THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Date Distributed: January 24, 2024

NATIONAL BOARD INSPECTION CODE SUBCOMMITTEE INSPECTION

MINUTES

Meeting of January 10, 2024
San Antonio, TX

These minutes are subject to approval and are for the committee use only. They are not to be duplicated or quoted for other than committee use.

The National Board of Boiler & Pressure Vessel Inspectors
1055 Crupper Avenue
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1. **Call to Order**
   The Subcommittee Inspection (SC) Chair, Mr. Jim Getter, called the meeting to order at 8:05 a.m. Central Time.

2. **Introduction of Members and Visitors**
   Secretary, Ms. Jodi Metzmaier did a roll call of all SC members in person and online was done by. All visitors in person and online stated their name and their company. All members and visitors are noted on the attendance sheets. (**Attachment Pages 1-2**)

3. **Check for a Quorum**
   With 19 of 24 members in attendance, both in person and online, a quorum was established.

4. **Awards/Special Recognition**
   None.

5. **Announcements**
   Ms. Metzmaier gave announcements to the SG. (**Attachment Pages 3-4**)

6. **Adoption of the Agenda**
   -Add Mike Whitlock (AIA) as a Member Nominee to Subcommittee
   -Add Tim Barker for Membership Reappointment to Subcommittee.
   -Add Interpretation Item 24-04
   -Add Item 24-03

   The above items were added to the agenda and a motion was made to adopt the revised agenda. The motion was seconded and unanimously approved.

7. **Approval of the Minutes of the July 12, 2023, Meeting**
   A motion was made to approve the minutes of the July 12, 202, meeting. The motion was seconded and unanimously approved.

8. **Review of Rosters**
   a. **Membership Nominations**
      Mr. David Dexter (Users) is interested in becoming a member of **Subgroup** Inspection.
      Mr. David Dexter (Users) and Mr. Mike Whitlock (AIA) are interested in becoming members of **Subcommittee** Inspection.

      Mr. Dexter and Mr. Whitlock spoke to the SC stating why they would like to be a member of the SC, and how their knowledge would be beneficial to the SC. Both nominees left the room, and the SC discussed the two nominees.
      A motion was made to accept Mr. Dexter to the Inspection SG & to accept his nomination to the Inspection SC. The motion was seconded and **unanimously approved**.
      The group had a lot of discussion regarding a balance and whether a person should be on the SG for a specific period of time before being brought into the SC.
      A motion was made to accept Mr. Whitlock's nomination to the SC Inspection. The motion was seconded and unanimously approved.

   b. **Membership Reappointments**
      - The following **Subgroup** members are up for reappointment: Mr. Tim Barker and Mr. Matt Sansone.
      - The following **Subcommittee** members are up for reappointment: Mr. Tim Barker and Mr. Matt Sansone.

      Mr. Tim Barker was not present at the meeting but noted to other members that he would like to continue being a member of the Inspection SG & SC. A motion was made to reappoint Mr. Barker to the SG & SC. The motion was seconded and unanimously approved.

      Mr. Sansone stated he will not be renewing his membership to SG or SC.

c. Officer Appointments
None.

9. Open Items Related to Inspection

a. PRD

i. **Item 23-31 –** Testing of liquid service valves to be water or other suitable liquid.
The SC reviewed a proposal from PRD that passed through their SG. The Inspection SC agrees with the changes in the proposal. PRD will present the proposal to Main Committee for vote.

b. R&A

i. **Item 21-53** – Post repair inspection of weld repairs to CSEF steels. (P. Gilston as PM)
This item will be discussed with the new standing task group regarding items shared between Parts.

ii. **Item 21-67** – Add welding requirements to plugging firetubes. (P. Gilston as PM)
This item was closed with no action in R&A. It can now be removed from our Agenda.

10. Interpretations.

Item Number: 22-40	**NBIC Location: Part 2, 4.4.7.2**	**Attachment Page 5**
General Description: Allowable stresses for t(required) calculation **Subgroup:** Inspection **Task Group:** J. Clark (PM), B. Ray, B. Wilson, J. Petersen, J. Roberts, J. Sowinski **Submitted by**: Tom Chen **Explanation of Need:** For the purpose of setting up inspection plans, especially with older equipment, we are calculating t(required) per Part 2, para 4.4.7.2. However, we would like to know if it is permissible to use the higher allowable stresses in later editions of ASME BPV Code.		
January 2024 Meeting Action: Mr. Clark presented the proposal that passed through SG LB. A motion was made to accept the proposal as presented. The motion was seconded and **approved with 1 abstention**.		

Mr. Luis Ponce joined the SC Meeting to give a presentation on Interpretations. Mr. Ponce then answered questions from the SC.

Item Number: 23-70	**NBIC Location: Part 2, 2.3.6.11**	**Attachment Page 6**
General Description: Inspection of vessels at and above 10,000 PSI (c) & (d) "requalification" **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** C. Bierl **Explanation of Need:** Isostatic Pressure Vessel manufacturers are currently "requalifying" pressure vessels through an engineering evaluation without the involvement of the NB Alteration process and therefore an Inspector. This leaves control of this process of a code vessel in the hands of the manufacturer and impairs the code integrity of the vessel.		
January 2024 Meeting Action: Mr. Getter discussed the proposal that was passed through Inspection SG. There were a few questions regarding the interpretation. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.		

Item Number: 23-80	NBIC Location: Part 2, S2.6.1 a)	Attachment Page 7
General Description: The Held Pressure for Hydro-static Testing of Heritage Boilers. **Subgroup:** SG Historical **Task Group:** None assigned. **Explanation of Need:** There has been issues in our Jurisdiction of inspectors interpreting that the boiler shall hold hydro static pressure for 10 minutes without the aid of a pump to maintain pressure. Therefore, any weep in valve packing, hand holes, gauge glass gaskets, etc. would be cause for failure of the hydro test.		
January 2024 Action: Mr. Rose presented the proposal that was passed through the Historical TG. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.		

Item Number: 24-04	NBIC Location: Part 2, 4.4.7.2h) and i)	Attachment Page 8
General Description: Thickness for determining corrosion rates for circumferential stress **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** L. Ponce **Explanation of Need:** It is unclear if the statement made in the NBIC Part 2, 4.4.7.2 i) also applies to 4.4.7.2 h). The statement reads, "The thicknesses used for determining corrosion rates at the respective locations shall be the most critical value of average thickness." Mr. Dominguez believes the statement applies to both paragraphs.		
January 2024 Meeting Action: The proposal that was unanimously approved through SG Inspection was presented to the SC. A motion was made to accept the proposal as presented. The motion was seconded and was **approved with one abstention**.		

11. Action Items

a. TG FRP Items

Item Number: NB16-1402	NBIC Location: Part 2, New Supplement	No Attachment
General Description: Life extension for high pressure FRP vessels above 20 years **Subgroup:** FRP **Task Group:** M. Gorman (PM)		
January 2024 Meeting Action: There were no updates on this item.		

b. TG Historical Items

Item Number: 23-74	NBIC Location: Part 2, S2	No Attachment
General Description: Certificate of compliance for new fusible plugs **Subgroup:** SG Historical **Task Group:** None assigned. **Explanation of Need:** To discuss the possibility of requiring a certificate of compliance on all new fusible plugs on historical boilers.		
January 2024 Action: Mr. Rose presented this item to the SC stating the item was closed with no action during the Historical TG meeting as this is addressed in ASME Section 1, A19-21 and NBIC Part 2, S2.8.4 c. A motion was made to **close this item with no action**. The motion was seconded and **unanimously approved**.		

Item Number: 23-85	NBIC Location: Part 2, S2.14.7	No Attachment
General Description: Review paragraphs to replace with proper verbiage. **Subgroup:** SG Historical **Task Group:** None assigned. **Explanation of Need:** There is some slang and second person (POV) verbiage throughout these paragraphs. Recommend rewording with proper terminology (such that it could be understood internationally) and changing point of view (e.g., changing "you're pulling water" to "water is being pulled"). Since I don't have the technical knowledge to know what is slang and what isn't, what I have proposed will still need to be reworded.		
January 2024 Action: Progress Report: a task group was created during the Historical TG meeting.		

c. TG Locomotive Items

There are currently no Locomotive items open for Part 2.

d. SG Inspection Items

Item Number: 21-25	NBIC Location: Part 2	Attachment Pages 9-11
General Description: Autoclave/Quick Opening Device PP **Subgroup:** Inspection **Task Group:** V. Scarcella (PM), T. Bolden, M. Horbaczewski, J. Peterson, J. Clark, W. Hackworth, M.A. Shah, C. Becker, J. Morgan. **Submitted by:** Kevin Hawes **Explanation of Need:** Upon our AIA (Intact) QRR I produced a Power point presentation on Autoclave inspections. Your NB team leader Gary Scribner suggested I forward this inspection presentation to the NB for review of content as mention of good reference material for next NBIC edition. I have attached a copy of this PP for your considerations.		
January 2024 Meeting Action: Mr. Scarcella presented the proposal that was unanimously approved through the SG. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.		

Item Number: 21-47	NBIC Location: Part 2, 2.2.4 & 2.2.5	Attachment Page 12

General Description: To provide better guidance as it relates to carbon monoxide

Subgroup: Inspection
Task Group: W. Hackworth (PM), V. Scarcella, D. Buechel, T. Barker, T. Bolden, M. Sansone, H. Henry, J. Castle, J. Morgan, & J. Clark

Explanation of Need: Need to provide more comprehensive items to be reviewed to guide the inspector on carbon monoxide and combustion air.

January 2024 Meeting Action:
Mr. Bolden presented the proposal that was unanimously approved through the SG. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.

Item Number: 22-06	NBIC Location: Part 2, 3.4.9 e)	No Attachment

General Description: Part 2 task group to review Part 3 Item 21-53

Subgroup: Inspection
Task Group: M. Horbaczewski (PM), J. Clark, B. Wilson, J. Mangas, P. Polick
Submitted by: D. Graf

Explanation of Need: Part 2 task group to investigate further changes to Part 2/Part 3 that could be needed because of Part 3 action item 21-53.

January 2024 Meeting Action:
Progress Report: Mr. Horbaczewski gave a progress report on this item.

Item Number: 22-22	NBIC Location: Part 2, 4.2	Attachment Page 13

General Description: Changes and additions to align with part III with in service inspections

Subgroup: Inspection
Task Group: T. Bolden (PM), J. Clark, J. Petersen, M. Sansone, B. Ray, D. Graf, J. Mangas, H. Henry, P. Gilston, B. Ray, T. Bolden, T. Lebeau, A. Triplett
Submitted By: V. Scarcella

Background Information: Several areas where part III after repair in service inspections should be aligned with part II.

January 2024 Meeting Action:
Mr. Bolden presented the proposal that passed through SG LB. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.

Item Number: 22-26	NBIC Location: Part 2, 2.3.6.8	No Attachment

General Description: Addition of cast acrylic as a pressure vessel material

Subgroup: Inspection
Task Group: J. Calvert (PM), V. Newton, D. Buechel, D. Rose
Submitted by: J. Calvert

Explanation of Need: Provide inspectors with the criteria necessary to competently inspect vessels like acrylic chromatography columns.

January 2024 Meeting Action:
Mr. Graf gave a Progress Report of no progress.

Item Number: 22-39	NBIC Location: Part 2, 4.4.8.7 g)	No Attachment

General Description: Recommended clarification of requirements for Evaluating Local Thin Areas

Subgroup: Inspection
Task Group: V. Newton (PM), T. Barker, J. Morgan, B. Wilson
Submitted by: L. Ponce

Explanation of Need: The existing text may lead to confusion due to a misplaced comma after 'specified' in the first sentence and no reference to what is being specified in the paragraph. The proposed text is a way to tie in the specified requirement in paragraph (f).

January 2024 Meeting Action:
PM was not present - No Report.

Item Number: 23-08	NBIC Location: Part 2	No Attachment

General Description: Part 2 task group to review Part 3 Item 21-67

Subgroup: Inspection
Task Group: M. Horbaczewski (PM), J. Clark, B. Wilson, J. Mangas, P. Polick, H. Henry, P. Gilston, B. Ray, T. Bolden, T. Lebeau, & A. Triplett
Submitted by: D. Graf

Explanation of Need: Part 2 task group to investigate further changes to Part 2/Part 3 that could be needed because of Part 3 action item 21-67.

January 2024 Meeting Action:
This item will become a part of the new standing task group on shared items. No further action was taken.

Item Number: 23-17	NBIC Location: Part 2, 2.3.6.4 and 4.4.8.7	No Attachment

General Description: Steel-loss acceptance criteria for pressure-retaining items

Subgroup: Inspection
Task Group: D. Graf (PM), B. Ray, J. Roberts, T. Vandini, C. Becker, J. Sowinski, & J. Hadley
Submitted by: J. Hadley

Explanation of Need:
(1) Resolve inconsistencies between the 2021 NBIC's air, ammonia, LPG, and general acceptance criteria.
(2) Provide screening criteria that, if met, would ensure that a pressure-retaining item also meets the conservative criteria in API 579-1/ASME FFS-1, Fitness-For-Service, 2021 edition, "ASME FFS-1", Part 3 Level 1 (brittle fracture) and either Part 4 Level 2 or Part 5 Level 1 (wall thinning). If not met, an owner/user could fall back on more complex, less conservative, ASME FFS-1 assessments.
(3) Describe steel-loss screening criteria in one location within NBIC, and reference this location when needed, to facilitate future revisions.
(4) Coordinate NBIC with ASME FFS-1. They have been referencing each other for some years, so coordinating them seems worthwhile.

January 2024 Meeting Action:
Mr. Graf gave a Progress Report.

Item Number: 23-26	NBIC Location: Part 2	No Attachment

General Description: Adding verbiage in Part 2 to mention a time limit on tube plugs in vessels

Subgroup: Inspection
Task Group: M. Horbaczewski (PM), J. Clark, B. Wilson, J. Mangas, P. Polick, H. Henry, P. Gilston, B. Ray, T. Bolden, T. Lebeau, A. Triplett
Submitted by: K. Moore

Explanation of Need: Part 3 is currently revamping 3.3.4.9. We feel like there should be a statement in the NBIC that the Chief or the in-service Inspector can address the operational issues and concerns of plugged tubes.

January 2024 Meeting Action:
This item was closed with no action in the Inspection SG meeting. Mr. Horbaczewski stated he has talked with members of R&A and they are not going to do anything with this; therefore, Mr. Horbaczewski has recommended closing this item with no action. A motion was made to **close this item with no action**. The motion was seconded and **unanimously approved**.

Item Number: 23-27	NBIC Location: Part 2, 1.5.1	No Attachment

General Description: Addition of requirement for Inspector to be present for inspections.

Subgroup: Inspection
Task Group: V. Newton (PM), V. Scarcella, T. Bolden, J. Morgan, J. Smith, T. Barker, C. Becker, C. Hartford
Submitted by: D. Kinney

Explanation of Need: While it has always been standard industry practice for inspections to be performed in-person, and there are requirements for remote inspection, currently there is no language in Part 2 or RCI-1 requiring the Inspector to be present at the location of installation while performing an inspection. This requirement is implied, but not stated.

January 2024 Meeting Action:
PM was not present - No Report.

Item Number: 23-28	NBIC Location: Part 2, 5.3.3	Attachment Pages 14-17

General Description: Revision to NB-136

Subgroup: Inspection
Task Group: J. Clark (PM), D. Graf, J. Petersen, J. Smith
Submitted by: D. Kinney

Explanation of Need: For Line #3, "R" should be added, and should match Line #13.
For Line #13, when filling out the form, there is confusion between Owner or User, and Owner-User. These are two different terms defined in the NBIC. I believe the intention is to use "Owner or User" and not "Owner-User, and this should be clarified on the form.

January 2024 Meeting Action:
Mr. Clark presented the proposal that passed through SG. A motion was made to accept the proposal as presented. The motion was seconded and **unanimously approved**.

Item Number: 23-37	NBIC Location: Part 2, 1.4	Attachment Page 18

General Description: Add comment to further define responsibility of the owner user

Subgroup: Inspection
Task Group: V. Scarcella (PM), J. Smith, J. Mangas, T. Barker
Submitted by: V. Scarcella

Explanation of Need: Specifically, if the inspector is going to a location where for instance H2S of some harmful pathogen is being handled, those locations have and should provide safety training and equipment needed to complete the inspection. For internals this is already touched on in 1.5.3. "Requirements of occupational safety and health regulations (i.e., federal, state, local, or other), as well as the owner-user's own program and the safety program of the Inspector's employer are applicable."

January 2024 Meeting Action:
Mr. Bolden presented the proposal that unanimously passed through SG. There were minor changes made to the proposal and a motion was made to accept the revised proposal. The motion was seconded and **unanimously approved**.

12. New Items

Item Number: 23-81	NBIC Location: Part 2, 4.4.3 b)	No Attachment

General Description: Evaluate Inspector responsibilities relating to 4.4.3 FFS

Subgroup: Inspection
Task Group: None assigned.
Submitted by: R. Underwood

Explanation of Need: Currently, 4.4.3-b states the Inspector shall review the condition assessment methodology and ensure the inspection data and documentation are in accordance with Section 4. This proposal would redefine the role and responsibility of the Inspector.

January 2024 Meeting Action:
A Task Group was created in the SG Inspection meeting. Mr. Jon Ferrera joined the meeting to discuss this item.

Task Group updates: PM is changing to V. Scarcella. Add: J. Ferreira & J. Sowinski

Item Number: 23-84	NBIC Location: Part 2, 2.3.6.4 c) 3), 2.3.6.7 b) 5), and S10.10.6	Attachment Page 19

General Description: Wording Updates for Clarity

Subgroup: Inspection
Task Group: None assigned.
Submitted by: J. Metzmaier

Explanation of Need: "good repair" is typically an understood term, but with the NBIC being read internationally, we were wondering if that phrase could be understood in the same way on a global scale. Or if a better phrase could be chosen.

January 2024 Meeting Action:
The Task Group that was created in the SG Inspection meeting created a proposal. Mr. Ray presented the proposal to the SC. The proposal was reviewed and modified. A motion was made to approve the revised proposal. The motion was seconded and **unanimously approved**.

Item Number: 24-03	NBIC Location: Part 2, S6	No Attachment
General Description: Revise "Inspector" terminology and requirements in Supplement 6 **Subgroup:** Inspection **Task Group:** None assigned. **Submitted by:** Luis Ponce **Explanation of Need:** Part 2 Supplement 6 should be revised to align with Part 3, Suppl 6 and the DOT. A few references are S6.4.2 a), S6.4.2 c), S6.4.4, S6.4.5, S6.4.6, and S6.4.6.1. However, this may not be an all-inclusive list.		
January 2024 Meeting Action: A Task Group was created in the Inspection SG meeting.		

13. Future Meetings

- July 15-18, 2024 – The Brown Hotel in Louisville, KY
- January 2025 – TBD

Mr. Getter discussed future meetings with the SC.

14. Adjournment

A motion was made to adjourn the meeting at 10:55 a.m. Central Time.

Respectfully submitted,

Jodi Metzmaier
Subcommittee Inspection Secretary

Subcommittee Inspection Member Attendees - January 2024

MEMBERS:	Interest Category	Email	Registered	In Person Attendance	Remote Attendance	Not In Attendance
Jim Getter Chair	Manufacturers	jim.getter@worthingtonindustries.com	In-Person	x		
Mark Horbaczewski Vice Chair	Users	mhorbaczewski@diamondtechnicalservices.com	In-Person	x		
Jodi Metzmaier Secretary	NBBI	jmetzmaier@nbbi.org	In-Person	x		
Tim Barker	Authorized Inspection Agencies	timothy.barker@fmglobal.com	Remote			x
Chuck Becker	Manufacturers	hggbecker@yahoo.com	In-Person	x		
Ernest Brantley	Authorized Inspection Agencies	ernest.brantley@bpcllcga.com	In-Person			x
David Buechel	Authorized Inspection Agencies	davidbuechel55@gmail.com	In-Person	x		
Lee (Damon) Burton	National Board Certificate Holders	burtondl@airproducts.com	In-Person	x		
James Calvert	National Board Certificate Holders	jlcalvert@lilly.com	In-Person			x
James Clark	Manufacturers	james.clark@worthingtonindustries.com	In-Person	x		
Darrell Graf	National Board Certificate Holders	grafdr@airproducts.com		x		
William Hackworth	Authorized Inspection Agencies	william.hackworth@tuvsud.com	In-Person	x		
Jerry Jessick	Users	jjessick@fusion-etc.com			x	
John Mangas	General Interest	jcmangas@gmail.com	In-Person	x		
Joe Morgan	Users	jemorgan1@dow.com			x	
Venus Newton	Authorized Inspection Agencies	venus_newton@yahoo.com	In-Person			x
Jeffrey Petersen	Users	jeffrey.petersen@inl.gov	In-Person	x		
Pat Polick	Jurisdictional Authorities	patrick.polick@illinois.gov	In-Person	x		
Brent Ray	Users	bdray@marathonpetroleum.com	In-Person	x		
James Roberts	Manufacturers	james.roberts@triarccorp.com	Remote		x	
David Rose	Users	dr3747@telus.net	In-Person	x		
Jason Safarz	General Interest	jsafarz@karldungsusa.com				x
Matt Sansone	Jurisdictional Authorities	matthew.sansone@labor.ny.gov	In-Person	x		
Vincent Scarcella	Authorized Inspection Agencies	vincent.scarcella@cna.com	In-Person	x		
Thomas Vandini	National Board Certificate Holders	tvandini@propanetank.com	In-Person	x		

Subcommittee Inspection Visitor Attendees - January 2024

VISITORS:	Company/Title/Interest	Email	Registered	In Person Attendance	Remote Attendance
Jeff Castle	Zurich Risk Engineering	jeffrey.castle@zurichna.com	In-Person	x	
Wil Griffith	Zurich	william.griffith@zurichna.com	In-Person	x	
James Hadley	Fact Fancy, LLC	james.hadley@factplusfancy.com	Remote		x
Tim Bolden	CNA	timothy.bolden@cna.com	In-Person	x	
Joseph Beauregard	Maintenance Manager/Los Alamos National Laboratory	joeducati@hotmail.com	In-Person	x	
Randy Kennedy	Babcock & Wilcox	crkennedy@babcock.com crkennedy1965@yahoo.com	In-Person	x	
James Sowinski	Principanl Engineer I/The Equity Engineering Group, Inc.	jsowinski@e2g.com	In-Person	x	
Brandon Steinhart	FM Global	brandon.steinhart@fmglobal.com	In-Person		x
Andrew Triplett	UT-Battelle, LLC	triplettal@ornl.gov	In-Person		x
Rich Wallace	Diamond Technical Services	rwallace@diamondtechnicalservices.com	In-Person	x	x
Mike Whitlock	Hartford Steam Boiler	gerald_whitlock@hsb.com	In-Person	x	
Brandon Wilson	Liquidmetal Coating Enterprises, LLC	bwilson@lmce.solutions	In-Person		x
Steve Van Slavens	Chief of Deleware	steve.vanslavens@delaware.gov			x
Christopher Derks	Chief of Wisconsin	christopher.derks@wisconsin.gov			x
Clay Moultrie	Quality Director/Quality Steel Corporation	cmoultrie@propanetank.com			x
David Dexter	Energy Technology Principle/Dow Chemical	dexterde@dow.com			x
Kiwi Derrick	Chevron Products Company	kiwi.derrick@chevron.com		x	
Ken Barkdoll	Arise	ken.barkdoll@tuvsud.com			x
David Brockerville	Priovince of Newfoundland & Laborador	davidbrockerville@gov.nl.ca			x
Donald Ehler	Province of Nova Scotia	Donald.Ehler@novascotia.ca			x
Phillip Cole	FM Global	phillip.cole@fmglobal.com			x
Jon Ferrera	HSB	jonathan_ferreira@hsb.com		x	
Mark Mooney	NBBI	mmooney@nationalboard.org	In-Person	x	
Luis Ponce	NBBI	lponce@nbbi.org	In-Person	x	

Announcements

- MS Teams Notes:
  - Please stay muted during the meeting. If you would like to speak, please use the "raise hand" feature, and then you can unmute as you are called on. Teams will note the order in which your hands were raised, and we will call on you in that order.
  - Any messages sent through chat **will be displayed for anyone in the meeting to see**. If you need to send me a private message, please send it to me directly and not through the meeting chat.

- This meeting marks the end of Cycle C for the 2025 NBIC edition. The committees will have until the end of the July 2024 NBIC meeting to approve items for inclusion in the 2025 NBIC. Anything going to letter ballot should be done this meeting.

- The National Board will be hosting a reception on Wednesday evening from 5:30 p.m. to 7:30 p.m. in Veramendi (fourth level of the hotel).

- The National Board will be hosting breakfast and lunch on Thursday in Veramendi (fourth level of the hotel) for those attending the Main Committee meeting. Breakfast will be served from 7:00 a.m. to 8:00 a.m. and lunch will be served from 11:30 a.m. to 12:30 p.m.

- There is a new tutorial for submitted NBIC requests on the NBIC tab of the Business Center. The link is under the NBIC Requests section. If there are any other tutorials you think would be helpful, please let us know and we can do our best to add more.

- The National Board Staff, primarily Michelle Vance, has been working hard to update the NBIC Style Guide. This valuable resource is now available on the cloud and on the National Board Business Center. It is located on the NBIC page under the section title "Committee Documents". Please be advised you must be logged in to view this document. Any comments, questions, or suggestions regarding the Style Guide should be directed to Jonathan. Below is a list of the major changes since revision 5 (the last section of the style guide shows this same list of major changes):
  - Title modified from *NBIC Writing Guide* to *NBIC Style Guide*
  - Topics reorganized into five major sections:
    - Language
    - Capitalization, Grammar, and Punctuation
    - Publication Style
    - Proposal Format
    - Synopsis of Revision 6 Changes (major changes since the previous revision)
  - Topics rearranged and edited to include more detail where necessary.
  - Unnecessary topics and rules removed.
  - Relevant topics and examples added.

- The National Board Staff, primarily Michelle Vance, has been working hard to update the NBIC Style Guide. This valuable resource is now available on the cloud and on the National Board Business Center. It is located on the NBIC page under the section title "Committee Documents". Please be advised you must be logged in to view this document. Any comments, questions, or suggestions regarding the Style Guide should be directed to Jonathan.

- Meeting schedules, meeting room layouts, and other helpful information can be found on the National Board website under the **NBIC** tab → NBIC Meeting Information.

- **NBIC Share Cloud is for members only**. Please do not share the username and password with guests.

- Remember to add any attachments that you'd like to show during the meeting (proposals, reference documents, power point, etc.) to the cloud **prior to the meeting**.
  - If needed, we can go over this process.
  - ALL power point attachments/presentations must be sent to Jonathan prior to the meeting for approval.

- All proposals should be submitted in word with "strike through/underline" tracking.
  - Please contact me (jmetzmaier@nbbi.org) if you need any help with this.

Announcements

- If you'd like to open a new Interpretation or Action Item, this should be done through the National Board Business Center.
  - Anyone, member or not, can open a new item.

- As a reminder, anyone who would like to become a member of a group or committee:
  - Should attend at least 2 meetings prior to being put on the agenda for membership consideration. The nominee will be on the agenda for vote during their 3rd meeting, and they would become a voting member during their 4th meeting.
  - The nominee must submit the formal request along with their resume to the NBIC Secretary, Jonathan Ellis, **PRIOR TO** the meeting. *nbicsecretary@nbbi.org*
  - If needed, we can also create a ballot for voting of a new member between meetings. To do this, you will need to contact Mr. Ellis.

- Just a heads up, Wendy will be around taking pictures, so you may see her popping in and out.

- Thank you to everyone who registered online for this meeting. The online registration is very helpful for planning our reception, meals, the room set up, etc. Please continue to use the online registration for each meeting, whether you are attending in person or remote. It also is a good way to make sure we have the most up-to-date contact information.

  If you did not register, please do this now so we have an accurate count for the reception on Tonight and breakfast and lunch on tomorrow.

PROPOSED INTERPRETATION

Item No.
22-40

Subject/Title
Allowable stresses for t(required) calculation

Project Manager and Task Group

Source (Name/Email)
Tom Chen / tom.chen@chemours.com

Statement of Need
For the purpose of setting up inspection plans, especially with older equipment, we are calculating t(required) per Part 2, para 4.4.7.2. However, we would like to know if it is permissible to use the higher allowable stresses in later editions of ASME BPV Code.

Background Information
Part 3, para 3.4.2, titled "Alterations Based on Allowable Stress Values" states "...re-calculating a new minimum wall thickness for a pressure-retaining item using a later edition/addenda of the original code of construction or selected construction standard or code that permits use of higher allowable material stress values than were used in the original construction, the following requirements shall apply...". The paragraph goes on to give some requirements. It seems to imply that recalculating a new min wall thickness per new Code allowable stresses is considered an alteration. While Part 2, Para 4.4.7.2 does not reference allowable stress values, interpretation 07-13 and 95-19 states that it is permissible to use later editions of the original code of construction.

Proposed Question
Question 1: When calculating the t(required), as defined in NBIC Part 2, Para 4.4.7.2, is it permissible to use a later edition/addenda of the original code of construction?
Question 2: If the reply to Question No. 1 is yes, is it permissible to use higher allowable material stress values than were used in the original construction when calculating the t(required)?
Question 3: If the reply to Question No. 2 is yes, is it considered an alteration to use higher allowable material stress values than were used in the original construction to calculate the t(required) per NB23 Part 3, para 3.4.2?

Proposed Reply
Proposed Reply 1: Yes. See Interpretations 07-13 and 95-19.
Proposed Reply 2: Yes, if the requirements of NB23 Part 3, paragraph 3.4.2, subparagraphs (b), (c), (d), (e), and (f) are met.
Proposed Reply 3: No, unless required by the jurisdiction.

Committee's Question 1
When calculating the t(required), as defined in NBIC Part 2, Para 4.4.7.2, is it permissible to use a later edition/addenda of the original code of construction that permits higher allowable material stress values than the original code of construction?

Committee's Reply 1
No.

Rationale
Part 2 does not specifically allow for the use of a later edition/addenda of the original code of construction that permits higher allowable material stress values than the original code of construction. However, Part 2 Para. 4.4.7.2 (a) allows for the inspection interval to be determined by other industry methods (see Part 2, Para. 1.3) as accepted by the Jurisdiction. Interpretation 07-13 directs to Interpretation 95-19 which only directly addresses repairs and alterations.

Committee's Question 2

Committee's Reply 2

Rationale

Interpretation Item 23-70
Submitted by Craig Bierl (craig.bierl@chubb.com)
12-2-23

Subject: Inspection of vessels at and above 10,000 PSI (c) & (d) "requalification"

Statement of Need: Isostatic Pressure Vessel manufacturers are currently "requalifying" pressure vessels through an engineering evaluation without the involvement of the NB Alteration process and therefore an Inspector. This leaves control of this process of a code vessel in the hands of the manufacturer and impairs the code integrity of the vessel.

Background:

2.3.6.11 INSPECTION OF VESSELS FOR PRESSURES AT AND ABOVE 10,000 PSI

c) Vessels constructed for a set number of cycles, as defined by the code of construction, which have reached the end of those cycles, must be removed from service or requalified for continued use. Any requalification for continued service must be completed in accordance with the requirements of the jurisdiction where applicable. The Inspector shall verify that documentation of any requalification is retained.

d) Requalification of any vessel shall either be completed by the original manufacturer or a manufacturer familiar with the construction of pressure vessels at and above 10,000 PSI (68.95 MPa). Guidance for completing requalification can be found in ASME PCC-3, Inspection Planning and Using Risk-Based Methods.

It is not clear in the new Part 2 guidance, and I have already had a manufacturer question this. I would like this interpretation to also consider the prior interpretation:

19-15 INTERPRETATION
Subject: PV Cycles of operations change as an alteration (Part 3, 3.4.4). Edition: 2019
Question: When the design of a pressure retaining item (PRI) includes cyclic loading data, should an adjustment, modification or change in analysis of the original design data be considered an alteration?
Reply: Yes.

Proposed Question: Is the “requalification for continued service” of a vessel constructed for a set number of cycles, as defined by the code of construction, which has reached the end of those cycles, required to be completed as an alteration?

Proposed Reply: Yes, requalification of a pressure vessel requires an alteration.

Committee’s Question:

Committee’s Reply:

Rationale:

Interpretation Item 23-80
Submitted by Robin Forbes (robin.a.forbes@outlook.com)
12-2-23

Subject: The Held Pressure for Hydro-static Testing of Heritage Boilers.

Statement of Need: There has been issues in our Jurisdiction of inspectors interpreting that the boiler shall hold hydro static pressure for 10 minutes without the aid of a pump to maintain pressure. Therefore, any weep in valve packing, hand holes, gauge glass gaskets, etc. would be cause for failure of the hydro test.

Background: There was a situation where it took the owner of a traction engine 8 days to complete a hydro. Any drop in the pressure over the 10 minutes and the inspector would fail the boiler. He would reference the above clause from the NBIC as evidence the boiler must hold hydro static pressure (unaided) for 10 minutes.

Proposed Question: S2.6.1.a states a hydro static pressure between MAWP and 1.25 MAWP shall be "held for a minimum of 10 minutes or as required to perform a complete visual inspection" Is the intent that the boiler shall hold a set hydro static pressure for a minimum of 10 minutes, without the aid of a pump to maintain the pressure? Or is it permissible to use a pump to maintain the hydro static pressure for a minimum of 10 minutes?

Proposed Reply: Given that the wording is "held" and not "hold" the use of a pump to maintain the hydro static pressure is permissible. The intent that the pressure be held a minimum of 10 minutes is to allow time for leaks to present themselves along seams, tubes, stay bolts, etc.

Committee's Question:

Committee's Reply:

Rationale:

Interpretation Item 24-04
Submitted by L. Ponce (lponce@nbbi.org)
01-04-2024

Subject: Thickness for determining corrosion rates for circumferential stress

Location: Part 2; Section: 4; Paragraph: 4.4.7.2 h) & 4.4.7.2 i)

Statement of Need: It is unclear if the statement made in the NBIC Part 2, 4.4.7.2 i) also applies to 4.4.7.2 h). The statement reads, "The thicknesses used for determining corrosion rates at the respective locations shall be the most critical value of average thickness." Mr. Dominguez believes the statement applies to both paragraphs.

Background:
This inquiry was received from Mr. Alejandro Domingues, Eng. National Institute of Industrial Technology (INTI), Argentina. Mr. Domingues has led the effort for the adoption of the NBIC Parts 1 and 2 in several provinces in Argentina and Uruguay.

S7.8.5 CORROSION
c) General Corrosion
For a corroded area of considerable size, the thickness along the most damaged area may be averaged over a length not exceeding 10 in. (250 mm). The thickness at the thinnest point shall not be less than 75% of the required wall thickness, and the average shall not be less than 90% of the required wall thickness.

So, the intent could be
1- limit the average thickness (as in SUPPLEMENT 7)
2- The thicknesses used for determining corrosion rates at the respective locations shall be the most critical value of average thickness (as in 4.4.7.2 i))

Proposed Question: For the purposes of determining PRI corrosion rates when circumferential stresses govern, it is the intent of the NBIC that the statement in 4.4.7.2 i), "The thicknesses used for determining corrosion rates at the respective locations shall be the most critical value of average thickness" also applies to 4.4.7.2 h)?

Proposed Reply: Yes

Committee's Question:

Committee's Reply:

Rationale:

2.3.6.5 INSPECTION OF PRESSURE VESSELS WITH QUICK-ACTUATING CLOSURES

~~a)~~ This section describes guidelines for inspection of pressure vessels equipped with quick-actuating closures. ~~Due to the many different designs of quick-actuating closures, potential failures of components that are not specifically covered should be considered. The scope of inspection should include areas affected by abuse or lack of maintenance and a check for inoperable or bypassed safety and warning devices.~~ Pressure vessels with quick actuating closures have a higher likelihood of personnel being in close proximity of the vessel during opening.

a)~~.~~ Accidents have occurred when gaskets became stuck and released suddenly when pried open. Wear and fatigue damage caused by the repetitive actuation of the mechanism and pressure cycles are also a source of accidents.

b) ~~Temperatures above that for which the quick-actuating closure was designed can have an adverse effect on the safe operation of the device. If parts are found damaged and excessive temperatures are suspected as the cause, the operating temperatures may have exceeded those temperatures recommended by the manufacturer.~~ Rapid fluctuations in temperatures due to rapid start-up and shutdown may lead to cracks or yielding caused by excessive warping and high thermal stress. An ~~careful observation~~ inspection ~~should~~ shall be made of the condition of the complete installation~~,~~. Review shall ~~including~~ include maintenance, ~~and~~training records, operation, and non-destructive examination records. This review shall serve as a guide ~~in forming an opinion of~~ for evaluating the care the equipment receives. The construction history of the vessel should be established, including~~:~~ year built, materials of construction, extent of post weld heat treatment, previous inspection results, and repairs or alterations performed. Any leak should be thoroughly investigated. ~~and the necessary corrective action initiated~~taken by an "R" Certificate Holder~~.~~

1) Inspection of parts and appurtenances

The owner/user shall adhere to the items below, and the items shall be verified by the inspector if applicable.

a)~~.~~ Seating surfaces of the closure device, including but not limited to the gaskets, O-rings, or any mechanical appurtenance, shall be inspected to ensure proper alignment. ~~of the closure to the seating surface, should be inspected. This inspection can be made by using powdered chalk or any substance that will indicate that the closure is properly striking the seating surface of the vessel flange. If this method is used, a check should be made to ensure that:~~

~~1. Material used shall not contaminate the gasket or material with which it comes into contact; and~~
~~2. The substance used shall be completely removed after the examination.~~

b)~~.~~ The closure mechanism of the device ~~should~~ shall be inspected for freedom of movement and proper contact with the locking elements. This inspection should indicate that the movable portions of the locking mechanism are striking the locking element in such a manner that full stroke can be obtained. Inspection should be made to ensure that the seating surface of the locking mechanism is free of metal burrs and deep scars, which would indicate misalignment or improper operation. A check should be made for proper alignment of the door hinge mechanisms to ensure that adjustment screws and locking nuts are properly secured.

c. When deficiencies are noted, the following corrective actions ~~should~~ shall be initiated:

1. If any ~~deterioration~~ defect of the gasket, O-ring, etc., is found, the gasket, O-ring, etc., ~~should~~ shall be removed from service and replaced immediately. Replacements ~~should~~ shall be in accordance with the vessel manufacturer's specifications;
2. If any cracking or excessive wear is discovered on the closing mechanism, the owner or user ~~should~~ shall contact the original manufacturer of the device for spare parts or repair information. If this cannot be accomplished, the owner or user should contact an organization competent in quick-actuating closure design and construction prior to implementing any repairs;
3. Defective safety or warning devices ~~should~~ shall be repaired or replaced prior to further operation of the vessel;
4. Deflections, wear, or warping of the sealing surfaces may cause out-of-roundness and misalignment. The manufacturer of the closure ~~should~~ shall be contacted for acceptable tolerances for out-of-roundness and deflection; and
5. The operation of the closure device through its normal operating cycle should be observed while under control of the operator. ~~This should indicate if the operator is following posted procedures and if the operating procedures for the vessel are adequate~~.

2) Gages, safety devices, and controls

The owner/user shall adhere to the items below, and the items shall be verified by the inspector as applicable.

~~a. The required pressure gage should be installed so that it is visible from the operating area located in such a way that the operator can accurately determine the pressure in the vessel while it is in operation. The gage dial size should be of such a diameter that it can be easily read by the operator. This gage should have a pressure range of at least 1-1/2 times, but not more than four times, the operating pressure of the vessel. There should be no intervening valve between the vessel and gage.~~

~~b.~~a. The pressure gage should be of a type that will give accurate readings, especially when there is a rapid change in pressure. It should be of rugged construction and capable of withstanding severe service conditions. Where necessary, the gage should be protected by a siphon or trap.

~~c.~~b. Pressure gages intended to measure the operating pressure in the vessel are not usually sensitive or easily read at low pressures approaching atmospheric. It may be advisable to install an auxiliary gage that reads inches of water (mm of mercury) and is intended to measure pressure from atmospheric through low pressures. This ensures that there is zero pressure in the vessel before opening. It would be necessary to protect the auxiliary ~~low pressure~~low-pressure gage from the higher operating pressures.

~~d.~~c. Provisions should be made to calibrate pressure gages or to have them checked against a master gage as frequently as necessary.

~~e.~~d. A check should be made to ensure that the closure and its holding elements must be fully engaged in their intended operating position before pressure can be applied to the vessel. A safety interlock device ~~should~~ shall be provided that prevents the opening mechanism from operating unless the vessel is completely depressurized.

~~f.~~e. Quick-actuating closures held in position by manually operated locking devices or mechanisms, and which are subject to leakage of the vessel contents prior to disengagement of the locking elements and release of the closure, shall be provided with an audible and/or visible warning device to warn the operator if pressure is applied to the vessel before the closure and its holding elements are fully

engaged, and to warn the operator if an attempt is made to operate the locking device before the pressure within the vessel is released. Pressure tending to force the closure clear of the vessel must be released before the closure can be opened for access.

3. If required by the authority having jurisdiction, a Risk Based Inspection Assessment (RBIA) program, managed by the owner/user, shall be developed by an ~~professional~~ engineer familiar with the design and applications of quick actuating closures. See NBIC Part 2, Section 4. The RBIA shall be made available for review by the inspector.

PART 2
SUPPLEMENT 15 CONCERNS REGARDING CARBON MONOXIDE DURING BOILER INSPECTIONS

S15.1 SCOPE

a) This supplement provides specific requirements and guidelines for evaluating potential carbon monoxide concerns.

b) It is well documented and internationally recognized[1] that carbon monoxide is a serious health concern. Annually, there are over 40,000 cases of CO poisoning in North America[2]. Boiler and fired pressure vessel inspections involve equipment that is an exposure to the inspector and occupants of buildings. National Board Inspection Code Part 1 calls for carbon monoxide detectors (NBIC Part 1, 1.6.9) where required. A review of service and maintenance records (NBIC Part 2, 2.2.11), verification that combustion air is supplied to the boiler room (NBIC Part 2, 2.2.20.6 c and NBIC Part 1, 1.6.6) and inspecting for combustion air leaks (NBIC Part 2, 2.2.5 d) are important parts of the inspection that help prevent carbon monoxide from becoming a problem. Installers must follow manufacturers and the jurisdictions requirements for the installation of the equipment.

S15.2 Inspection points that should be included in the inspection of the object

a) Assessment of conditions that may indicate a carbon monoxide condition exists outside of the combustion chamber include:

- Unstable pilot or main flame
- Yellow flame
- Smoke from stack
- Discoloration around burner or casing
- The presence of soot on any surface
- Any flue leakage or blockage
- Fresh air intake blocked
- Negative pressure in boiler room, resistance when you go to open door, air rushes in when you open door
- Lack of maintenance on burner/boiler
- Condensation in boiler room

b) If leakage of flue gas or in any case a condition indicates a lack of combustion air, further investigation by boiler service technician is required. (ASME CSD-1, CG 700 qualified individual, or persons deemed qualified by the authority having jurisdiction)

S15.3 Equipment recommended to inspect the objects safely.

a) It is highly recommended that inspectors carry a carbon monoxide detector.

Note 1: https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants,

Note 2: https://www.ncbi.nlm.nih.gov/books/NBK430740/

4.2 NONDESTRUCTIVE EXAMINATION METHODS (NDE)

a) Listed below ~~is~~ are a variety of ~~nondestructive examination~~ NDE methods that may be employed to assess the condition of pressure-retaining items. ~~The skill, experience, and integrity of the personnel performing these examinations are essential to obtain meaningful results.~~ The Inspector ~~should~~ shall review the methods and procedures to be employed to ensure compliance with the codes, standards, and/or jurisdictional requirements.

b) ~~Generally, some form of surface preparation will be required prior to use of these examination methods.~~ When there is doubt as to the extent of a defect or detrimental condition found in a pressure-retaining item, the Inspector ~~is cautioned~~ encouraged to should seek competent technical advice for further evaluation of the finding. Additionally, ~~and~~ supplemental NDE~~.~~ ~~M~~may be used to further evaluate the finding.

c) ~~Personnel performing examination and test methods shall have proper training and certification, as required by the owner and acceptable to the Inspector and Jurisdiction, if required.~~ The NDE requirement shall include technique, the extent of coverage, procedures, personnel, and acceptance criteria. The acceptance criteria shall be in accordance with the original code of construction, standard, or specification. If the original code of construction, standard, or Specification is not possible or practical an alternative NDE methods may be used~~,~~ if all other requirements are met. The alternative NDE method(s) shall be acceptable to the Inspector and the Jurisdiction where the pressure-retaining item is installed, where required.

d) Personnel shall be qualified to the requirements of ASME Section V paragraph T-120, which references national and internationally accepted standards. When this is not possible, NDE personnel may be qualified and certified in accordance with their employer's written practice.

1) The employer's written practice shall be established by using ASNT SNT-TC1A, *Recommended Practice Non-destructive Testing Personnel Qualification and Certification,* or ANSI/ASNT CP-189, *Standard for Qualification and Certification of Nondestructive Testing Personnel*, as a guideline.

2) Personnel performing the examination and test methods shall have proper training and certification, as required by the owner and acceptable to the Inspector and Jurisdiction (where required). Such training and certification shall be maintained by the employer of the NDE personnel.

5.3.3 INSTRUCTION FOR COMPLETING THE FORM NB-136, REPLACEMENT OF STAMPED DATA FORM

Items 1-13 shall be completed by the owner, user, original manufacturer, or "R" Certificate Holder making the request.

1) Enter the purchase order number, job number, or other identifying number used by your company if applicable.
2) The name, address, and phone number of the Jurisdiction, Authorized Inspection Agency (when there is no Jurisdiction) to which the form is being submitted for approval.
3) Enter the name and address of the requestor's company or organization. If an "R" Certificate Holder is making the request, provide the "R" Certificate Number.
4) Enter the name, email, and phone number of the person within the requestor's company or organization who can be contacted if there are any questions concerning this request.
5) Etner the name and address of the location where the pressure-retaining item is installed. If this is the same as number 3, check the box "Same as #3". If the pressure-retaining item is being refurbished and the final installation location is unknown, check the box "Stock Item-Unknown".
6) Enter the date the pressure-retaining item was installed. If unknown check the box "Unknown."
7) Enter the name of the manufacturer of the pressure-retaining item for whom the request is being submitted.
8) Is the Manufacturer's Data Report attached to the form? Check the appropriate box.
9) Is the pressure-retaining item registered with the National Board? Check the appropriate box. If yes, provide the National Board Registration Number.
10) Provide as much information as known to help identify the pressure-retaining item.
11) Provide a true facsimile of the legible part of the nameplate or stamping.
12) Attach any other documentation that helps provide traceability of the vessels to the original stamping, such as purchase orders, blueprints, inspection reports, etc.
13) Provide the name of the owner, user, original manufacturer, or "R" Certificate Holder making the request. If an "R" Certificate Holder is making the request, provide the "R" Certificate Number. Provide the signature of the requester and date requested.
14) To be completed by the Jurisdiction or Authorized Inspection Agency's authorized representative. If the original manufacturer is currently in business, concurrence shall be obtained by the owner or user.

    The requester shall submit the form along with any attachments to the jurisdiction where the pressure-retaining item is installed for approval. If there is no jurisdiction or the pressure-retaining item is a stock item, the requester shall submit the form to a national Board Commissioned Inspector for approval.

    After authorization, the form will be returned to the owner, user, original manufacturer, or "R" Certificate Holder who made the request. The requester is required to contact the jurisdiction or an Authorized Inspection Agency to provide a National Board Commissioned Inspector to witness the re-stamping or installation of the new nameplate. If the nameplate is being welded to the pressure-retaining boundary of the vessel, the welding shall be done by an "R" Certificate Holder. The requester will provide the new nameplate or have on hand the tools to do the re-stamping in accordance with the original code of construction.

15) Once the re-stamping is completed, or the new nameplate is attached, the requester shall provide a true facsimile of the replacement stamping.
16) The owner, user, original manufacturer, or “R” Certificate Holder shall fill in their name (and “R” Certificate Number if an “R” Certificate Holder), signature, and date.
17) To be completed by the National Board Commissioned Inspector who witnessed the re-stamping or installation of the new nameplate.

    Note: Once the form is completed, the requester shall file a copy with the jurisdiction where the pressure-retaining item is installed, the National Board, and the owner or user of the vessel (if the request was made by the original manufacturer or the “R” Certificate Holder), and up on request to the Authorized Inspection Agency who witnessed the re-stamping or attachment of the new nameplate.

REPLACEMENT OF STAMPED DATA FORM, NB-136
in accordance with provisions of the *National Board Inspection Code*

1. _____
(P.O. no., job no., etc.)

2. SUBMITTED TO: _____
(Name of Jurisdiction)

_____
(Address)

_____
(Telephone no.)

3. SUBMITTED BY: _____ NUMBER: _____
(Name of Owner, User, Original Manufacturer, or "R" Certificate Holder) ("R" Certificate Holder Only)

_____
(Address)

4. _____ _____ _____
(Name of contact) (Email) Telephone no.)

5. LOCATION OF INSTALLATION: ☐ SAME AS #3 ☐ STOCK ITEM-UNKNOWN

_____
(Name)

_____
(Address)

6. DATE INSTALLED: _____ ☐ UNKNOWN

7. MANUFACTURER: _____
(Name)

8. MANUFACTURER'S DATA REPORT ATTACHED: ☐ NO ☐ YES

9. ITEM REGISTERED WITH NATIONAL BOARD: ☐ NO ☐ YES, NB NUMBER _____

10. ITEM IDENTIFICATION: _____ _____ _____ _____
(Type) (Mfg. serial no.) (Jurisdiction no.) (Year built)

_____ _____ SAFETY RELIEF VALVE SET AT: _____
(Dimensions) (MAWP psi) (psi)

11. PROVIDE A TRUE FACSIMILE OF THE LEGIBLE PORTION OF THE NAMEPLATE: ☐ ATTACHED

THE FOLLOWING IS A TRUE FACSIMILE OF THE LEGIBLE PORTION OF THE ITEM'S ORIGINAL NAMEPLATE (IF AVAILABLE). PLEASE PRINT. WHERE POSSIBLE, ALSO ATTACH A RUBBING OR PICTURE OF THE NAMEPLATE.

12. TRACEABILITY DOCUMENTATION – PROVIDE ANY DOCUMENTATION THAT WILL HELP THE JURISDICTION OR INSPECTOR VERIFY THE REQUESTED RE-STAMPING OR REPLACEMENT NAMEPLATE IS IN ACCORDANCE WITH THE ORIGINAL CODE OF CONSTRUCTION FOR THIS PRESSURE-RETAINING ITEM. ☐ ATTACHED

13. I REQUEST AUTHORIZATION TO REPLACE THE STAMPED DATA OR NAMEPLATE ON THE ABOVE DESCRIBED PRESSURE-RETAINING ITEM IN ACCORDANCE WITH THE RULES OF THE *NATIONAL BOARD INSPECTION CODE* (NBIC).

NAME: _____ NUMBER: _____
(Owner, User, Original Manufacturer, "R" Certificate Holder) ("R" Certificate Holder only)

SIGNATURE: _____ ^ or _____ DATE: _____
(Authorized Representative)

14. BASED ON THE TRACEABILITY PROVIDED, AUTHORIZATION IS GRANTED TO REPLACE THE STAMPED DATA OR TO REPLACE THE NAMEPLATE OF THE ABOVE DESCRIBED PRESSURE-RETAINING ITEM.

SIGNATURE: _____ DATE: _____
(Authorized Jurisdictional Representative or Inspector)

NATIONAL BOARD COMMISSION NO.: _____ JURISDICTIONAL NUMBER: _____
(If available)

15. THE FOLLOWING IS A TRUE FACSIMILE OF THE ITEM'S REPLACEMENT STAMPING OR NAMEPLATE.
(Must clearly state "replacement")

16. I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE STATEMENTS IN THIS REPORT ARE CORRECT, AND THAT THE REPLACEMENT INFORMATION, DATA, AND IDENTIFICATION NUMBERS ARE CORRECT AND IN ACCORDANCE WITH PROVISIONS OF THE *NATIONAL BOARD INSPECTION CODE* (NBIC).

NAME: _____ NUMBER: _____
(Owner, User, Original Manufacturer, "R" Certificate Holder) ("R" Certificate Holder only)

SIGNATURE: _____ ^ or _____ DATE: _____
(Authorized Representative)

17. WITNESSED BY: _____ EMPLOYER: _____
(Name of Inspector)

SIGNATURE: _____ DATE: _____ NB COMMISSION NO.: _____
(Name of Inspector)

1.4 PERSONNEL SAFETY

a) Personnel safety is the joint responsibility of the owner or user and the Inspector. All applicable safety regulations shall be followed. This includes regulations of the country, ~~federal,~~ state, regional, and/or local rules and regulations. Owner or user programs, safety programs of the Inspector's employer, or similar standards also apply. ~~In the absence of such rules, prudent and generally accepted engineering safety procedures satisfactory to the Inspector shall be employed by the owner or user.~~

b) The owners or users are responsible for addressing all exposures with the Inspector prior to the inspection. This may include but is not limited to the following:

1. remove the exposure.
2. provide the necessary training to the Inspector to satisfy the Inspector's concern.
3. provide proper PPE.

In no case shall the Inspector perform an inspection until satisfied that the inspection can be performed safely.

c~~b~~) Inspectors are cautioned that the operation of safety devices involves the discharge of fluids, gases, or vapors. Extreme caution should be used when working around these devices due to hazards to personnel. Suitable hearing protection should be used during testing because extremely high noise levels can damage hearing.

d~~c~~) Inspectors shall take all safety precautions when examining equipment. Proper personal protective equipment shall be worn, equipment shall be locked out, blanked off, decontaminated, and confined space entry permits obtained before internal inspections are conducted. In addition, Inspectors shall comply with plant safety rules associated with the equipment and area in which they are inspecting. Inspectors are also cautioned that a thorough decontamination of the interior of vessels is sometimes very hard to obtain and proper safety precautions must be followed to prevent contact or inhalation injury with any extraneous substance that may remain in the tank or vessel.

Luis and I were both wondering about the use of "pencil lead"?

NOTE TO COMMITTEE: Per AE testing, it is common practice to actually break a pencil lead to review waveforms. The use of the term 'pencil lead' below is correct. However, there is some additional clarifications in the changes submitted that would be beneficial.

S10.10.6 TEST PROCEDURE

Couple sensors to vessel and connect to the testing equipment per ASME Section V Article 11. Connect pressure transducer to the recorder. Conduct sensor performance checks prior to the test to verify proper operation and ~~good coupling~~that the sensor is coupled to the vessel. The E and F waveforms shall be observed by breaking a pencil lead (e.g., using a 0.3 mm type 2H mechanical pencil lead per ASME, Section V, Article 13, paragraph T-1347.1) at approximately 8 in. (200 mm) and 16 in. (410 mm) from a sensor along the fiber direction. All calibration data shall be recorded.

I know "good repair" is typically an understood term, but with the NBIC being read internationally, we were wondering if that phrase could be understood in the same way on a global scale. Or if a better phrase could be chosen.

NOTE TO COMMITTEE: We agree that 'good repair' can be a subjective term. See the changes below.

2.3.6.4 LIQUID AMMONIA VESSELS

c) Inspection of parts and appurtenances

1) If valves or fittings are in place, check to ensure that these are complete and functional. Parts made of copper, zinc, silver, or alloys of these metals are unsuitable for ammonia service and shall be replaced with parts fabricated of steel or other suitable materials.

2) Check that globe valves are installed with the direction of flow away from the vessel.

3) Observe that excess flow valves are properly installed and ~~in good repair~~are fit for continued service.

2.3.6.7 ANHYDROUS AMMONIA NURSE TANKS

b) Inspection shall consist of the following:

5) Trailer and running gear – Ensure that the hitch and undercarriage ~~are~~ adhere to roadworthiness regulations per Jurisdiction~~good repair~~. Observe that welds are not cracked, or the rails bent. The trailer tires shall be in serviceable condition with no cuts to the cords. Two safety chains and hooks shall be in place with one hitch pin and lock pin available. The tank to trailer anchorage shall be satisfactory and any bolting tightened. Spring leaves shall not be cracked or broken on inspection and the ends secured.