



THE NATIONAL BOARD
OF BOILER AND PRESSURE VESSEL INSPECTORS

Date Distributed: July 31, 2023

NATIONAL BOARD INSPECTION CODE SUBGROUP INSPECTION

MINUTES

Meeting of July 11, 2023
St. Louis, MO

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The National Board of Boiler & Pressure Vessel Inspectors
1055 Crupper Avenue
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1. Call to Order

The Inspection Subgroup (SG) Chair, Mr. Darrell Graf called the meeting to order at 8:01 a.m. (CST).

2. Introduction of Members and Visitors

A roll call of all SG members in person and online was taken by Secretary, Ms. Jodi Metzmaier. 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 21 of 26 members in attendance, both in person and online, a quorum was established.

4. Awards/Special Recognition

None.

5. U.S. Chemical Safety Board Presentation

Representatives from the U.S. Chemical Safety Board gave a presentation regarding the 2017 Loy Lange Box Company pressure vessel explosion. The presentation was simulcast to the SG Inspection meeting room via MS Teams. Virtual attendees joined the Subgroup Repairs & Alterations meeting at approximately 8:20 am (CST) to watch the presentation. The members and visitors then rejoined the SG meeting at the conclusion of the presentation.

6. Announcements

Ms. Metzmaier gave the announcements to the SG. (Attachment Page 3)

7. Adoption of the Agenda

- Add Mike Whitlock (Authorized Inspection Agencies) & Jeremy Smith (General Interest) to the agenda as nominees.

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

8. Approval of the Minutes of the January 10, 2023, Meeting

A motion was made to accept the minutes from the January 10, 2023, meeting. The motion was seconded and unanimously approved.

9. Review of Rosters

a. Membership Nominations

Mr. Joseph Beauregard (Users), Mr. Randy Kennedy (Certificate Holders), Mr. Jeremy Smith (General Interest), and Mr. Mike Whitlock (Authorized Inspection Agencies) are interested in becoming members of the Inspection Subgroup.

Brandon Wilson noted to the SG that he has changed employment but remains in the same interest category (General Interest). He would like to remain on the SG. No action needed by the SG.

Chuck Becker has changed employment which has changed his interest category from Manufacturer to General Interest. A motion was made to keep Mr. Becker on the SG. The motion was seconded and **unanimously approved.**

Mr. Beauregard, Mr. Kennedy, Mr. Smith, and Mr. Whitlock all spoke to the SG about their background and why they would like to become a member of the Inspection SG. The resumes of all nominees were reviewed by the SG.

After much discussion regarding interest categories, and the total number of members on the SG, a motion was made to accept all four nominees. The motion was seconded and unanimously approved.

b. Membership Reappointments

The following SG members are up for reappointment: Mr. Brent Ray, Mr. James Roberts, and Mr. Jason Safarz.

All three members have confirmed they would like to be reappointed as members on the Inspection SG. A motion was made to reappointment all 3 members. The motion was seconded and unanimously approved.

Mr. Getter, Mr. Buechel, Mr. Scarcella, and Mr. Petersen have all stated they would be like to be removed from the Inspection SG to allow more room for other who would like to join the SG; however, they will remain as members of the Inspection Subcommittee. All 4 members will send an email to the NBIC Secretary stating their intention.

c. Officer Appointments - None.

10. Open Items Related to Inspection

a. PRD

- i. **Item 23-31** – Testing of liquid service valves to be water or other suitable liquid (new item)
Since this is a new item, there was no discussion by the SG.

b. R&A

- i. **Item 21-53** – Post repair inspection of weld repairs to CSEF steels. (P. Gilston as PM)
(See item 22-06 below)
Mr. Horbaczewski presented the proposal from R&A to the Inspection SG. The group discussed the proposal, and stressed their concern that the inspectors will not see this information if it is Part 3. Mr. Horbaczewski noted that we have an item open to discuss this Part 3 item and potentially add something into Part 2.
- ii. **Item 21-67** – Add welding requirements to plugging firetubes. (P. Gilston as PM)
(See item 23-08 below)
Mr. Horbaczewski noted that Part 2 has an item open to review this Part 3 item.

11. Interpretations

Item Number: 22-40	NBIC Location: Part 2, 4.4.7.2	No Attachment
General Description: Allowable stresses for t(required) calculation		
Subgroup: Inspection		
Task Group: T. Clark (PM), B. Ray, B. Wilson, J. Petersen, J. Roberts		
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.		
July 2023 Meeting Action: PROGRESS REPORT		
Mr. Clark presented a proposed question and answer to the interpretation. The group had many comments & questions regarding the proposal. The task group (TG) will get back together to revise the proposal based on the SG’s comments. The TG will work together during break and will submit a new proposal to the SG. Mr. Clark and Mr. Ray have revised the proposal and presented it to the SG. There were still concerns with the proposal, and after further discussion the SG questioned if this should be an interpretation for Part 3 instead of Part 2. Mr. Clark stated he will reach out to Part 3 to see if this item should be sent to them for response.		
TASK GROUP UPDATE: Add J. Roberts & James Sowinski		

12. Action Items

Item Number: 20-57	NBIC Location: Part 2, 4.4.1 a)	No Attachment
<p>General Description: Evaluate revision to Part 2, 4.4 FFS scope roles & responsibilities and API 579-1/ASME FFS-1.</p> <p>Subgroup: Inspection Task Group: M. Horbaczewski (PM), B. Williams, and B. Ray Submitted by: George Galanes</p> <p>Explanation of Need: Currently, there is confusion surrounding implementation of FFS for Part 2 inspection activities, where the FFS form is located and Part 3 activities regarding Part 3, 3.3.4.8 because it references Part 2 for FFS. In addition, we need to have a Part 2 Inspection member to be assigned to assist in the development of roles and responsibilities.</p>		
<p>July 2023 Meeting Action: Mr. Horbaczewski presented this item to the SG. He stated Mr. Seifert is not getting good response from EPRI, and he questioned if the SG wanted to take this on their own or close the item with no action. After discussion, a motion was made to close this item with no action. The motion was seconded and unanimously approved.</p>		

Item Number: 21-25	NBIC Location: Part 2	No Attachment
<p>General Description: Autoclave/Quick opening device PP (submitted by Kevin Hawes)</p> <p>Subgroup: Inspection Task Group: V. Scarcella (PM), T. Bolden, M. Horbaczewski, J. Peterson, J. Clark, W. Hackworth, M.A. Shah, C. Becker, J. Morgan.</p> <p>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.</p>		
<p>July 2023 Meeting Action: This item went to Letter Ballot (LB) between meetings. The first ballot passed on 5/31/23; however, the document was then revised based on comments and sent back out for a revote. The second ballot passed and closed on 6/30/23. There is no action needed by the SG. This item will now go to the Inspection SC for vote. Mr. Getter and Mr. Becker had questions regarding the item and Mr. Scarcella spoke to try and answer the questions. There was a lot of discussion on the item and concerns regarding the exemption to the small autoclaves.</p>		

Item Number: 21-47	NBIC Location: Part 2, 2.2.4 & 2.2.5	No Attachment
<p>General Description: To provide better guidance as it relates to carbon monoxide</p> <p>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, J. Smith Submitted by: V. Scarcella</p> <p>Explanation of Need: Need to provide more comprehensive items to be reviewed to guide the inspector on carbon monoxide and combustion air.</p>		
<p>July 2023 Meeting Action: PROGRESS REPORT Mr. Hackworth noted that the TG has an intended proposal that they are currently reviewing. He is proposing the TG meet at least once per month prior to January 2024 so they can finalize the proposal for the January 2024 meeting.</p> <p>TASK GROUP UPDATE: Remove V. Scarcella, add J. Smith</p>		

Item Number: 22-06	NBIC Location: Part 2, 3.4.9 e)	No Attachment
<p>General Description: Part 2 task group to review Part 3 Item 21-53</p> <p>Subgroup: Inspection Task Group: M. Horbaczewski (PM), J. Clark, B. Wilson, J. Mangas, P. Polick, H. Henry, P. Gilston, B. Ray, T. Bolden Submitted by: D. Graf</p> <p>Explanation of Need: Part 2 task group to investigate further changes to Part 2/Part 3 that could be needed because of action item 21-53.</p>		
<p>July 2023 Meeting Action: PROGRESS REPORT Mr. Horbaczewski stated Mr. Gilston will join the SG meeting to discuss where Part 3 is with this item and the reasoning behind the item. Mr. Gilson joined the SG meeting to present and discuss his proposal for Part 3 item 21-53. The SG has added more members to the TG to discuss the Part 3 proposal and to see if anything needs to be added to Part 2.</p> <p>TASK GROUP UPDATE: Add H. Henry, P. Gilston, B. Ray, T. Bolden, T. Lebeau, A. Triplett</p>		

Item Number: 22-22	NBIC Location: Part 2	No Attachment
<p>General Description: Changes and additions to align with part III with in service inspections</p> <p>Subgroup: Inspection Task Group: T. Bolden (PM), J. Clark, J. Petersen, M. Sansone, B. Ray, D. Graf, and J. Mangas Submitted by: V. Scarcella</p> <p>Explanation of Need: Several areas where part III after repair in service inspections should be aligned with part II.</p>		
<p>July 2023 Meeting Action: Mr. Bolden presented the proposal to the SG. Since there are quite a few changes and additions, the SG decided to send the proposal to LB.</p>		

Item Number: 22-26	NBIC Location: Part 2, 2.3.6.8	No Attachment
<p>General Description: Addition of cast acrylic as a pressure vessel material</p> <p>Subgroup: Inspection Task Group: J. Calvert (PM), V. Newton, D. Buechel, D. Rose Submitted by: J. Calvert</p> <p>Explanation of Need: Provide inspectors with the criteria necessary to competently inspect vessels like acrylic chromatography columns.</p>		
<p>July 2023 Meeting Action: The PM, Mr. Calvert, was not present at the meeting, and the task group members have not heard any updates. No report was given.</p>		

Item Number: 22-39	NBIC Location: Part 2, 4.4.8.7 g)	No Attachment
<p>General Description: Recommended clarification of requirements for Evaluating Local Thin Areas</p> <p>Subgroup: Inspection Task Group: V. Newton (PM), T. Barker, J. Morgan, B. Wilson Submitted by: L. Ponce</p> <p>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).</p>		
<p>July 2023 Meeting Action: PROGRESS REPORT Mr. Newton stated he still has more work to do before presenting a proposal to the SG.</p> <p>TASK GROUP UPDATE: Add J. Morgan & B. Wilson</p>		

Item Number: 23-08	NBIC Location: Part 2	No Attachment
<p>General Description: Part 2 task group to review Part 3 Item 21-67</p> <p>Subgroup: Inspection Task Group: M. Horbaczewski (PM), J. Clark, B. Wilson, J. Mangas, P. Polick Submitted by: D. Graf</p> <p>Explanation of Need: Part 2 task group to investigate further changes to Part 2/Part 3 that could be needed because of action item 21-67.</p>		
<p>July 2023 Meeting Action: PROGRESS REPORT Mr. Horbaczewski stated Mr. Gilston will join the SG meeting to discuss where Part 3 is with this item and the reasoning behind the item. Mr. Gilson joined the SG meeting to present and discuss his proposal for Part 3 item 21-67. The SG has added more members to the TG to discuss the Part 3 proposal and to see if anything needs to be added to Part 2.</p> <p>TASK GROUP UPDATE: Add H. Henry, P. Gilston, B. Ray, T. Bolden, T. Lebeau, & A. Triplett</p>		

13. New Items

Item Number: 23-16	NBIC Location: Part 2	No Attachment
General Description: Part III is adding requirements for inservice inspectors for repair F/U		
Subgroup: Inspection Task Group: None assigned. Submitted by: V. Scarcella		
Explanation of Need: Part III has items pending for mechanical repairs and post repair work inspections and the SG needs to make sure we have adequate instructions for the inspector.		
July 2023 Meeting Action: A motion was made to close this item with no action because it is already being covered in several other items. The motion was seconded and unanimously approved .		

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: None assigned. 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.		
July 2023 Meeting Action: Mr. Hadley presented this item to the SG. After some discussion it was decided to form a TG to review Mr. Hadley's power point presentation and other information he has put together to see if anything is needed to be added to Part 2.		
TASK GROUP: D. Graf (PM), B. Ray, J. Roberts, T. Vandini, C. Becker, J. Sowinski, & J. Hadley		

Item Number: 23-19	NBIC Location: Part 2, S6.13.6	Attachment Page 4
<p>General Description: DOT Transport Tank Pressure Testing (Part 2, Supplement 6)</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: R. Underwood</p> <p>Explanation of Need: The table in 49CFR180.407(g)(1)(iv) appears to have been revised at some point to add “The test pressure on the nameplate or specification plate” to the beginning of each specification pressure test requirement. Table S6.13.6 needs to be revised to reflect the current DOT requirements.</p>		
<p>July 2023 Meeting Action: Mr. Underwood joined the SG meeting to present this item. He stated when he updated the table in Part 3, he noticed the same table was in part 2. He felt the table in Part 2 needed to be updated as well. A motion was made to accept the proposal as presented. The motion was seconded and unanimously approved.</p>		

Item Number: 23-26	NBIC Location: Part 2	No Attachment
<p>General Description: Adding verbiage in Part 2 to mention a time limit on tube plugs in vessels</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: K. Moore</p> <p>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.</p>		
<p>July 2023 Meeting Action: Mr. Clark presented this item to the SG. Mr. Scarcella stated since Part 3 is revamping this section, Part 2 should hold off on any action until Part 3 has completed the re-write. A task group was created.</p> <p>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</p>		

Item Number: 23-27	NBIC Location: Part 2, 1.5.1	No Attachment
<p>General Description: Addition of requirement for Inspector to be present for inspections.</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: D. Kinney</p> <p>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.</p>		
<p>July 2023 Meeting Action: Mr. Kinney’s proposal was presented to the SG. After review and a short discussion, it was decided a task group was needed to review the proposal further.</p> <p>TASK GROUP: V. Newton (PM), V. Scarcella, T. Bolden, J. Morgan, J. Smith, T. Barker, C. Becker, C. Hartford</p>		

Item Number: 23-28	NBIC Location: Part 2, 5.3.3	No Attachment
<p>General Description: Revision to NB-136</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: D. Kinney</p> <p>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.</p>		
<p>July 2023 Meeting Action: Mr. Clark presented this item to the SG and a task group was created.</p> <p>TASK GROUP: J. Clark (PM), D. Graf, J. Petersen, J. Smith</p>		

Item Number: 23-30	NBIC Location: Part 2, S7. 10 and Table S9.4	Attachment Page 5
<p>General Description: References to change of service for LPG vessels incorrectly use "altered"</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: T. Vandini</p> <p>Explanation of Need: Conversion of service for LPG tanks (typically from above ground to underground service) typically involves changes to the vessel covered under Part 3, Paragraph 3.3.3 and, as such, are considered repairs. As such, the language referring to these conversions that uses the word "altered" or "alteration" may be confusing to an inspector or other user of NBIC. I suggest changing the word "altered" to "converted" and removing the specific reference to "alterations".</p>		
<p>July 2023 Meeting Action: Mr. Clark presented this item to SG, and asked Mr. Vandini to discuss the item with the SG. A motion was made to accept the proposal as presented. The motion was seconded and unanimously approved.</p>		

Item Number: 23-37	NBIC Location: Part 2, 1.4	No Attachment
<p>General Description: Add comment to further define responsibility of the owner user</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: V. Scarcella</p> <p>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."</p>		
<p>July 2023 Meeting Action: Mr. Scarcella presented this item to the SG. He suggested creating a TG. The SG agreed and a task group was created</p> <p>TASK GROUP: V. Scarcella (PM), J. Smith, J. Mangas, T. Barker</p>		

Item Number: 23-42	NBIC Location: Part 2, 1.4 a)	No Attachment
<p>General Description: Change for consistency</p> <p>Subgroup: Inspection Task Group: None assigned. Submitted by: L. Ponce</p> <p>Explanation of Need: Inconsistencies add confusion and increase liabilities of all parties.</p>		
<p>July 2023 Meeting Action: Mr. Ponce presented this item to the SG. Mr. Mooney stated, by definition, “form” is input, and “report” is output. After discussion, Mr. Ponce proposed that this item be moved as editorial to make all bodies of each Part be consistent with form vs report, as National Board staff feel necessary. A motion was made to close this item with no SG action. The motion was seconded and unanimously approved.</p>		

14. Future Meetings

- January 2024 – Charlotte, NC
- July 2024 – TBD

Mr. Graf discussed the future meetings with the SG.

15. Adjournment

A motion was made to adjourn the meeting at 3:54 pm (CST). The motion was seconded and unanimously approved.

Respectfully submitted,



Jodi Metzmaier
Subgroup Inspection Secretary

Subgroup Inspection Member Attendees - July 2023

Name:	Interest Category	Email	Registered	In Person Attendance	Remote Attendance	Not In Attendance
Darrell Graf - Chair	National Board Certificate Holders	grafdr@airproducts.com	In Person	X		
Jim Clark - Vice Chair	Manufacturers	james.clark@worthingtonindustries.com	Remote		X	
Jodi Metzmaier - Secretary	NBBI	jmetzmaier@nbbi.org	In Person	X		
Tim Barker	Authorized Inspection Agencies	timothy.barker@fmglobal.com	In Person	X		
Chuck Becker	Manufacturers	hggbecker@yahoo.com	In Person	X		
Tim Bolden	Authorized Inspection Agencies	timothy.bolden@cna.com	In Person	X		
Ernest Brantley	Authorized Inspection Agencies	ernest.brantley@bpcllca.com				X
David Buechel	Authorized Inspection Agencies	davidbuechel55@gmail.com	In Person	X		
Lee Burton	National Board Certificate Holders	burtondl@airproducts.com	In Person	X		
James Calvert	National Board Certificate Holders	jcalvert@lilly.com				X
Jim Getter	Manufacturers	jim.getter@worthingtonindustries.com	In Person	X		
William Hackworth	Authorized Inspection Agencies	william.hackworth@tuvsud.com	Remote		X	
Mark Horbaczewski	Users	mhorbaczewski@diamondtechnicalservices.com	In Person	X		
Jerry Jessick	Users	jjessick@fusion-etc.com				X
John Mangas	General Interest	jemangas@gmail.com	In Person	X		
Joe Morgan	Users	jemorgan1@dow.com			X	
Venus Newton	Authorized Inspection Agencies	venus_newton@yahoo.com	In Person	X		
Jeff Petersen	Users	jeffrey.petersen@inl.gov	In Person	X		
Pat Polick	Jurisdictional Authorities	patrick.polick@illinois.gov		X		
Brent Ray	Users	bdray@marathonpetroleum.com	In Person	X		
James Roberts	Manufacturers	james.roberts@triarccorp.com	In Person	X		
David Rose	Users	dr3747@telus.net				X
Jason Safarz	General Interest	jsafarz@karldungsusa.com	Remote		X	
Matt Sansone	Jurisdictional Authorities	matthew.sansone@labor.ny.gov	Remote			X
Vincent Scarcella	Authorized Inspection Agencies	vincent.scarcella@cna.com	In Person	X		
Thomas Vandini	National Board Certificate Holders	tvandini@propanetank.com		X		
Brandon Wilson	General Interest	Brandon.wilson167@yahoo.com			X	

Subgroup Inspection Visitor Attendees - July 2023

Name	Company/Title/Interest	Email	Registered	In Person Attendance	Remote Attendance
Mark Mooney	NBBI	mmooney@nationalboard.org	In Person	X	
Luis Ponce	NBBI	lponce@nbbi.org	In Person	X	
Melissa Wadkinson	Vice Chair of MC	melissa.wadkinson@fulton.com	In Person	X	
James Hadley	Member/Fact Fancy, LLC	james.hadley@factplusfancy.com	Remote		X
Brandon Steinhart	Operations Chief Inspector/FM Global	brandon.steinhart@fmglobal.com	In Person	X	
Christopher Hartford	Machinery & Equipment Supervisor/Cincinnati Insurance Companies	Christopher_Hartford@cinfin.com	Remote		X
Mike Whitlock	Hartford Steam Boiler	gerald_whitlock@hsb.com	In Person	X	
M.A. Shah	ABM Industrial Services Inc.	abmindustrialservices@gmail.com	Remote		X
David Dexter	Energy Technology Principle/Dow Chemical	dexterde@dow.com	Remote		X
Keith Sanford	Boiler Program Supervisor/State of Texas	keith.sanford@tdlr.texas.gov	In Person	X	
Clay Moultrie	Quality Directory/Quality Steel Corp	cmoultrie@propanetank.com	Remote		X
James Sowinski	Principal Engineer I/The Equity Engineering Group, Inc.	jsowinski@e2g.com	In Person	X	
Joseph Arvizu III	Operations Manager/HIS Group Inc.	jarvizuiii@hsigroupinc.com	Remote		X
Joseph Beauregard	Maintenance Manager/Los Alamos National Laboratory	joeducati@hotmail.com	In Person	X	
Jeremy Smith	NC Department of Labor Boiler Safety Bureau	jeremy.smith@labor.nc.gov	In Person	X	
Robert Smith	Hyperbaric Certification Authority/Naval Facilities Engineering Command	robert.c.smith@navy.mil	In Person	X	
Harrington Henry	ARISE Inc.	Harrington.Henry@tuvsud.com	In Person		X
Randy Kennedy		crkennedy@babcock.com		X	
Phil Gilson	Principal Engineer, Codes & Standards	philip_gilston@hsb.com		X	
Dan Powell	Boiler Property Consulting			X	

Announcements

- 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 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.
- The National Board will be hosting a reception on Wednesday evening from 5:30pm to 7:30pm at the Sports & Social St. Louis Ballpark Village next to the hotel. We will also host a 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 Cardinal C. Members, visitors, and guests are all welcome.
- The US Chemical Safety Board will be giving a presentation during the SG R&A meeting regarding the 2017 Loy Lange Box Company pressure vessel explosion. The SG Inspection meeting will join the presentation via Teams around 8:15 am (Central Time). If you are joining us remotely, and you are interested in listening to the presentation, you will want to leave the SG Inspection Meeting and Join the SG R & A meeting. Once the presentation is complete, we will resume our SG Inspection meeting.
- Meeting schedules, meeting room layouts, and other helpful information can be found on the National Board website under the **Inspection Code** tab → NBIC Meeting Information.
- **NBIC Share Cloud is for members only.** The password has changed, please see me for the new password.
- 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.
- 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.
- 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 Wednesday and breakfast and lunch on Thursday.

Item 23-19
B. Underwood
Part 2

PROPOSED TEXT

TABLE S6.13.6
PRESSURE TEST REQUIREMENTS

<u>Transport Cargo-Tank Specification</u>	<u>Test Pressure</u>
MC 300, MC-301, MC-302, MC-303, MC-305, and MC-306	<u>The test pressure on the name plate or specification plate, 20.7 kPa (3 psig) or design pressure, whichever is greater.</u>
MC 304, and MC-307	<u>The test pressure on the name plate or specification plate, 275.8 kPa (40 psig) or 1.5 times design pressure, whichever is greater.</u>
MC 310, MC-311, and MC-312	<u>The test pressure on the name plate or specification plate, 20.7 kPa (3 psig) or 1.5 times design pressure, whichever is greater.</u>
MC 330, and MC-331	<u>The test pressure on the name plate or specification plate, 1.5 times either MAWP or the re-rated pressure, whichever is applicable. DOT Transport Tanks constructed in accordance with Part UHT in Section VIII, Division I of the ASME Code shall be tested at a pressure at least twice the design pressure.</u>
MC 338	<u>1.25 times either MAWP or the re-rated pressure, whichever is applicable The test pressure on the name plate or specification plate or 1.5 times the design pressure, plus static head of lading, plus 101.3 kPa (14.7 psi) if subjected to external vacuum. DOT Transport Tanks constructed in accordance with Part UHT in Section VIII, Division I of the ASME Code shall be tested at a pressure at least twice the design pressure.</u>
DOT 406	<u>The test pressure on the name plate or specification plate, 34.5 kPa (5 psig) or 1.5 times the MAWP, whichever is greater.</u>
DOT 407	<u>The test pressure on the name plate or specification plate, 275.8 kPa (40 psig) or 1.5 times the MAWP, whichever is greater.</u>
DOT 412	<u>The test pressure on the name plate or specification plate, or 1.5 times the MAWP, whichever is greater.</u>

REFERENCE - Current Table in 180.407(g)(1)(iv)

Specification	Test pressure
MC 300, 301, 302, 303, 305, 306	The test pressure on the name plate or specification plate, 20.7 kPa (3 psig) or design pressure, whichever is greater.
MC 304, 307	The test pressure on the name plate or specification plate, 275.8 kPa (40 psig) or 1.5 times the design pressure, whichever is greater.
MC 310, 311, 312	The test pressure on the name plate or specification plate, 20.7 kPa (3 psig) or 1.5 times the design pressure, whichever is greater.
MC 330, 331	The test pressure on the name plate or specification plate, 1.5 times either the MAWP or the re-rated pressure, whichever is applicable.
MC 338	The test pressure on the name plate or specification plate, 1.25 times either the MAWP or the re-rated pressure, whichever is applicable.
DOT 406	The test pressure on the name plate or specification plate, 34.5 kPa (5 psig) or 1.5 times the MAWP, whichever is greater.
DOT 407	The test pressure on the name plate or specification plate, 275.8 kPa (40 psig) or 1.5 times the MAWP, whichever is greater.
DOT 412	The test pressure on the name plate or specification plate, or 1.5 times the MAWP, whichever is greater.

Item 23-30

T. Vandini

Part 2

Statement of Need: Conversion of service for LPG tanks (typically from above ground to underground service) typically involves changes to the vessel covered under Part 3, Paragraph 3.3.3 and, as such, are considered repairs. As such, the language referring to these conversions that uses the word "altered" or "alteration" may be confusing to an inspector or other user of NBIC. I suggest changing the word "altered" to "converted" and removing the specific reference to "alterations".

S7.10 REQUIREMENTS FOR CHANGE OF SERVICE FROM ABOVE GROUND TO UNDERGROUND SERVICE

ASME LPG pressure vessels may be ~~altered~~ converted from above ground (AG) service to underground (UG) service subject to the following conditions.

**TABLE S9.4
EXAMPLES OF CHANGE OF SERVICE CONDITIONS**

Change	Some Factors to Consider
LP Gas to Ammonia	<ul style="list-style-type: none"> • PWHT of Vessel During Construction Wet-fluorescent magnetic particle testing (WFMT) on all internal surfaces • Internal access of vessel is necessary, may need to install manhole • NFPA 58 should be consulted
Ammonia to LP gas	<ul style="list-style-type: none"> • NFPA 58 should be consulted for restrictions. • Wet-fluorescent magnetic particle testing (WFMT) on all internal surfaces • Internal access of vessel is necessary., may need to install manhole • Also see, NBIC Part 2, 2.3.6.4, S7.8.6, S7.9
LP gas service: from above ground to underground	<ul style="list-style-type: none"> • Requires alterations (additional nozzles) • Corrosion protection • See NFPA 58
LP gas to air receiver	<ul style="list-style-type: none"> • Assurance of vessel cleanliness, i.e. removal of mercaptan • Appropriateness and number of inspection and drain openings • Corrosion allowance
Boiler Service: steam to hot water	<ul style="list-style-type: none"> • Nozzles may require modification for water inlet and outlet • Change of Pressure Relief Device