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**THE
NATIONAL
BOARD**
OF BOILER AND
PRESSURE VESSEL
INSPECTORS

NATIONAL BOARD TASK GROUP GRAPHITE

MINUTES

Meeting of October 7th, 2019
Clearwater, FL

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
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1. Call to Order

Task Group Graphite Chair Mr. Aaron Viet called the meeting to order at 9:07AM local time.

2. Introduction of Members and Visitors

Mr. Viet asked those present to introduce themselves. After introductions, it was determined that enough members were present to establish a quorum.

3. Announcements

Mr. Viet announced that the next meeting is scheduled to take place on April 7th and 8th at the National Board headquarters in Columbus, OH.

4. Adoption of the Agenda

A motion was made, seconded, and unanimously approved to adopt the agenda as presented.

5. Approval of the Minutes of July 10th, 2019 Meeting

The minutes from the July 2019 meeting can be found on the National Board website - <https://www.nationalboard.org/Index.aspx?pageID=13&ID=18>

A motion was made, seconded, and approved unanimously to approve the minutes from the July meeting.

6. Review of Rosters

a. Membership Nominations

- i.** The nominations for Mr. Nolan Lee and Mr. Richard Bulgin were approved by the NBIC Committee and are pending approval by the Chair of the Board of Trustees.
- ii.** Mr. Viet announced that Mr. Bob Dickerson nominated Mr. Tracy Rudy to take his position on the task group as he can no longer make it to meetings consistently. The group reviewed Mr. Rudy's resume and voted to approve his appointment to the group. His appointment will be on Subcommittee R&A's agenda for approval at the January 2020 NBIC Meeting.

b. Membership Reappointments

- i.** Mr. Francis Brown's and Mr. Justin Clements' reappointments were approved by the NBIC Committee and are pending approval by the Chair of the Board of Trustees.

c. Officer nominations

- i.** No new nominations.

7. NBIC Business

Item Number: NB15-2208	NBIC Location: Part 3, S3	No Attachment
<p>General Description: Investigate repair options for graphite block heat exchangers</p> <p>Subgroup: Graphite</p> <p>Task Group: G. Becherer (PM), Aaron Viet</p> <p>October Meeting Action: Mr. Viet shared initial sketches he made for the common types of repairs. The group discussed those sketches and other repairs that might need to have sketches in the NBIC. Mr. Viet will include descriptions for each sketch in the final proposal, and will prepare sketeckes for square blocks as well. Mr. Viet asked Mr. Greg Becherer to write an introduction for this section. Mr. Cahris Cary and Mr. Andy Stupica will write out the procedure hole-plugging repairs. Further discussion was held on whether or not reimpregnation should be included in the procedure. It was suggested that the new section could point to existing sections on reimpregnation and that there should be limits on scale.</p>		

Item Number: 17-167	NBIC Location: Part 3, S3.2 d)	No Attachment
<p>General Description: Clarify repair inspection requirements for machined only graphite parts</p> <p>Subgroup: Graphite</p> <p>Task Group: M. Bost, A. Viet</p> <p>October Meeting Action: Mr. Monte Bost was not present to share a new proposal. The group will wait until next meeting for input from Monte before deciding to close the item or not. Additional discussion was held on clarifying S3.2 d) to define parts and materials more clearly.</p>		

Item Number: 18-94	NBIC Location: Part 3, S3.2 f), h); S3.4 a), b), c) etc.	No Attachment
<p>General Description: G-mark Requirements for Various Repairs/Alteration to Graphite</p> <p>Subgroup: Graphite</p> <p>Task Group: C. Cary (PM)</p> <p>October Meeting Action: Mr. Cary presented a new proposal and asked for input from the group. Discussion was held on calculations for springs and under what conditions a pressure test could be waived. Based on discussion, Mr. Cary will make a few suggested revisions to the proposal and resubmit for review.</p>		

New Items:

Item Number: 19-73	NBIC Location: Part 3, S3	No Attachment
<p>General Description: Requirements for who can make hole plugging repairs on graphite blocks</p> <p>Subgroup: Graphite</p> <p>Task Group: C. Cary (PM), A. Viet, A. Stupica</p> <p>October Meeting Action: During discussion for Item NB15-2208, it was determined that language for this item would be written after the procedure for hole-plugging repairs on graphite blocks has been completed.</p>		

Item Number: 19-74	NBIC Location: Part 3, S3.3	Attachment Page 2
General Description: Routine repair requirements for partial nozzle replacement		
Subgroup: Graphite		
Task Group: A. Stupica (PM), M. Bost		
October Meeting Action: Mr. Stupica presented a proposal to change the existing language for nozzle replacement. After discussing the proposal, the group agreed that this language can be merged with the existing nozzle repair language. It was also suggested that a separate section for nozzle replacement/repair be written to show procedures for performing the repair.		

8. New Business

Limits for routine surface repairs:

- The group discussed types of repairs for surface repair and the common sizes of those repairs. The group proposed opening an item to allow for 1 cubic inch of cement-only repair and for inlay repairs up to 36 cubic inches. A proposal will be prepared and presented at the next meeting.

Mr. Nolan Lee and Mr. Viet asked Mr. Ellis if the heading for Part 3, S3.3 could be changed from “Repairs of a Routine Nature” to “Routine Repairs” to match the rest of Part 3. Mr. Ellis confirmed that this would be an editorial change that would not require a formal vote.

Mr. Lee mentioned that in Part 3, S3.5.6.1 d), ASTM no longer used and the wording should be changed to match ASME. He will prepare a proposal for this and send it to Mr. Ellis, who will send it to the group as a letter ballot.

Mr. Stupica mentioned that he wants to re-word Part 3, S3.5.4 h) to clarify the procedure. He will develop a proposal and send it to Mr. Ellis to be letter balloted.

9. Future Meetings

NBIC Meeting – January 13th-16th, 2020, San Diego, CA

Graphite Meeting – April 7th-8th, 2020, Columbus, OH

NBIC Meeting – July 13th-16th, 2020, Louisville, KY

The NBIC Committee would like a representative from Task Group Graphite to be in attendance for NBIC Meetings (in-person or via WebEx) to discuss Graphite items.

10. Adjournment

A motion was made, seconded, and unanimously approved to adjourn the meeting at 2:15PM local time.

Respectfully submitted,

Jonathan Ellis

Jonathan Ellis
NBIC Secretary

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NBIC Task Group Graphite Attendance - 10/7/2019

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First Last	Email	Company	Phone #	Signature
Andrew Stupica	andy.stupica@sglgroup.com	SGL	440 878-2232	
Keith Cummins	keith.cummins@mersen.com	Mersen	502 893-6575	
Aaron Viet	aaronv@cgthermal.com	CG Thermal	330 998-5120	
Gregory Becherer	GregB@cgthermal.com	CG Thermal	330 405-0844	
Justin Clements	Justin@GMIGraphite.com	Graphite Maintenance	863 581-0507	
Chris Cary	chris.w.cary@dowcorning.com	The Dow Chemical Company	502 732-2767	
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Francis Brown	fbrown@asme.org	Consultant	740-862-8901	
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NOLAN LEE	NOLAN.LEE@MERSEN.COM	MERSEN	540 204-1656	

Item 19-74

S3.3 REPAIRS OF A ROUTINE NATURE

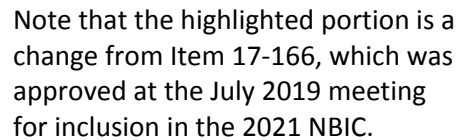
a) The following repairs shall be considered routine, and shall comply with NBIC Part 3, 3.3.2.

1) Machining — routine repair shall not include the machining of pressure-retaining parts with the exception of minor machining for cleaning and joint preparation not to exceed 1/32 in. (0.8 mm) of material thickness.

2) Repair of Gasket Surfaces — re-machining of gasket surfaces, re-serrating, or flattening is permitted if the design thickness is maintained.

3) Replacing Individual Tubes — drilling out and replacing tubes with new tubes or repaired tubes. Only certified materials shall be used for this repair.

4) Nozzle Replacement — complete or partial replacement of nozzles by removing ~~the old nozzle and cementing a new nozzle~~all or a length of the old nozzle and cementing a new piece in place. This is applicable for nozzles with inside diameters not exceeding **6 inches (152 mm)**.



Note that the highlighted portion is a change from Item 17-166, which was approved at the July 2019 meeting for inclusion in the 2021 NBIC.