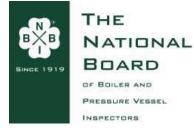
### State of California Inspectors' Meeting

**Presented by:** 

#### **Chuck Withers – Assistant Executive Director – Technical**

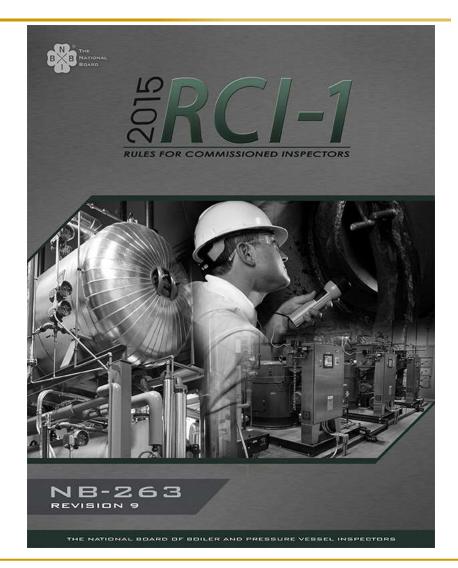
May 2015





### **RCI-1: Rules for Commissioned Inspectors (NB-263)**

Date of Issue: October 6<sup>th</sup>, 2014



Effective Date: July 1<sup>st</sup>, 2015



The National Board of Boiler and Pressure Vessel Inspectors

## **Objectives**

Describe and discuss the requirements for Rules for Commissioned Inspectors/Supervisors, RCI-1.

### Qualifications and Duties

- Inservice
- New Construction



## **RCI-1 Rules for Commissioned Inspectors**

### **Restructured General Layout**

- Sectioned into elements:
  - Foreword
  - Part 1 National Board (NB) Commissions & Endorsements
  - Part 2 Commission and Endorsement Examination
  - Part 3 Commissioned Inspector and Inspector Supervisor/ Technical Manager Duties
  - Part 4 Authorized Inspector Supervisor and Authorized Inspector Duties
  - Part 5 Authorized Inspector/ Inspector Diary (Inspector Diary)
  - Part 6 Code of Ethics
  - Part 7 Complaints and Due Process
  - Glossary



## **RCI-1 Foreword**

 <u>Scope</u>: provides a <u>general overview</u>, <u>purpose</u>, and <u>content</u> of the document, and requirements for inspection.

#### Highlights:

- Describes each endorsement
  - Progression
  - Inspectors/Supervisors
- Relationships
  - Jurisdictions
  - Authorized Inspection Agencies (AIA)



### **Part 1 – National Board Commissions and Endorsements**

**Scope:** Describes general topics for obtaining and maintaining Commissions and Endorsements such as:

- Qualification requirements Inservice, New Construction
- Issuance and renewal
- Reinstatement and change of employment
- Continuing Education requirements

### Changes:

- References to applications for Commissions and Endorsements and where to locate them
- Requires the applicant to submit <u>verifiable evidence</u> for qualifying work experience
- Qualification criteria
- Continuing Education



## **Continuing Education Courses - 2015**

### "IS" Inservice courses

- Pressure relief device installation
- Potable water heaters
- Combustion controls

### "A" New Construction courses

- Calibration
- Determining joint efficiencies (2 parts)
- Inspection and testing requirements

### Nuclear courses

- ASME Section III Div. 1 ("N" endorsement)
  - Material organizations/suppliers
  - Unqualified source material
- More courses in development for ASME Section XI ("I" endorsement) and ASME Section III Div. 2 ("C" endorsement)



### Part 2 – Commissions and Endorsement Examinations

### • <u>Scope</u>:

- Describes <u>examination requirements</u> for all <u>commissions</u> and <u>endorsements</u>. This includes <u>re-examination activities</u>.
- Locations
  - Classroom, On-Demand provider locations, National Board member jurisdictions, and other locations approved by the Executive Director
- Examinations time periods <u>3 per year</u>
  - Wait <u>12 months</u> from date of <u>3<sup>rd</sup> exam attempt</u> to <u>retake</u>
- <u>Grade</u> of <u>70%</u> required to pass



### Part 3 – Commissioned Inspector and the Inspector Supervisor/Technical Manager Duties

- Scope: <u>Specifies required duties</u> for:
  - Inservice Commissioned Inspectors, and
  - Inservice Supervisors and Technical Managers
- Changes:
  - For <u>Supervisor</u>/Technical Manager: Added oversight duties for Inspectors <u>performing Repairs and Alterations</u>
  - Inservice <u>Inspector</u>: Added duties for performing <u>Repair and</u> <u>Alteration inspections</u>
    - Example: 3-2.2.2 "monitor the repair organization's accepted quality program on a <u>continual</u> basis"

\*Inquiry 2015-1



## **RCI-1 Inquiries**

### Inquiry 2015-01

Question: In Paragraph 3-2.2.2(c), it is required that the Inservice Commissioned Inspector monitor the repair organization's accepted quality program on a continual basis. Is it also a requirement in Paragraph 5-4.2, that the Authorized Inspector (new construction) monitor the repair organization's accepted quality program on a continual basis, or at least every twelve months?

**<u>Reply</u>:** Paragraph 3-2.2.2(c) specifies that monitoring of the repair organization's quality program by an Inservice Commissioned Inspector <u>shall</u> be performed on a continual basis. Paragraph 5-4.2 specifies that each element <u>should</u> be monitored at least once every twelve months by either an appropriate Inspector (Inservice Commission) or an Authorized Inspector (New Construction) as appropriate.



### Part 3 – Commissioned Inspector and the Inspector Supervisor/Technical Manager Duties

### Inspector Supervisor/Technical Manager Duties

- Maintaining <u>competency</u> of the Inspector
- Maintaining a <u>record</u> of <u>Inspector assigned</u>
- Document <u>nonconforming activities</u> reported by the Inspector

### For <u>Repairs and Alterations</u>:

•	Auditing the performance of each Inspector	New
•	Confirming corrective actions have been verified by the Inspector	New
•	Ensuring each Inspector maintains an Inspector Diary	New
•	Recording audits and supervisory activities in the Inspector Diary	New

Note: Only applicable to Repairs and Alterations – not inservice type inspections Follow jurisdictional requirements



### Part 3 – Commissioned Inspector and the Inspector Supervisor/Technical Manager Duties

### Inspector:

- Inservice Inspections:
  - <u>No Changes</u>. Still includes:
    - Performing external and internal inspections
    - Witnessing pressure tests
    - <u>Verifying</u> nameplate stamping is legible and represents the item
    - **<u>Reporting</u>** inspection results incl. nonconforming conditions

Note: Follow jurisdictional requirements

### Repairs and Alterations:

 Detailed list of duties <u>similar to shop inspection</u> activity of "A" endorsed New Construction Inspector



### Part 4 – Authorized Inspector (AI) Supervisor and AI Duties

- Scope: Required <u>duties</u> for <u>Inspectors</u> and <u>Supervisors</u> holding New Construction Commission (A) and associated endorsements (N, I, C, B, NS, NS<sub>I</sub>, NS<sub>C</sub>)
- Changes:
  - Added a <u>detailed list</u> of Inspector duties.
  - These duties <u>complement</u> those duties specified in the ASME Code, and
  - <u>ASME QAI-1</u>\* (Qualifications for Authorized Inspection)

Note: Supervisors shall, as a minimum, hold the same endorsement as the Inspector being supervised.



### Part 4 – QAI Duties (Some Examples)

- QAI 5-3.2 (Inspector) <u>Audit</u> performed by Supervisor shall provide <u>evidence</u> of the satisfactory <u>performance of the duties</u> as specified in the applicable sections of the ASME Code and the National Board <u>Rules for Commissioned Inspectors</u>
- QAI 5-2.2.5 (Supervisor) Audit the performance of each Inspector
  - Performed <u>at least once each year</u> and additional times as <u>requested</u> by the <u>Inspector</u>
  - Audit at shop or field location
  - Accompanied by the Inspector during the audit
  - <u>Not required</u> if Inspector has <u>not been engaged</u> in code activity
- QAI 5-2.2.6 Audit shall be recorded in writing, contain the status of each item audited, and a brief description of objective evidence



### Part 4 - AI Supervisor and AI Duties

### Al Supervisor Duties – New Construction

- <u>No changes</u> to existing duties:
  - Maintaining <u>competency</u> of the AI
  - Maintaining a <u>record</u> of AI assigned
  - <u>Auditing</u> the performance of each AI
  - Documenting <u>nonconforming activities</u> reported by the AI
  - Confirming corrective action have been verified by the AI
  - Ensuring AI maintains an Inspector Diary
  - <u>Recording audits</u> and supervisory activities in the <u>Inspector Diary</u>



### **Part 4 - AI Supervisor and AI Duties**

#### Authorized Inspector Duties - New Construction

- Verifying Certificates of Authorization and Code books
- Monitoring
- Notifying Supervisor of nonconforming conditions
- Drawings & Calculations
- Materials
- Examinations and Inspections
- Welding
- Heat Treatment
- Nondestructive Examination
- Calibration
- Nonconforming conditions are closed out
- <u>ASME Data Reports & Stamping\*</u>



### Part 4 – Common Data Report Deficiencies

- National Board authorization to register new process
- Drawing numbers including revision levels incorrect
- Nozzles missing/incorrect
- Joint efficiencies incorrect
- Certificate of Authorization number and/or expiration date incorrect
- Materials incorrect
- Manufacturer's name and/or postal code not meeting Certificate of Authorization
- Certification signatures missing



### **Part 5 - Authorized Inspector/Inspector Diary**

- Scope: Specifies requirements for Inspectors to <u>record</u> inspections and related activities for:
  - Repairs and alterations inspections
  - ASME Code inspections on newly constructed items
- Changes:
  - Includes <u>detail</u> to record <u>activities</u>
  - Bound not loose leaf
  - Controls for electronic diaries
  - Instructions for <u>performing</u> and <u>recording monitoring activities</u> for both <u>new construction</u> and <u>repairs/alterations</u>
  - Availability reviews, investigations
  - Meet employer's requirements



### **Part 5 - Authorized Inspector/Inspector Diary**

### Example: 5-4.2 – Methods

- 1. Accomplished while performing in-process inspection, or through an established, predetermined schedule
- 2. Each element monitored at least once every twelve months
- 3. Based on amount of work

\*Inquiry 2015-2



## **RCI-1 Inquiries**

### Inquiry 2015-02

Question: If a Certificate Holder's scope and/or quality program is "Repairs and Alterations" only (no inservice), then would the requirements of Part 3 and Part 5, with respect to monitoring, still apply?

**Reply:** Yes, both Part 3 and Part 5 apply



### Part 6 – Code of Ethics

- Scope: Establishes criteria for all National Board Inspectors to act in an ethical manner with integrity.
  - Integrity quality of being honest, having strong moral principles.
- Ethics: involves concept of right and wrong conduct (individual values and morals)
- Changes:
  - Assist in understanding and applying
  - This is a new section that includes the following areas of interest:
    - Conflicts of Interest
    - Good Faith Actions
    - Public Perception
    - Independence, Impartiality, and Integrity



### Part 6 - Code of Ethics

### 6-1 – Conflict of Interest

- Activities that <u>compromise</u> or <u>appear to compromise</u> independence, objectivity, or integrity
  - Financial interest, compensation, gifts, or other acceptances that would improperly influence impartiality

### 6-2 – Good Faith Actions (Professional Expert)

- Perform or express opinions within areas of education, training, and experience
- Should be objective and maintain confidentiality
- All safety hazards identified should be immediately disclosed



### Part 6 – Code of Ethics

### 6-3 – Public Perception

- Avoid activities that may harm public, discredit the inspector, or reduce public confidence in the professionalism of the inspector
- Respect individuals and property
- 6-4 Independence, Impartiality, and Integrity
- Free from commercial, financial, and other pressures that can potentially affect judgment
- Independent from functions such as designing, manufacturing, supplying, installing, purchasing, owning, or maintaining items which are inspected by the inspector



### **Part 7 – Complaints and Due Process**

 Scope: Requirements covering complaints against National Board Commissioned inspection personnel and provisions for due process.

#### Changes:

- Falsification of an application
- Neglect of duties or falsification of a report

### • Appeal:

• Within 30 days to the Executive Director



## **RCI-1 Inquiries**

#### Inquiry 2015-03

Question: Would the mandated audit(s) of the "Authorized Inspector specified in Part 4, 4-1.1.3 fulfill the mandated audit for the "Commissioned Inspector" specified in Part 3, 3-1.2.1.1, if the individual is qualified as both an Authorized Inspector and Commissioned Inspector, and is performing new construction and some level or repair and alteration inspection activities?

Reply: Yes.

#### Inquiry 2015-04

Question: To meet the mandate specified in Part 5 (5-3.1) to include "the requirement that prompted the activity" in the Inspector's diary, is it permissible to specify either the applicable paragraph number from RCI-1 Part 3, Part 4, or ASME QAI-1 that is specifically related the inspection activities being performed? **Reply:** Yes.



### **RCI-1 Glossary**

- Scope: Includes definitions of terms used throughout this document.
- Added definitions for the following terms:
  - Inspection Points Inspections stipulated by the Authorized Inspector/Inspector that the Authorized Inspector that the Authorized Inspector/Inspector intends to make in order to fulfill the requirements of the NBIC or the ASME BPV Code. These may also be known as <u>witness</u> <u>points</u>, <u>hold points</u>, or some other term that denotes a specific area or item to be inspected or document to be reviewed.
  - Monitor To <u>observe</u> or <u>verify</u> an activity is systematically consistent over a period of time with the Certificate Holder's accepted quality program.
  - Verify To determine the particular action has been performed in accordance with the requirements either by <u>witnessing</u> the action or <u>reviewing</u> records.
  - Witness To be present at an event and have first-hand knowledge of the action and be able to attest that it occurred.







# **Questions**?

