**02 DEPARTMENT OF PROFESSIONAL AND FINANCIAL REGULATION**

**41 OFFICE OF PROFESSIONAL AND OCCUPATIONAL REGULATION**

**BOILER AND PRESSURE VESSEL SAFETY PROGRAM**

**Chapter 77: REPAIRS AND ALTERATIONS**

**Summary**: This Chapter establishes requirements for performing welded repairs, mechanical replacement of pressure parts, and alterations on boilers or pressure vessels.

**SECTION 1. Generally**

An owner shall obtain permission from the Inspector responsible for the jurisdictional inspection of the object prior to making any repair or replacement that affects the pressure retaining capability of a boiler or pressure vessel.

In the event that the Inspector responsible for the jurisdictional inspection of the object is unavailable, permission may be obtained by contacting the chief inspector.

**SECTION 2. Welded Repairs and Alterations**

1. All welded repairs and alterations to a boiler or a pressure vessel must be performed as follows:

1. By an appropriate R Certificate Holder; and

B. In accordance with the applicable standards specified in Chapter 73, Section 1, Subsection 3 of these rules. In those cases where it is not possible to complete welded repairs and alterations in accordance with the applicable standards specified in Chapter 73, Section 1, Subsection 3 of these rules, the chief inspector shall be consulted.

2. All alteration plans must be submitted to the chief inspector on a form approved by the director at least thirty (30) days prior to the alteration. Emergency situations will be handled on a case-by-case basis. If an emergency situation makes it not practicable to submit alteration plans in advance, the chief inspector must be notified.

3. The R Certificate Holder performing a repair or alteration must submit legible copies of the forms documenting the welded repair or alteration to the director within sixty (60) days of completing the work.

4. Routine repairs shall be completed as required in the NBIC as adopted by the director in Chapter 73, or any equivalent standard as approved by the director.

**SECTION 3. Low Pressure Boiler Repair or Replacement by Mechanical Attachment**

Boiler tube work must be completed by an R Certificate Holder. Mechanical attachment of piping and components on low pressure boilers must be completed by appropriately licensed individuals.

**SECTION 4. Power Boiler Repair or Replacement by Mechanical Attachment**

1. The mechanical attachment of piping and components within the code boundary on power boilers associated with the major boiler systems must be completed by an R Certificate Holder. Major boiler systems consist of the main steam system or equivalent, the feedwater system, the blow-down system, and any repairs or replacements associated with tubes.

A. The owner shall submit documentation on each repair/replacement on the Mechanical Repair Form approved by the director.

B. The documentation shall include material traceability and verification of the construction standard.

C. A hydrostatic test to verify mechanical integrity shall be conducted upon completion of the repair/replacement.

(1) The minimum permissible metal temperature during the hydrostatic test shall conform with the applicable standards adopted in Chapter 73 of these rules.

(2) The test pressure shall be at least normal operating pressure of the object.

D. The Inspector responsible for the jurisdictional inspection of the object must document all mechanical repairs on a form approved by the director.

2. The mechanical attachment of piping and components within the code boundary on power boilers not associated with the major boiler systems may be performed by individuals under the supervision of the engineer-in-charge.

A. The owner shall submit documentation on each repair/replacement on the Mechanical Repair Form approved by the director.

B. The documentation shall include material traceability and verification of the construction standard.

C. A hydrostatic test to verify mechanical integrity shall be conducted upon completion of the repair/replacement.

1. The minimum permissible metal temperature during the hydrostatic test shall be as required by the conform with the applicable standards adopted in Chapter 73 of these rules**.**

2. The test pressure shall be at least normal operating pressure of the object.

D. The Inspector responsible for the jurisdictional inspection of the object must document all mechanical repairs on a form approved by the director.

AUTHORITY: 32 M.R.S. §§ 15103-A and 15110

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