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RECORD OF REVISIONS

Rev	Date	Description	POC	RM
0	9/17/2014	Initial issue. Revision of content formerly in Section I, Rev. 3.	Ari Ben Swartz, <i>ES-EPD</i>	Larry Goen, <i>ES-DO</i>
1	12/11/2018	Added Att ASME-2 for NB-23, Att ASME-5 for ASME B&PV Code. VAR-2015-011, Copper Tubing Alternative, was incorporated by the Allowed Unlisted Component Listing.	Ari Ben Swartz, <i>ES-EPD</i>	Larry Goen, <i>ES-DO</i>

Contact the Chapter POC for upkeep, interpretation, and variance issues.

Chapter 17	<u>Pressure Safety POC and Committee</u>
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1.0 NEW FABRICATION

All boilers, pressure vessels, air receivers, and supporting piping shall meet the appropriate ASME Boiler and Pressure Vessel Code Section and B31 piping section as applicable.¹

A. Application of Codes

1. ASME Code-Stamped Boilers and Vessels
 - a. A manufacturer holding an ASME Code stamp as defined by the applicable ASME B&PVC Section must be designed and have vessel stamped accordingly.
 - b. A copy of the manufacturer's data reports (e.g., "P-2", "U1", "U1A", "U2", etc.) must be supplied with the vessel, and must be maintained in the pressure system documentation package. An NBIC registration number must be applied to the item.
 - c. For pressure vessels without an ASME stamp, the ASME Code design calculations must be obtained [e.g., LANL or an external design agency (Architect/Engineer)].
 - d. Receipt inspection of fabricated vessels must include verification of manufacturer's data reports (e.g., "P2", "U1" form, etc.), and visual identification of appropriate stamping, or availability of design calculations.
 - e. Installation of new boilers shall comply with NBIC Section I, Installation.
2. Repairs and Alterations
 - a. Repairs and alterations that require welding to code stamped vessels ("S", "H", "U", "U2", etc.) must be performed as instructed per the applicable ASME Boiler and Pressure Vessel Section (as referenced by NBIC NB-23), and must be performed by an institution holding an "R" stamp.
 - b. ASME PCC-2 must be used as a guide for repair of pressure equipment and piping.
 - c. Repairs to support piping and piping components must be performed as defined in ASME B31.1 or other applicable B31 piping code.
 - d. Repairs to pressure relief, or pressure safety valves displaying the "UV" stamp, must be performed by an institution holding a "VR" stamp.
 - e. Repairs and modifications to pressure vessels and piping must be verified through engineering calculations prior to performing the operation.

¹ Invokes 10CFR851 as described in [PD100](#), DOE/NNSA Approved Los Alamos National Laboratory 10 CFR 851 Worker Safety and Health Program Description.

- f. Completion of repairs (including routine repairs) and alterations must be verified by inspection and testing as defined by the applicable ASME BPV or B31 code, and NBIC/NB23, Part 3, Section 4. Inspectors Forms (R-1, R-2, etc.) must be maintained in the pressure system's documentation package.
- g. Although not anticipated at LANL, repairs and alterations made to ASME Section III stamped nuclear facility components (e.g., "NV", "NB") must be performed by an institution holding the "NR" stamp.
- h. Boilers: Repair or alteration of boilers must meet New Mexico Administrative Code (NMAC) [14.9.4](#) "Housing and Construction, Mechanical Codes, Boilers."
 - 1) Routine repairs as defined by NB-23 include re-tubing a boiler when no welding is performed.
 - 2) NMAC 14.9.4 requires boilers be maintained and operated in compliance with the manufacturer's requirements.

2.0 ATTACHMENTS

Attachment ASME-1 – B31 Code and Regulation Application

Attachment ASME-2 – NB-23 Application

Attachment ASME-3 – Category M Fluids

Attachments ASME-4–X – Acceptable Items for Code Construction

Attachment ASME -4-1 Designer-Approved Alternative Hose Restraints

Attachment ASME -4-2 Swagelok Flex Hoses

Attachment ASME-5 – ASME B&PV Code Application