

Standards, Level 2 - Multi-Facility

## **CPCC-STD-EN-52736**

### **Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Revision 0, Change 1

Published: 10/28/2025

Effective: 10/28/2025

Periodic Review Due Date: 10/05/2026

Program: Engineering

Topic: Engineering Program

Technical Authority: Leist, Kendrick J

Functional Manager: Kujath, Brett A

## **Use Type: Administrative**



USQ Facility	USQ Review	Screeners
D4ES-Central Plateau	GCX-2 (Editorial Changes)	Collop, Imelda
105 KW Facility	GCX-2 (Editorial Changes)	Collop, Imelda
Canister Storage Building/Interim Storage Area	GCX-2 (Editorial Changes)	Collop, Imelda
Solid Waste Operations Complex	GCX-2 (Editorial Changes)	Collop, Imelda
Waste Encapsulation Storage Facility	GCX-2 (Editorial Changes)	Collop, Imelda
324 Building	GCX-2 (Editorial Changes)	Collop, Imelda

**JHA:** Administrative

**Periodic Review Due Date:**10/05/2026

Rev. 0, Chg. 1

## Change Summary

### Description of Change

Minor change to procedure reference. CPCC-STD-EN-52773 has replaced the cancelled CPCC-PRO-EN-489

#### Applicable Facilities

100K Area Project

400 Area

Canister Storage Building

Central Waste Complex

Environmental Restoration Disposal Facility

Integrated Disposal Facility

Plutonium Finishing Plant

Soil and Groundwater Remediation Project

Solid Waste Storage and Disposal

T Plant

TRU Project

Waste Encapsulation and Storage Facility

Waste Receiving and Processing Facility

Maintenance and Storage Facility

200 West Pump and Treat

Central Plateau S&M

324 Facility

300 Area

**Design, Inspection, Testing and Repair of ASME-Coded Pressure  
Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

---

**TABLE OF CONTENTS**

1.0 INTRODUCTION .....2  
1.1 Purpose.....2  
1.2 Scope.....2  
1.3 Applicability .....2  
1.4 Implementation .....3  
2.0 STANDARD .....3  
2.1 Pressure Systems Design Requirements .....3  
2.2 Boiler and Pressure Vessel Repair Requirements.....4  
2.3 Pressure Piping Repair Requirements.....5  
2.4 Pressure Systems Fabrication, Replacement, and Repair .....6  
2.5 Pressure Systems Inspection .....6  
2.6 Pressure Systems Welding.....7  
2.7 Pressure Systems Pressure Testing.....7  
2.8 Pressure Systems Acceptance .....8  
2.9 Inspection and Testing of Repairs and Tie-Ins to Existing Systems .....8  
2.10 Pressure Relief Device Requirements .....8  
2.11 Category D Process Piping Repairs .....11  
3.0 FORMS.....13  
4.0 RECORD IDENTIFICATION.....13  
5.0 SOURCES .....13  
5.1 Requirements.....13  
5.2 References.....13

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

### 1.0 INTRODUCTION

#### 1.1 Purpose

This standard establishes the requirements for Central Plateau Cleanup Company (CPCCo) and CPCCo subcontractors performing design, repairs, significant repairs of a routine nature, and alterations to boilers, pressure vessels, pressure piping, and other American Society of Mechanical Engineers (ASME)-coded pressure systems. This standard also establishes the requirements for inspecting and testing pressure relief devices.

#### 1.2 Scope

A list of typical systems is included below.

- Power boilers and boiler external piping (ASME Boiler and Pressure Vessel Code, Section I, "Rules for Construction of Power Boilers").
- Heating boilers (ASME Boiler and Pressure Vessel Code, Section IV, "Rules for Construction of Heating Boilers").
- Unfired pressure vessels (ASME Boiler and Pressure Vessel Code, Section VIII, "Rules for Construction of Pressure Vessels").
- Pressure relief devices.
- Steam systems with a designed operating pressure above 15 psig.
- Air systems required to control or actuate boilers, regardless of pressure, up to the point where air is regulated or controlled for instrument use.
- Liquid systems (for example, water, oil, chemical solutions) with a designed operating pressure above 30 psig.
- Air or gas systems (argon, carbon dioxide, nitrogen, helium, etc.) with a designed operating pressure above 15 psig.

**NOTE:**

- *Components in nuclear related systems that are within the scope of ASME Boiler and Pressure Vessel Code, Sections III and XI, are **excluded** from the scope of this procedure.*
- *The codes prescribe minimum safety requirements for pressure systems and are not design handbooks. Careful analysis of specific system requirements and competent engineering judgment will still be needed.*

#### 1.3 Applicability

This standard applies to the design of new boilers, pressure vessels, pressure relief devices, and pressure piping; to repairs and alterations to existing boilers, pressure vessels, and pressure piping; and to inspection and testing of pressure relief devices in accordance with the Jurisdictional requirements and the latest editions of the ASME Boiler and Pressure Vessel

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

Code, ASME standards, the ASME Codes for Pressure Piping (B31), and the National Board Inspection Code (NBIC).

**1.4 Implementation**

This document is effective upon publication.

**2.0 STANDARD****2.1 Pressure Systems Design Requirements**

- a. Contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.
- b. Contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to:
  - 1) The applicable American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (2015); Sections I through Section XII including applicable Code Cases (incorporated by reference, see 10 CFR § 851.27)
  - 2) The applicable ASME B31 (Code for Pressure Piping) standards as indicated below; and or as indicated in paragraph (b)(3) of this section:
    - i. B31.1—2016—Power Piping (incorporated by reference, see 10 CFR § 851.27)
    - ii. B31.3—2014—Process Piping (incorporated by reference, see 10 CFR § 851.27)
    - iii. B31.4—2016—Pipeline Transportation Systems for Liquid and Slurries (incorporated by reference, see 10 CFR § 851.27)
    - iv. B31.5—2016—Refrigeration Piping and Heat Transfer Components (incorporated by reference, see 10 CFR § 851.27)
    - v. B31.8—2016—Gas Transmission and Distribution Piping Systems (incorporated by reference, see 10 CFR § 851.27)
    - vi. B31.8S—2014—Managing System Integrity of Gas Pipelines (incorporated by reference, see 10 CFR § 851.27)
    - vii. B31.9—2014—Building Services Piping (incorporated by reference, see 10 CFR § 851.27)
    - viii. B31G—2012—Manual for Determining Remaining Strength of Corroded Pipelines (incorporated by reference, see 10 CFR § 851.27).

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

- 3) The strictest applicable state and local codes.
- c. When national consensus codes are not applicable (because of pressure range, vessel geometry, use of special materials, etc.), contractors must implement measures to provide equivalent protection and ensure a level of safety greater than or equal to the level of protection afforded by the ASME or applicable state or local code. Measures must include the following:
  - 1) Design drawings, sketches, and calculations must be reviewed and approved by a qualified independent design professional (i.e., professional engineer). Documented organizational peer review is acceptable.
  - 2) Qualified personnel must be used to perform examinations and inspections of materials, in-process fabrications, non-destructive tests, and acceptance test.
  - 3) Documentation, traceability, and accountability must be maintained for each unique pressure vessel or system, including descriptions of design, pressure conditions, testing, inspection, operation, repair, and maintenance.

### 2.2 Boiler and Pressure Vessel Repair Requirements

#### 2.2.1 General Requirements

Boiler and pressure vessel repairs or alterations shall be made only by organizations with an "R" stamp or organizations with an appropriate ASME Certificate of Authorization. The "R" stamp is issued by the National Board. Repairs of a routine nature are subject to approval of the Jurisdictional authority.

**NOTE:** *Fabrication and inspection of pressure piping in accordance with the ASME Code for Pressure Piping, B31 does not have to be done in a shop certified by ASME, except for portions of boiler piping covered by ASME Boiler and Pressure Vessel Code, Section I, "Power Boilers." Consequently, an Authorized Inspector (AI) has no mandatory code requirements to monitor shop or field construction of the piping.*

#### 2.2.2 ASME Code-Stamped Boiler and Pressure Vessels

##### a. Repairs and Alterations

All repairs and alterations shall be completed by an appropriate "R" Certificate Holder in accordance with the NBIC. The Certificate Holder performing the work will complete the National Board Form R-1, "Report of Repair," or Form R-2, "Report of Alteration," and attach the "Manufacturers Partial Data Reports" for any parts used in their repair or alteration. The user shall keep these documents on file.

##### b. Repairs of a Routine Nature

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

Subject to the approval of the Authorized Inspector (AI), nameplates and stamping may not be required for repairs of a routine nature. In all cases, the type and extent of repairs necessary shall be considered before waiving a requirement. The user shall maintain a record of all repairs.

- NOTE:**
- *No repair of a routine nature shall be initiated to a boiler, pressure vessel, or boiler external piping system, without the AI's authorization. The cognizant/project engineer will contact an AI as part of the review when a work package is prepared.*
  - *Subject to the approval of the AI, stamping and repair plates may not be required for repairs of a routine nature.*

**2.3 Pressure Piping Repair Requirements**

- a. Contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.
- b. Contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to:
  - 1) The applicable ASME B31 (Code for Pressure Piping) standards as indicated below; and or as indicated in paragraph (b)(3) of this section:
    - i. B31.1—2016—Power Piping (incorporated by reference, see 10 CFR § 851.27)
    - ii. B31.3—2014—Process Piping (incorporated by reference, see 10 CFR § 851.27)

**NOTE:** *Category D Process Piping repairs will be made in accordance with Section 2.11.*

- iii. B31.4—2016—Pipeline Transportation Systems for Liquids and Slurries (incorporated by reference, see 10 CFR § 851.27)
- iv. B31.5—2016—Refrigeration Piping and Heat Transfer Components (incorporated by reference, see 10 CFR § 851.27)
- v. B31.8—2016—Gas Transmission and Distribution Piping Systems (incorporated by reference, see 10 CFR § 851.27)
- vi. B31.8S—2014—Managing System Integrity of Gas Pipelines (incorporated by reference, see 10 CFR § 851.27)
- vii. B31.9—2014—Building Services Piping (incorporated by reference, see 10 CFR § 851.27); and

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

viii. B31G—2012—Manual for Determining Remaining Strength of Corroded Pipelines (incorporated by reference, see 10 CFR § 851.27).

2) The strictest applicable state and local codes.

**2.4 Pressure Systems Fabrication, Replacement, and Repair****2.4.1 Repairs of a Routine Nature to Boilers and Pressure Vessels**

Repairs of a routine nature shall be performed according to the guidance of the NBIC and the approval of the AI.

**NOTE:** *The four categories of routine repairs are summarized below. Refer to NB-23 for details:*

1. *Welded repair or replacement of tubes or pipes and their attachments.*
2. *The addition or repair of non-load bearing attachments to pressure parts where post weld heat treatment is not required.*
3. *Weld buildup of wasted area not exceeding 100 sq. in.*
4. *Corrosion resistant weld overlay not exceeding 100 sq. in.*

**2.4.2 Repairs/Alterations of Pressure Piping**

Design requirements for the repair and alterations are to meet the original code of construction or the code most appropriate for the repair or alteration. These systems shall be designed for the most severe conditions of pressure, temperature, loadings, and expected transients considered for normal operation. All pipe materials, fittings, and valves shall be rated for the maximum service conditions for normal operation. Corrosion of piping system should also be considered when determining types of materials and thicknesses.

**2.5 Pressure Systems Inspection**

Pressure-containing piping, pressure vessels, and boilers shall be inspected at installation and after modifications.

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

- NOTE:**
- *Step-by-step instructions for performing examinations/inspections will be prepared as a part of job planning. This step-by-step plan includes material check, reference to items such as welding procedure specifications, fit-up, nondestructive examination (NDE) technique, heat treatment, and pressure test methods to be used.*
  - *The Design Authority (DA) or Quality Assurance (QA) engineer may require signoffs at key steps/operations to verify that each step/operation has been properly performed. The step-by-step instructions also provide for inspection of specific steps/operations the AI may wish to make.*
  - *Inspection of threaded or flanged joints for leakage in ASME B31.3 Category D or ASME B31.9 systems may be performed by non-QA staff with the DA's written approval and concurrence of the DA's manager.*
  - *Third party (or in-service) inspections of ASME-Coded pressure vessels and boilers are covered by CPC-STD-EN-52773, Third Party Inspections.*

**2.6 Pressure Systems Welding**

Welding shall be performed in accordance with requirements of the original code of construction used for the pressure-retaining item whenever possible and the Hanford/CPCCo Welding Manual.

**2.7 Pressure Systems Pressure Testing****2.7.1 Boiler and Pressure Vessel**

Based on the nature and scope of the repairs/alteration activities, one or a combination of the following examination and test methods shall be applied to repairs, alterations, and replacement parts used in alterations and repairs.

- Liquid Pressure Test
- Pneumatic Test
- Initial Service Leak Test
- Vacuum Test
- Nondestructive Examination

The DA, QA, and the AI shall review and approve the examination and pressure test procedure/plan before each test.

**NOTE:** *The pressure testing requirements of pressure vessels are detailed by NBIC.*

Instructions and records for the examination and pressure test shall be provided within the work package.

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

### 2.7.2 Pressure Piping

A pressure test, when required by the Code of Record, will be performed following repairs and/or alterations to pressure piping. The DA shall review and approve the pressure test procedure before each test. The pressure testing requirements for pressure piping are detailed by the applicable ASME Code for Pressure Piping, B31. Instructions and records for the pressure test will be provided within the work package.

**NOTE:** *Testing of threaded or flanged joints in ASME B31.3 Category D or ASME B31.9 systems may be performed by non-QA staff with the DA's written approval and concurrence of the DA's manager.*

### 2.8 Pressure Systems Acceptance

After repairs and/or alterations the user shall schedule an acceptance inspection. The DA, QA, Safety, and the AI shall inspect boilers, pressure vessels, and some pressure piping systems, and the documentation. The inspection may include checking records kept during fabrication and installation. The acceptance criteria will be defined by the original code of construction for each component.

**NOTE:** *Acceptance inspection of ASME B31.3 Category D or ASME B31.9 systems may be waived with the DA's written approval and concurrence of the DA's manager.*

### 2.9 Inspection and Testing of Repairs and Tie-Ins to Existing Systems

To the extent possible, inspection and testing of repairs and tie-ins to existing piping systems shall meet the requirements of the current edition of the applicable Code.

**NOTE:** *Where Code-required inspections and tests are not practical due to accessibility, ALARA, or other reasons, the DA may designate alternative inspection and testing requirements with the CPCCo Chief Engineer's approval. Examples of alternative inspections and tests are Liquid Penetrant (PT) or Magnetic Particle (MT) in lieu of Radiography (RT) or Ultrasonic Examination Testing (UT), or in-service leak test in lieu of hydrostatic test.*

### 2.10 Pressure Relief Device Requirements

Pressure relief devices used for the overpressure protection on boilers, hot water heaters, pressure vessels, and pressure piping systems include pressure relief valves, safety relief valves, pilot operated pressure relief valves, and rupture disk devices. As used herein, the term relief valve or safety relief valve is intended to include all pressure actuated valves used for system pressure relief. These valves are sometimes known as pressure relief, vacuum relief, safety relief, balanced safety relief, internal spring safety relief, pop-off, etc.

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

Relief valves should be tested for ease of valve lift, correct set pressure, correct blowdown (reset) pressure, and for acceptable leakage after closing. Any failure to pass these tests will require that the valve be adjusted, repaired, or replaced.

### 2.10.1 General

Contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.

In-service inspection shall be in accordance with the National Board Inspection Code (NB-23).

Pressure relief valves must be periodically tested to ensure that they are free to operate and will operate in accordance with the requirements of the original code of construction.

If pressure test indicates the valve does not open within the requirements of the original Code of Construction minor adjustments shall be made by organization accredited by the National Board to reset the valve to the correct opening pressure. Minor is defined as no more than twice the set pressure tolerance.

### 2.10.2 Relief Valve Inspection

Inspection as used here includes visual observation and manual check (try-lever test). The manual check verifies that the relief valve will open and close freely, will pass fluid, and will reseal. The following frequencies are only **recommendations** by the National Board Inspection Code. DAs determine the actual inspection frequency and document the rationale for frequencies that are longer than the recommendation.

**NOTE:** *The DA may exempt certain relief valves from inspection on a case-by-case basis if:*

1. *Inspection would result in an uncontained release of radioactive or hazardous chemicals, or*
2. *Access to the valve requires cell access or the removal of a cover block; provided that failure of the system protected by the relief valve would not cause injury to personnel or an unacceptable financial loss, or*
3. *The probability and consequences of a failure of the relief valve to operate are low.*

*The DA may document all exemptions.*

Relief valves protecting power boilers and hot water boilers with pressures less than 400 psig should be manually checked every 6 months.

**NOTE:** *Manual checks should be performed only at a pressure greater than 75% of the stamped set pressure of the valve or the lifting device may be damaged.*

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

Low-pressure steam heating boilers and hot-water heating boilers should be manually checked quarterly to verify nameplate set pressure.

Relief valves protecting hot water heaters not exceeding 120 gallons, 160 psig, or 210 °F should be manually checked annually. [NB-23 Part 2, Section 2.5.8.e recommends every 2 months.]

The manual check frequency for relief valves protecting pressure vessels and piping should be based on previous inspection history, type of service, importance to plant operation, and consequences of failure. The following manual check frequencies are suggested for pressure vessels and piping with the following services:

- |  |         |
|--|---------|
| • Steam  | Annual  |
| • Air & clean dry gas                                      | 3 years |
| • Pressure relief valves in combination with rupture disks | 5 years |
| • Propane or refrigerant                                   | 5 years |

High pressure (> 400 psig) boilers and high temperature hot water heaters need not be manually checked.

If a valve is found to be stuck closed, the system should immediately be taken out of service until the condition can be corrected unless special provisions have been made to operate on a temporary basis (such as additional relief capacity provided by another valve).

### 2.10.3 Relief Valve Testing

Pressure relief valves must be tested periodically to ensure that they are free to operate and will operate in accordance with the requirements of the original Code of Construction. Pressure testing as used here means verifying the set point and blow-down pressures. The following frequencies are **recommendations** only by the National Board Inspection Code. DAs determine the actual test frequency and document the rationale for frequencies that are longer than the recommendation.

**NOTE:**

- *In lieu of pressure testing, relief valves may be replaced with new or retested relief valves.*
- *New relief valves should be tested for proper set point pressures prior to being placed into service. This testing may be performed and documented by the manufacturer or a qualified offsite contractor. DAs may choose to skip this test as long as their rationale is documented and approved by the Chief Engineer.*

Relief valves protecting power boilers and hot water boilers with pressures less than 400 psig should be tested every year or as determined by operating experience as verified by testing history.

Low-pressure steam heating boilers and hot-water heating boilers should be tested annually prior to the heating season.

High pressure (> 400 psig) boilers should be tested every 3 years.

## Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices

Published Date: 10/28/25

Effective Date: 10/28/25

High temperature hot water heaters should be tested every year.

**NOTE:** *For safety reasons, removal and testing on a bench is recommended.*

Pressure testing internal on relief valves protecting pressure vessels and piping service is greatly dependent on the nature of the contents and operation of the system. Inspection frequency should be based on previous inspection history. Where test records history are not available, the following test frequencies are suggested:

- |  |                        |
|--|------------------------|
| • Steam  | Annual                 |
| • Air and Clean Dry Gases                                  | Every 3 years          |
| • Pressure relief valves in combination with rupture disks | Every 5 years          |
| • Propane, Refrigerant                                     | Every 5 years          |
| • All Others   | per inspection history |

**NOTE:** *Pressure testing of relief valves, where the frequency is determined by inspection history, shall be performed not less than every 10 years.*

During pressure testing minor adjustments can be made to correct the set point pressure, providing that the adjustment is not more than twice the permitted set point pressure tolerance. Minor adjustments shall be made by an organization accredited by the National Board to reset the valve to the correct opening pressure.

If the as-found set point pressure is greater than twice the permitted set point pressure tolerance, this may indicate that the valve is in need of repair or has damaged or misapplied parts. Its condition should be investigated accordingly.

The allowable tolerance shall not exceed  $\pm 2$  psi for set point pressures up to and including 70 psig and  $\pm 3$  % for set point pressures over 70 psig.

### 2.11 Category D Process Piping Repairs

**NOTE:** *Per ASME B31.3, Category D Process Piping is piping associated with systems where the fluid service meets the following:*

- *Fluid is nonflammable, nontoxic, and not damaging to human tissues (prompt restorative measures are not required due to exposure to skin, eyes, or exposed mucous membranes,*
- *Design gage pressure does not exceed 150 psi, and*
- *Design temperature is from -29°C (-20°F) through 186°C (366°F).*

Repairs made to Category D Process Piping Systems must comply with the following requirements:

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

1. The bonding procedure used must be qualified and approved per the [Hanford Welding Program Welding Procedures and Specifications](#).
2. Bonders and Bonding Operators must be qualified per [HNF-42888](#).
3. Operational Leak Test (as defined by the DA) must be performed to test the repaired joints.
4. A Quality Control Inspection will be performed per CPCC-PRO-QA-283, *Control of Inspections*, as a final inspection after the Operational Leak Test to validate:
  - a. That repaired welded or bonded joints are suitably marked or an entry is made in the work package reflecting the bonding operator that made the repair,
  - b. That bonded joints have 360 degree cement coverage (Solvent Joints).
  - c. That bonded joints have 360 degree continuous homogeneous bond with a small fillet of fused material (Heat Fusion Joints).
  - d. That the repaired joint is leak free,
  - e. For threaded system repairs, there are no cross threaded connections,
  - f. For flanged systems, there is no damage to the flanges, no damage to any gaskets, no loose bolts, and no damage to or cross threading of bolts.

**NOTE:** *Exceptions to 100% inspection may be approved by the DA Manager and the QA Manager. Exceptions are intended to be authorized only where performing the inspection poses more risk than waving the inspection.*

5. Results of Quality Control Final Inspection will be documented in the work package, either in the work log or within the detailed work instruction.

**NOTE:** *Repaired Category D systems may be left in operation after the operational leak test, but prior to the performance of the Final Inspection described above.*

**Design, Inspection, Testing and Repair of ASME-Coded Pressure Systems and Pressure Relief Devices**

Published Date: 10/28/25

Effective Date: 10/28/25

---

**3.0 FORMS**

None

**4.0 RECORD IDENTIFICATION**

None

**5.0 SOURCES**

**5.1 Requirements**

10 CFR 851, *Worker Safety and Health Program, Appendix A to Part 851-Worker Safety and Health Functional Areas, Section 4, Pressure Safety*

ANSI/NB-23, *National Board Inspection Code*

ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 Pressure Vessels

ASME B31 Code for Pressure Piping

**5.2 References**

*ASME Boiler and Pressure Vessel Code*

Section I, Power Boilers

Section IV, Heating Boilers

Section VIII, Division 1 Pressure Vessels

Section IX, Welding and Brazing Qualifications

*ANSI/ASME Code for Pressure Piping*

B31.1, Power Piping

B31.2, Fuel Gas Piping

B31.3, Process Piping

B31.5, Refrigeration Piping

B31.9, Building Services Piping

CPC-STD-EN-52773, *Third Party Inspections*