

- d) Items requested by the Inspector, such as manhole and handhole plates, washout plugs, inspection plugs, and any other items shall be removed;
- e) The Inspector shall not enter a vessel until all safety precautions have been taken. The temperature of the vessel shall be such that the inspecting personnel will not be exposed to excessive heat. Vessel surfaces should be cleaned as necessary so as to preclude entrant exposure to any toxic or hazardous materials;
- f) If requested by the Inspector or required by regulation or procedure, a responsible attendant shall remain outside the vessel at the point of entry while the Inspector is inside and shall monitor activity inside and outside and communicate with the Inspector as necessary. The attendant shall have a means of summoning rescue assistance, if needed, and to facilitate rescue procedures for all entrants without personally entering the vessel.

Note: If a vessel has not been properly prepared for an internal inspection, the Inspector shall decline to make the inspection.

1.5.4 POST-INSPECTION ACTIVITIES

- a) During any inspections or tests of pressure-retaining items, the actual operating and maintenance practices should be noted by the Inspector and a determination made as to their acceptability.
- b) Any defects or deficiencies in the condition, operating, and maintenance practices of the pressure-retaining item shall be discussed with the owner or user at the time of inspection and recommendations made for correction. Follow-up inspections should be performed as needed to determine if deficiencies have been corrected satisfactorily.
- c) Documentation of inspection shall contain pertinent data such as description of item, classification, identification numbers, inspection intervals, date inspected, type of inspection, and test performed, and any other information required by the inspection agency, jurisdiction, and/or owner or user. The Inspector shall sign, date, and note any deficiencies, comments, or recommendations on the inspection report. The Inspector should retain and distribute copies of the inspection report, as required.
- d) The form and format of the inspection report shall be as required by the Jurisdiction. Where no Jurisdiction exists, forms ~~NB-5~~, ~~NB-6~~, or NB-7 (see NBIC Part 2, 5.3) or any other form(s) required by the inspection agency or owner or user may be used as appropriate.

1.6 CHANGE OF SERVICE

Supplement 9 of this part provides requirements and guidelines to be followed when a change of service or service type is made to a pressure-retaining item.

Whenever there is a change of service, the Jurisdiction where the pressure-retaining item is to be operated, shall be notified for acceptance, when applicable. Any specific jurisdictional requirements shall be met.

(23) 1.7 SCRAPPING PRESSURE RETAINING ITEMS

The owner or user should deface beyond recognition and remove the code nameplate(s) or stamping of any pressure-retaining item that is scrapped. The removal or defacement of the Code nameplate(s) should be verified by the Inspector, and the National Board form NB-480 should be completed and submitted to the National Board, and Jurisdiction if required.

2.3.5.2 SAFETY DEVICES

See NBIC Part 2, 2.5 for the inspection of safety devices (pressure relief valves and non-closing devices such as rupture disks) used to prevent the overpressure of pressure vessels.

2.3.5.3 CONTROLS/DEVICES

- a) Any control device attached to a vessel should be demonstrated by operation or the Inspector should review the procedures and records for verification of proper operation.
- b) Temperature measuring devices shall be checked for accuracy and general condition.

2.3.5.4 RECORDS REVIEW

- a) The Inspector shall review any pressure vessel log, record of maintenance, corrosion rate record, or any other examination results. The Inspector should consult with the owner or user regarding repairs or alterations made, if any, since the last internal inspection. The Inspector shall review the records of such repairs or alterations for compliance with applicable requirements.
- b) A permanent record shall be maintained for each pressure vessel. This record should include the following:
 - 1) An ASME *Manufacturer's Data Report* or, if the vessel is not ASME Code stamped, other equivalent specifications or reports;
 - 2) Form NB-6, *Boiler-Fired Pressure Vessel Report of Inspection*, or Form NB-7, *Pressure Vessels Report of Inspection*~~5, *Boiler or Pressure Vessel Data Report — First Internal Inspection*~~, may be used for this purpose. It shall show the following identification numbers as applicable:
 - a. National Board No.
 - b. Jurisdiction No.
 - c. Manufacturer Serial No.
 - d. Owner or User No.
 - 3) Complete pressure-relieving device information, including safety or safety relief valve spring data, or rupture disk data and date of latest inspection;
 - 4) Progressive record including, but not limited to, the following:
 - a. Location and thickness of monitor samples and other critical inspection locations;
 - b. Limiting metal temperature and location on the vessel when this is a factor in establishing the minimum allowable thickness;
 - c. Computed required metal thicknesses and maximum allowable working pressure for the design temperature and pressure-relieving device opening pressure, static head, and other loadings;
 - d. Test pressure, if tested at the time of inspection; and
 - e. Required date of next inspection.
 - 5) Date of installation and date of any significant change in service conditions (pressure, temperature, character of contents, or rate of corrosion); and

able to take water out of either feedwater tank. Pumped feedwater shall be preheated prior to entering the boiler;

- b) Demonstration of operable try-cocks that show a level of water that correlates with that shown in the gage glass;
- c) Demonstration of operating gage glass upper and lower shutoff valves;
- d) Demonstration of an operating gage glass blowdown valve;
- e) Check that the gage glass is visually clear and fully operational;
- f) Visual inspection for leaks; and
- g) Safety valves shall be tested by having the operator raise boiler pressure to the safety valve popping point. Popping point pressure and blowdown will be observed to ensure they are within tolerances (see NBIC Part 2, S2.8). Alternatively, a certification acceptable to the Jurisdiction may be used for verification of set pressures.

S2.7.2 INSERVICE INSPECTION DOCUMENTATION

Inservice inspection shall be documented as required by the Jurisdiction where the boiler is operated, or Form ~~NB-5~~NB-6, NB-7, or similar form may be used.

S2.7.3 INSPECTION INTERVALS

S2.7.3.1 INITIAL INSPECTION

- a) Initial inspections shall be performed to determine baseline criteria needed for the operating life of the boiler. The owner or user shall maintain documentation and inspection results, as required by this section. In addition to the required Jurisdiction inservice inspection report identified in NBIC Part 2, S2.7.2, Form C-1 (See NBIC Part 2, S2.12) may be used for the documentation of initial examinations and inspections.
- b) Boilers initially evaluated in accordance with this inspection code shall be subject to the following examinations and tests:
 - 1) A visual internal examination per NBIC Part 2, S2.5.2;
 - 2) A visual inservice examination per NBIC Part 2, S2.7.1;
 - 3) Initial UT test requirements per NBIC Part 2, S2.6.2;
 - 4) MAWP calculation per NBIC Part 2, S2.10;
 - 5) Hydrostatic Pressure Testing per NBIC Part 2, S2.6.1; and
 - 6) Other examinations (UT, PT, MT) as required by the Jurisdiction or Inspector to determine boiler integrity.
- c) For new boilers constructed to a design code acceptable to the Jurisdiction, the initial inspection shall be a visual inservice exam per NBIC Part 2, S2.7.1. Subject to jurisdictional acceptance, the other initial inspection items above may be omitted. These new boilers may be mounted on existing running gear or settings and may include the original appurtenances.