

89.3 Inspection made.

1. It shall be the duty of the commissioner to inspect or cause to be inspected internally and externally, at least once every twelve months, except as otherwise provided in [this section](#), in order to determine whether all such equipment is in a safe and satisfactory condition, and properly constructed and maintained for the purpose for which it is used, all boilers and unfired steam pressure vessels operating in excess of fifteen pounds per square inch, all low pressure heating boilers and unfired steam pressure vessels located in places of public assembly and other appurtenances used in this state for generating or transmitting steam for power, or for using steam under pressure for heating or steaming purposes.

2. The commissioner may enter any building or structure, public or private, for the purpose of inspecting any equipment covered by [this chapter](#) or gathering information with reference thereto.

3. The commissioner may inspect boilers and tanks and other equipment stamped with the American society of mechanical engineers code symbol for other than steam pressure, manufactured in Iowa, when requested by the manufacturer.

4. *a.* An object that meets all of the following criteria shall be inspected at least once every two years internally and externally while not under pressure, and at least once every two years externally while under pressure, unless the commissioner determines that an earlier inspection is warranted.

(1) The object is a boiler with one hundred thousand pounds per hour or more capacity, or the object is an unfired steam pressure vessel or a regulated appurtenance that is part of the same system as a boiler with one hundred thousand pounds per hour or more capacity.

(2) The object contains only water subject to internal continuous water treatment under the direct supervision of a graduate engineer or chemist, or one having equivalent experience in the treatment of boiler water.

(3) The water treatment is for the purpose of controlling and limiting serious corrosion and other deteriorating factors.

b. The owner or user of an object meeting the criteria in paragraph “*a*” shall do the following:

(1) At any time the commissioner, a special inspector, or the supervisor of water treatment deems a hydrostatic test is necessary to determine the safety of an object, conduct the test under the supervision of the commissioner.

(2) Keep available for examination by the commissioner accurate records showing the date and actual time the object is out of service and the reason it is out of service.

(3) Keep available for examination by the commissioner chemical physical laboratory analyses of samples of the object water taken at regular intervals of not more than forty-eight hours of operation as will adequately show the condition of the water and any elements or characteristics of the water which are capable of producing corrosion or other deterioration of the object or its parts.

5. *a.* An object that meets all of the following criteria shall be inspected at least once each year externally while under pressure and at least once every four years internally while not under pressure, unless the commissioner determines an earlier inspection is warranted:

(1) The object is a boiler with one hundred thousand pounds per hour or more capacity, or the object is an unfired steam pressure vessel or a regulated appurtenance that is part of the same system as a boiler with one hundred thousand pounds per hour or more capacity.

(2) The object contains only water subject to internal continuous water treatment under the direct supervision of a graduate engineer or chemist, or one having equivalent experience in the treatment of boiler water.

(3) The water treatment is for the purpose of controlling and limiting serious corrosion and other deteriorating factors.

(4) Either of the following:

(a) The owner or user is a participant in good standing in the Iowa occupational safety and health voluntary protection program and has achieved star status within the program, which is administered by the division of labor in the department of workforce development.

(b) The object is an unfired steam pressure vessel and is part of or integral to the

continuous operation of a process covered by and compliant with the occupational safety and health administration process safety management standard contained in [29 C.F.R. §1910.119](#) and the owner demonstrates such compliance to a special inspector or the commissioner. The unfired steam pressure vessel must also be included as process safety management process equipment in the owner of the unfired steam pressure vessel's process safety management program.

b. The owner or user of an object that meets the criteria in paragraph "a" shall do the following:

(1) At any time the commissioner, a special inspector, or the supervisor of the water treatment deems a hydrostatic test necessary to determine the safety of an object, conduct the test under the supervision of the commissioner.

(2) Keep available for examination by the commissioner accurate records showing the date and actual time the object is out of service and the reason it is out of service.

(3) Arrange for an internal inspection of the object during each planned outage by a special inspector or the commissioner.

(4) Keep for examination by the commissioner accurate records showing the chemical physical laboratory analyses of samples of the object's water taken at regular intervals of not more than forty-eight hours of operation adequate to show the condition of the water and any elements or characteristics of the water that are capable of producing corrosion or other deterioration of the object or its parts.

6. Internal inspections of cast aluminum steam, cast aluminum hot water heating, sectional cast iron steam, and cast iron hot water heating boilers shall be conducted only as deemed necessary by the commissioner. External operating inspections shall be conducted annually.

7. Internal inspections of steel hot water boilers shall be conducted once every six years. External operating inspections shall be conducted annually in years other than the year in which internal inspections are conducted.

8. Inspections of unfired steam pressure vessels operating in excess of fifteen pounds per square inch and low pressure steam boilers shall be conducted at least once each calendar year. The inspections conducted within each two-year period shall include an external inspection conducted while the boiler is operating and an internal inspection, where construction permits. No more than one inspection shall be conducted per six-month period. An internal inspection of an unfired steam pressure vessel or low pressure steam boiler may be required at any time by the commissioner upon the observation by an inspector of conditions, enumerated by the commissioner through rules, warranting an internal inspection. If a low pressure steam boiler is in dry lay-up, an internal inspection shall be conducted in lieu of an external inspection. For purposes of [this subsection](#), "dry lay-up" means a process whereby a boiler is taken out of service for a period of six months or longer, drained, dried, and cleaned, and measures to prevent corrosion are performed on the boiler.

9. An internal inspection shall not be required on an unfired steam pressure vessel that was manufactured without an inspection opening.

10. An exhibition boiler does not require an annual inspection certificate but special inspections may be requested by the owner or an event's management to be performed by the commissioner. Upon the completion of an exhibition boiler inspection a written condition report shall be prepared by the commissioner regarding the condition of the exhibition boiler's boiler or pressure vessel. This report will be issued to the owner and the management of all events at which the exhibition boiler is to be operated. The event's management is responsible for the decision on whether the exhibition boiler should be operated and shall inform the division of labor of the event's management's decision. The event's management is responsible for any injuries which result from the operation of any exhibition boiler approved for use at the event by the event's management. A repair symbol, known as the "R" stamp, is not required for repairs made to exhibition boilers pursuant to the rules regarding inspections and repair of exhibition boilers as adopted by the commissioner, pursuant to [chapter 17A](#).

11. An inspection report created pursuant to [this chapter](#) that requires modification,

alteration, or change shall be in writing and shall cite the state law or rule or the ASME code section allegedly violated.

[C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, §89.2; C79, 81, §89.3]

85 Acts, ch 105, §1; 89 Acts, ch 321, §27; 97 Acts, ch 27, §1; 2004 Acts, ch 1107, §3, 30; 2007 Acts, ch 135, §1 – 3; 2009 Acts, ch 94, §2; 2009 Acts, ch 179, §34; 2010 Acts, ch 1015, §3; 2011 Acts, ch 34, §19; 2012 Acts, ch 1043, §1; 2013 Acts, ch 66, §1, 5; 2014 Acts, ch 1092, §23; 2018 Acts, ch 1098, §1

Referred to in §89.4, 89.7, 89.7A, 89.14