

## LABOR SERVICES DIVISION[875]

### Adopted and Filed

#### Rule making related to boilers and pressure vessels

The Boiler and Pressure Vessel Board hereby amends Chapter 80, “Boiler and Pressure Vessel Board Administrative and Regulatory Authority,” Chapter 81, “Waivers or Variances from Administrative Rules by the Boiler and Pressure Vessel Board,” Chapter 82, “Boiler and Pressure Vessel Board Petitions for Rule Making,” Chapter 83, “Declaratory Orders by the Boiler and Pressure Vessel Board,” Chapter 84, “Contested Cases Before the Boiler and Pressure Vessel Board,” Chapter 85, “Public Records and Fair Information Practices of the Boiler and Pressure Vessel Board,” Chapter 90, “Administration of the Boiler and Pressure Vessel Program,” Chapter 91, “General Requirements for All Objects,” and Chapter 94, “Steam Heating Boilers, Hot Water Heating Boilers and Hot Water Supply Boilers,” Iowa Administrative Code.

#### *Legal Authority for Rule Making*

This rule making is adopted under the authority provided in Iowa Code section 89.14(5).

#### *State or Federal Law Implemented*

This rule making implements, in whole or in part, Iowa Code chapter 89 and 2020 Iowa Acts, House File 2389.

#### *Purpose and Summary*

The Board is required by Iowa Code section 89.14(7) to review all boiler and pressure vessel rules every three years. Many of the adopted amendments are the result of that systematic review. Additional amendments were prompted by the passage of 2020 Iowa Acts, House File 2389, which amended the Administrative Procedure Act.

These amendments update the office address and code references; set forth the requirement to submit petitions for rule making and their disposition to the Administrative Rules Review Committee; set forth the requirement to enter information about waiver petitions and their disposition in the Legislative Services Agency’s website; strike references to “variance” and “reinstallation”; align fall protection language with current occupational safety and health standards; facilitate email communications between the Board and a petitioner for rule making; strike redundant language; eliminate inconsistencies in the use of the phrase “hot water supply boiler”; reduce the time for filing an inspection report from 30 days to 14 days; make extensive changes to the definitions; elaborate on procedures in the event of an imminent danger, on the types of conditions to be included on inspection reports, and on requirements for discharge piping; require that control and safety device reports, which must already be prepared and kept available for inspectors, also be sent to the Division of Labor Services; require a hydrostatic test and an internal inspection to be performed before a temporary object is put into operation; and adopt new rules concerning repairs, plugging leaky tubes, and the condition and maintenance of equipment rooms. Carbon monoxide detectors are already required in boiler rooms, and Item 34 sets forth specific requirements for carbon monoxide detectors. In order to make the requirements more accessible to users, some of the amendments place directly into rules requirements that are currently adopted by reference.

#### *Public Comment and Changes to Rule Making*

Notice of Intended Action for this rule making was published in the Iowa Administrative Bulletin on July 28, 2021, as **ARC 5806C**. No public comments were received. Since publication of the Notice, one

change has been made. In Item 32, the word “services” has been inserted after “division of labor” in paragraph 91.8(1)“d.” No other changes from the Notice have been made.

#### *Adoption of Rule Making*

This rule making was adopted by the Board on September 23, 2021.

#### *Fiscal Impact*

A limited amount of maintenance in state buildings may be required.

#### *Jobs Impact*

After analysis and review of this rule making, no impact on jobs has been found.

#### *Waivers*

Any person who believes that the application of the discretionary provisions of this rule making would result in hardship or injustice to that person may petition the Board for a waiver of the discretionary provisions, if any, pursuant to 875—Chapter 81.

#### *Review by Administrative Rules Review Committee*

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its [regular monthly meeting](#) or at a special meeting. The Committee’s meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

#### *Effective Date*

This rule making will become effective on November 24, 2021.

The following rule-making actions are adopted:

ITEM 1. Amend rule 875—80.5(89) as follows:

**875—80.5(89) Official communications.** All official communications, including submissions and requests, shall be addressed to the Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~4000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309.

ITEM 2. Amend **875—Chapter 81**, title, as follows:

#### **WAIVERS OR VARIANCES FROM ADMINISTRATIVE RULES BY THE BOILER AND PRESSURE VESSEL BOARD**

ITEM 3. Amend rule 875—81.3(17A,89), introductory paragraph, as follows:

**875—81.3(17A,89) Criteria for waiver or variance.** In response to a petition completed pursuant to this chapter, the board may, in its sole discretion, issue an order waiving, in whole or in part, the requirements of a rule as applied to an identified person on the basis of the particular circumstances of that person if the board finds, based on clear and convincing evidence, all of the following:

ITEM 4. Amend subrule 81.4(3) as follows:

**81.4(3) Filing petition.** A petition is deemed filed when it is received in the board’s office. A petition and related materials for consideration should be sent to the Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~4000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309.

ITEM 5. Amend rule 875—81.5(17A,89), introductory paragraph, as follows:

**875—81.5(17A,89) Content of petition.** The required form for a petition for waiver ~~or variance~~ is available on the board's website at [iowaboilers.gov](http://iowaboilers.gov). A petition for waiver shall include the following information where applicable and known to the petitioner:

ITEM 6. Rescind rule 875—81.12(17A,89) and adopt the following new rule in lieu thereof:

**875—81.12(17A,89) Submission of waiver information.** Information about all orders granting or denying a waiver petition shall be submitted by the board staff to the legislative services agency through the designated Internet site within 60 days of granting or denying the petition. The information submitted is available to the public via the website.

ITEM 7. Amend subrules 82.1(6) and 82.1(7) as follows:

**82.1(6)** The petition must be dated and signed by the petitioner or the petitioner's representative. The petition must also include the name, mailing address, and telephone number of the petitioner and petitioner's representative, and a statement indicating the person to whom communications concerning the petition should be directed. If desired, the petition should also provide an email address and a statement that email is an acceptable method for communication.

**82.1(7)** The board may deny a petition because it does not provide the required information. ~~The petitioner may file a new petition on the same subject that seeks to eliminate the grounds for the board's rejection.~~

ITEM 8. Amend rule 875—82.3(17A,89) as follows:

**875—82.3(17A,89) Inquiries.** Inquiries concerning the status of a petition for rule making may be made to the Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~1000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309.

ITEM 9. Amend subrule 82.4(3) as follows:

**82.4(3)** Within 60 days after the filing of the petition, or within any longer period agreed to by the petitioner, the board shall deny the petition in writing and notify petitioner of its action and the specific grounds for the denial, or grant the petition and notify petitioner that the board will institute rule-making proceedings on the subject of the petition. Notice shall be sent by the board office to the petitioner by regular mail or email if appropriate. Petitioner shall be deemed notified of the denial or granting of the petition on the date the board office mails the required notification to the petitioner. Copies of the petition and the document granting or denying the petition shall be sent to the administrative rules review committee.

ITEM 10. Amend rule 875—83.5(17A,89) as follows:

**875—83.5(17A,89) Inquiries.** Inquiries concerning the status of a declaratory order may be made ~~at the board office~~ to the Boiler and Pressure Vessel Board, Division of Labor Services, 150 Des Moines Street, Des Moines, Iowa ~~50309~~.

ITEM 11. Amend paragraph **84.10(5)"d"** as follows:

*d.* A certification in substantially the following form:

I certify under penalty of perjury and pursuant to the laws of Iowa that, on (date of mailing), I mailed copies of (describe document) addressed to the Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~1000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309, and to the names and addresses of the parties listed below by depositing the same in a United States post office mailbox with correct postage properly affixed.

(Date)

(Signature)

ITEM 12. Amend subrule 85.3(1) as follows:

**85.3(1) Address.** The board's ~~mailing~~ address is Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~4000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309. ~~The board's staff is located at 150 Des Moines Street, Des Moines, Iowa.~~

ITEM 13. Amend subrule 85.3(3) as follows:

**85.3(3) Request for access.** Requests for access to open records may be made in writing, in person, by facsimile, ~~E-mail~~ email, or other electronic means, or by telephone. Requests shall identify the particular records sought by name or description in order to facilitate the location of the record. Mail, electronic, or telephone requests shall include the name, address, and telephone number of the person requesting the information to facilitate the board's response. A person shall not be required to give a reason for requesting an open record. ~~While agencies are not required by Iowa Code chapter 22 to respond to requests for public records that are not made in person, the board will respond to such requests as reasonable under the circumstances.~~

ITEM 14. Amend paragraph **85.3(7)"b"** as follows:

*b. Copying and postage costs.* Price schedules for published materials and for photocopies of records supplied by the board shall be ~~prominently posted~~ available in board offices. Copies of records may be made by or for members of the public on board photocopy machines or from electronic storage systems at cost as determined and posted in board offices by the custodian. When the mailing of copies of records is requested, the actual costs of such mailing may also be charged to the requester.

ITEM 15. Amend rule 875—85.6(22,89) as follows:

**875—85.6(22,89) Procedure by which additions, dissents, or objections may be entered into certain records.** Except as otherwise provided by law, a person may file a request with the custodian to review, and to have a written statement of additions, dissents, or objections entered into, a record containing personally identifiable information pertaining to that person. However, this does not authorize a person who is a subject of such a record to alter the original copy of that record or to expand the official record of any board proceeding. Requester shall send the request to review such a record or the written statement of additions, dissents, or objections to the ~~board at the~~ Boiler and Pressure Vessel Board, Department of Workforce Development, Division of Labor Services, ~~4000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa ~~50319~~ 50309. The request to review such a record or the written statement of such a record of additions, dissents, or objections must be dated and signed by requester, and shall include the current address and telephone number of the requester or the requester's representative.

ITEM 16. Amend paragraph **85.12(2)"b"** as follows:

*b. Minutes and tapes of closed meetings of the board.* (Iowa Code section ~~21.5(4)~~ 21.5(5))

ITEM 17. Amend subrule 85.15(2) as follows:

**85.15(2) Board records.** Agendas, minutes, and materials presented to the board members in preparation for board meetings are available from the board office, except those records concerning closed sessions which are exempt from disclosure under Iowa Code section ~~21.5(4)~~ 21.5(5). Board records contain information about people who participate in meetings. This information is collected pursuant to Iowa Code section 21.3. This information is stored on paper and electronically.

ITEM 18. Rescind the definitions of "Alteration," "Hot water supply boiler" and "Reinstallation" in rule **875—90.2(89,252J,272D)**.

ITEM 19. Amend rule **875—90.2(89,252J,272D)**, definitions of "Electric boilers," "External inspection," "Internal inspection," "National Board," "National Board Inspection Code" and "Unfired steam pressure vessel," as follows:

*"Electric ~~boilers~~ boiler"* means a power boiler, heating boiler, high or low temperature water boiler in which the source of heat is electricity.

“External inspection” means as a complete an examination as can be reasonably made of the external surfaces and safety devices while the boiler or pressure vessel object is in operation, unless the object is required to be shut down pursuant to 875—subrule 89.3(4).

“Internal inspection” means as complete an examination as can be reasonably made of the internal and external surfaces of a boiler or pressure vessel an object while it is shut down and while access for examination is attained through the removal of any manhole plates, handhole plates or other inspection opening closures are removed as required by the inspector, blind flanges, piping spools or fittings attached to the object. A determination that an examination cannot be reasonably made shall not be based on a failure of the owner or user to provide clearance pursuant to rule 875—91.10(89) or on failure of the owner or user to provide for the inspector’s safety and health as described in 875—Chapters 90 and 91.

“National Board” means the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, whose membership is composed of the chief inspectors of jurisdictions who are charged with the enforcement of the provisions of boiler codes. The National Board’s website is [nationalboard.org](http://nationalboard.org).

“National Board Inspection Code” or “NBIC” means the Manual for Boiler and Pressure Vessel Inspectors (ANSI/NB 23) published by the National Board. Copies of the code may be obtained from the National Board.

“Unfired steam pressure vessel” means a vessel or container used for the containment of steam pressure either internal or external in which the pressure is obtained from an external source. “Unfired steam pressure vessel” may include items such as expansion tanks, flash tanks, and condensate return tanks.

ITEM 20. Adopt the following new definitions in rule **875—90.2(89,252J,272D)**:

“Alteration” means a change in the object described on the original manufacturer’s data report that affects the pressure-retaining capability of the pressure-retaining object. A nonphysical change such as an increase in the maximum allowable working pressure (internal or external), an increase in design temperature, or a reduction in minimum temperature of a pressure-retaining item shall be considered an alteration.

“CSD-1 report” means Manufacturer’s/Installing Contractor’s Report for ASME CSD-1.

“Exit” means a doorway, hallway, or similar passage that will allow free, normally upright unencumbered egress from an area.

“Hot water supply boiler” means a boiler that:

1. Operates at a pressure not exceeding 160 psig;
2. Furnishes hot water to be used externally to itself; and, either:
  - Bears a National Board “H” stamp and has a temperature less than or equal to 250°F at or near the boiler outlet, or,
  - Bears a National Board “HLW” stamp and has a temperature less than or equal to 210°F at or near the boiler outlet.

“Installation” means the process by which an object is connected to a system for operation. This applies to all objects whether they are new, used, or being brought back to service after being removed.

“Miniature boiler” means a boiler that does not exceed a 16-inch inside shell diameter, 20 square feet of heating surface (not applicable to electric boilers), 5 cubic feet of gross volume (exclusive of casing and insulation), and 100 psig maximum allowable working pressure.

“OEM” means original equipment manufacturer.

“Owner or user” means any person, firm, or corporation legally responsible for the installation, operation, and maintenance of any object within the jurisdiction.

“Safe point of discharge” means the same as in the National Board Inspection Code: a location that will not cause property damage, cause equipment damage, or create a health or safety threat to personnel in the event of discharge.

“Temporary object” means a boiler, unfired steam pressure vessel, or combination thereof that is not a permanent fixture or part of normal operation of the facility.

ITEM 21. Amend paragraph **90.6(2)“c”** as follows:

c. Special inspections may be conducted ~~at any time mutually agreed to~~ when deemed necessary by the division and the object’s owner or user.

ITEM 22. Amend subrule 90.6(3) as follows:

**90.6(3) *Inspections conducted by special inspectors.*** Special inspectors shall provide copies of the completed report to the insured and to the division within ~~30~~ 14 days of completing the inspection. The reports shall list all ~~adverse~~ noteworthy conditions that are within the scope of Iowa Code chapter 89, all recommendations, and all requirements, if any. If the special inspector has not ~~notified the division~~ of provided the inspection results of the inspection within ~~30 days of the expiration of an operating certificate~~ the time frame identified, the division may conduct the inspection.

ITEM 23. Amend subrule 90.6(7) as follows:

**90.6(7) *Imminent danger.***

a. If the labor commissioner determines that continued operation of an object constitutes an imminent danger that could seriously injure or cause death to any person, notice to immediately cease operation of that object shall be ~~posted by the labor commissioner~~ made to the owner or user through contact information available in the division’s records or by posting a notice at the location of the object.

b. Upon such notice, the owner or user shall immediately ~~begin~~ take the necessary steps to cease operation of the object. All forms of energy to and from the object must be isolated and physically locked in the closed position.

c. A division inspector will verify that the object is no longer in operation and all forms of energy to and from the object have been isolated and are locked in the closed position.

d. The object shall not be used until ~~the~~ all necessary repairs have been completed, ~~and~~ the object has passed inspection, all repair documentation is complete, and the division reviews and approves the documentation.

e. Operation of an object in violation of this subrule may result in further legal action pursuant to Iowa Code sections 89.11 and 89.13.

ITEM 24. Amend subrule 90.11(1), introductory paragraph, as follows:

**90.11(1) *Control and safety device reports.*** Documentation required by this subrule shall be kept on site and shall be available for inspection by the division or special inspectors. The owner or user shall mail a copy of the documentation required by this subrule to the division.

ITEM 25. Amend paragraph **90.11(1)“b”** as follows:

b. The installer shall complete a ~~Manufacturer’s/Installing Contractor’s Report for ASME CSD-1 (CSD-1 report)~~ CSD-1 report for each ~~newly installed or reinstalled~~ object.

ITEM 26. Amend rule 875—90.12(89) as follows:

**875—90.12(89) Publications available for review.** Pursuant to Iowa Code section ~~89.5, subsection 3~~ 89.5(3), the standards, codes, and publications adopted by reference in these rules are available for review in the office of the Division of Labor Services, ~~4000 East Grand Avenue~~ 150 Des Moines Street, Des Moines, Iowa.

ITEM 27. Rescind rule 875—90.14(89) and adopt the following **new** rule in lieu thereof:

**875—90.14(89) Temporary objects.**

**90.14(1) *Certificate to operate.*** A certificate to operate a temporary object shall expire one year from the date of issuance or when the temporary object is disconnected.

**90.14(2) *Inspections.***

a. An internal inspection and hydrostatic test pursuant to the National Board Inspection Code shall be performed on site at a new location before a temporary object is started up. Once a temporary object has been placed into normal operation, an external operating inspection shall be performed.

b. An inspection on a temporary object that remains at the same location and is in continuous service longer than one year shall be performed according to the inspection schedule of Iowa Code section 89.3.

ITEM 28. Adopt the following new rule 875—90.16(89):

**875—90.16(89) Definitions regarding objects.** The following definitions shall govern classification and status of objects in Iowa. To the extent they do not conflict with the definitions contained in Iowa Code chapter 89, the definitions in this rule shall be applicable to the rules contained in 875—Chapters 90 to 96.

“*Active status*” means an object is physically attached to the system and any forms of potential energy. The object may or may not be in operation.

“*Exempt status*” means an object that is not required to be inspected pursuant to Iowa Code chapter 89.

“*Inactive status*” means the object is no longer in operation and all forms of potential energy have been disconnected in a manner that creates an air gap.

“*Modular boiler*” means a steam or hot water heating assembly consisting of a group of individual boilers called modules intended to be installed as a unit with no intervening stop valves. Modules may be under one jacket or individually jacketed. The individual modules shall be limited to a maximum input of 400,000 Btu/hour (117kW) (gas), 3 gph (11.4 L/h) (oil), or 115kW (electric).

“*Scrapped status*” means the object has been permanently destroyed and is no longer physically at the location.

ITEM 29. Amend subrules 91.1(3) to 91.1(11) as follows:

**91.1(3) *Inspection code adopted by reference.*** The National Board Inspection Code (2019) is adopted by reference, and ~~reinstallations~~, installations, alterations, and repairs after April 15, 2020, shall comply with it.

**91.1(4) *Electric code adopted by reference.*** The National Electrical Code (2020) is adopted by reference, and ~~reinstallations~~ and installations after April 15, 2020, shall comply with it.

**91.1(5) *Piping codes adopted by reference.*** The Power Piping Code, ASME B31.1 (2018), and the Building Services Piping Code, ASME B31.9 (2017), are adopted by reference, and ~~reinstallations~~ and installations after April 15, 2020, shall comply with them up to and including the first valve.

**91.1(6) *Control and safety device code adopted by reference.*** Controls and Safety Devices for Automatically Fired Boilers (CSD-1) (2018) is adopted by reference, and ~~reinstallations~~ and installations after April 15, 2020, shall comply with it. Reporting requirements concerning CSD-1 are set forth at rule 875—90.11(89).

**91.1(7) *Mechanical code adopted by reference.*** Excluding Section 701.1, Chapters 2 and 7 of the International Mechanical Code (IMC) (2018) are adopted by reference, and installations and ~~reinstallations~~ after September 1, 2018, shall comply with them.

**91.1(8) *Oil burning equipment code adopted by reference.*** National Fire Protection Association Standard for the Installation of Oil Burning Equipment, NFPA 31 (2016), is adopted by reference, and installations and ~~reinstallations~~ after September 1, 2018, shall comply with it.

**91.1(9) *Fuel gas code adopted by reference.*** National Fire Protection Association National Fuel Gas Code, NFPA 54 (2018), is adopted by reference, and installations and ~~reinstallations~~ after September 1, 2018, shall comply with it.

**91.1(10) *Liquefied petroleum gas code adopted by reference.*** National Fire Protection Association Liquefied Petroleum Gas Code, NFPA 58 (2020), is adopted by reference, and installations and ~~reinstallations~~ after April 15, 2020, shall comply with it.

**91.1(11) *Boiler and combustion systems hazards code adopted by reference.*** National Fire Protection Association Boiler and Combustion Systems Hazards Code, NFPA 85 (2019), is adopted by reference, and installations and ~~reinstallations~~ after April 15, 2020, shall comply with it.

ITEM 30. Amend rule 875—91.2(89) as follows:

**875—91.2(89) Safety appliance.**

**91.2(1)** No person shall remove, disable or tamper with a required safety appliance except for the purpose of repair or inspection.

**91.2(2)** An object shall not be operated unless all ~~applicable~~ required and installed safety appliances are properly functional and operational.

ITEM 31. Amend rule 875—91.5(89) as follows:

**875—91.5(89) Location of discharge piping outlets.** The discharge from safety valves, safety relief valves, blowoff pipes and other outlets shall ~~be so arranged that there will be no danger of scalding personnel.~~ comply with the following:

**91.5(1)** The discharge piping shall terminate at a safe point of discharge.

**91.5(2)** When the safety valve or temperature and pressure relief valve discharge is piped away from the object to ~~the~~ a safe point of discharge, provision shall be made for properly draining the piping.

**91.5(3)** The size of the discharge piping shall not be reduced from the size of the relief valve.

**91.5(4)** All discharge piping shall be comprised of appropriate metallic material identified in ASME Section II.

ITEM 32. Adopt the following new rules 875—91.7(89) and 875—91.8(89):

**875—91.7(89) Repairs and alterations to unfired steam pressure vessels.** No single repair of an unfired steam pressure vessel shall involve replacement of more than 50 percent of the OEM's pressure-retaining boundary.

**875—91.8(89) Plugging boiler tubes.** This rule does not apply to tubes in headers of economizers, evaporators, superheaters, or reheaters.

**91.8(1) General requirements.**

- a. Leaky tubes shall be replaced or plugged.
- b. Tube plugs shall be made of a material which is compatible with the material of the boiler tube being plugged and shall be welded into place or manufactured to be expanded into the tube sheet or drum.
- c. All plugged boiler tubes shall be replaced prior to the next required certificate inspection.
- d. The maximum number of tubes that shall be plugged is the lesser of the number specified by the OEM or the number specified by an engineer experienced in boiler design. Documentation of the maximum number of tubes that may be plugged as determined by the OEM or engineer shall be kept on site, and a copy shall be mailed to the division of labor services.

**91.8(2) Fire tube boilers.** In a fire tube boiler, a tube that is adjacent to a plugged tube shall not be plugged.

**91.8(3) Water tube boilers, unfired boilers, or process steam generators.** To determine the maximum number of tubes that may be plugged in a water tube boiler, unfired boiler, or process steam generator, an engineer experienced in boiler design shall consider the operational effect on the water side pressure boundary or membrane and the effect on the combustion process throughout the boiler. Water wall tubes may not be plugged if the tubes form a separation wall between products of combustion and the outside atmosphere or a separation of the gas passes in a multiple gas pass boiler.

ITEM 33. Rescind rule 875—91.10(89) and adopt the following new rule in lieu thereof:

**875—91.10(89) Equipment room.** This rule applies to existing and new installations except as noted in subrule 91.10(1).

**91.10(1) Clearances.**

a. All objects installed after December 1, 2021, shall be installed with the clearances identified in NBIC Part 1.

b. This paragraph applies to objects installed after September 20, 2006, and before December 1, 2021. Minimum clearance on all sides of objects shall be 24 inches, or the manufacturer's recommended



service clearances if they allow sufficient room for inspection. Where a manufacturer identifies in the installation manual or other document that the unit requires more than 24 inches of service clearance, those dimensions shall be followed. Manholes shall have five feet of clearance between the manhole opening and any wall, ceiling or piping that would hinder entrance or egress from the object.

c. All objects installed prior to September 20, 2006, shall be so located that adequate space is provided for the proper operation, inspection, and necessary maintenance and repair of the object and its appurtenances.

**91.10(2) Condition of the equipment room.**

a. The roof, walls and floor of the equipment room shall be free from leaks and structurally sound.

b. The equipment room shall have drainage adequate to remove standing water from the floor.

c. The equipment room shall be free from materials that obstruct access to the objects, their setting, or operation.

d. Storage of flammable material or gasoline-powered equipment in the equipment room is prohibited.

**91.10(3) Exit from equipment room.** This subrule shall apply to an equipment room exceeding 500 square feet of floor area, containing at least one object, and containing fuel-burning equipment with at least a combined capacity of 1,000,000 Btu per hour or the equivalent electrical heat input. Two means of exit located remotely from one another shall be provided on each elevation for covered equipment rooms. A platform at the top of a single object or other equipment is not considered an elevation.

**91.10(4) Carbon monoxide detector or alarm.** The owner or user shall install a carbon monoxide detector or alarm in an equipment room where one or more fuel-fired objects are located.

a. The carbon monoxide detector or alarm shall have a visible display showing the parts per million value of the carbon monoxide that is detected.

b. The carbon monoxide detector or alarm shall be hardwired to the building power and shall have a battery backup with visible and audible alarms that identify when the battery backup power supply is low.

c. The carbon monoxide detector or alarm shall be tested daily and shall be calibrated in accordance with the manufacturer's recommendations, or every 18 months after installation of the detector. The testing and calibration shall be recorded in a log book that is readily accessible to the inspectors and owner's staff.

d. The carbon monoxide detector or alarm shall have visible and audible alarms capable of being heard and seen both inside and outside of the equipment room.

ITEM 34. Rescind rule 875—91.11(89) and adopt the following **new** rule in lieu thereof:

**875—91.11(89) Fall protection.** The owner or user shall provide safe access to object parts over four feet high consistent with 29 CFR Subpart D, Walking-Working Surfaces, and 29 CFR 1910.140, Personal Fall Protection Systems.

ITEM 35. Rescind and reserve rule **875—91.12(89)**.

ITEM 36. Amend paragraph **91.13(3)“a”** as follows:

a. *Installations and re-installations.* Installations ~~and re-installations~~ shall comply with the edition of NFPA 31, NFPA 54, NFPA 58, NFPA 85, or IMC currently adopted at rule 875—91.1(89) or with the Iowa combustion air standard in subrule 91.13(4). However, compliance with one of the listed NFPA codes constitutes compliance with this rule only if the object burns the fuel covered by the NFPA.

ITEM 37. Rescind subrule 94.1(3) and adopt the following **new** subrule in lieu thereof:

**94.1(3) Hot water supply boilers.**

[Filed 9/23/21, effective 11/24/21]

[Published 10/20/21]

EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement 10/20/21.