Regulatory Analysis

Notice of Intended Action to be published: Iowa Administrative Code 875—Chapter 90
"Administration of the Boiler and Pressure Vessel Program"

Iowa Code section(s) or chapter(s) authorizing rulemaking: 89.14
State or federal law(s) implemented by the rulemaking: Executive Order 10

Public Hearing

A public hearing at which persons may present their views orally or in writing will be held as follows:

October 22, 2024 9 to 9:30 a.m.	Lake Conference Room 6200 Park Avenue, Suite 100 Des Moines, Iowa

Public Comment

Any interested person may submit written or oral comments concerning this Regulatory Analysis. Written or oral comments in response to this Regulatory Analysis must be received by the Labor Services Division no later than 4:30 p.m. on the date of the public hearing. Comments should be directed to:

Mitchell Mahan
Iowa Department of Inspections, Appeals, and Licensing
6200 Park Avenue, Suite 100
Des Moines, Iowa 50321-1270
Phone: 515.443.1051
Email: mitchell.mahan@dia.iowa.gov

Purpose and Summary

This proposed rulemaking rescinds Chapter 90 in accordance with the goals and directives of Executive Order 10. Proposed Chapter 90 sets forth the authority of the Elevator, Boiler and Amusements Bureau to inspect, grant permits, enforce safety requirements, and assess fees for covered boilers and pressure vessels.

Analysis of Impact

1. Persons affected by the proposed rulemaking:

- Classes of persons that will bear the costs of the proposed rulemaking:

The boiler and pressure vessel program maintains personnel to inspect boilers and pressure vessels.

- Classes of persons that will benefit from the proposed rulemaking:

The public, boiler owners and pressure vessel owners benefit from operating boilers and pressure vessels.

2. Impact of the proposed rulemaking, economic or otherwise, including the nature and amount of all the different kinds of costs that would be incurred:

- Quantitative description of impact:

There are fees that are comparable to fees of other nearby jurisdictions.

- Qualitative description of impact:

No qualitative impact is discerned.

3. Costs to the State:

- Implementation and enforcement costs borne by the agency or any other agency:

The agency hires personnel to inspect.

- Anticipated effect on state revenues:

The level of fees in this new chapter will not change the impact on state revenues.

4. Comparison of the costs and benefits of the proposed rulemaking to the costs and benefits of inaction:

Inaction would result in unsafe boilers and pressure vessels.

5. Determination whether less costly methods or less intrusive methods exist for achieving the purpose of the proposed rulemaking:

No less costly or less intrusive methods are known.

6. Alternative methods considered by the agency:

- Description of any alternative methods that were seriously considered by the agency:

No alternative methods were seriously considered.

- Reasons why alternative methods were rejected in favor of the proposed rulemaking:

Not applicable.

Small Business Impact

If the rulemaking will have a substantial impact on small business, include a discussion of whether it would be feasible and practicable to do any of the following to reduce the impact of the rulemaking on small business:

- Establish less stringent compliance or reporting requirements in the rulemaking for small business.
- Establish less stringent schedules or deadlines in the rulemaking for compliance or reporting requirements for small business.
- Consolidate or simplify the rulemaking's compliance or reporting requirements for small business.
- Establish performance standards to replace design or operational standards in the rulemaking for small business.
- Exempt small business from any or all requirements of the rulemaking.

If legal and feasible, how does the rulemaking use a method discussed above to reduce the substantial impact on small business?

Small businesses can seek a waiver from burdensome requirements.

Text of Proposed Rulemaking

ITEM 1. Rescind 875—Chapter 90 and adopt the following **new** chapter in lieu thereof:

CHAPTER 90
ADMINISTRATION OF THE BOILER AND PRESSURE VESSEL PROGRAM

875—90.1(89) Purpose and scope. These rules institute administrative and operational procedures for implementation of Iowa Code chapter 89. An object is not considered "under pressure" and is not within the scope of Iowa Code chapter 89 when there is clear evidence that the manufacturer did not intend it to be operated at more than 3 psi and the object is operating at 3 psi or less. Jurisdiction is limited to objects, appurtenances, controls, safety devices, and equipment rooms as required by Iowa rules.

875—90.2(89,252J,272D) Definitions. To the extent they do not conflict with the definitions contained in Iowa Code chapter 89, the definitions in this rule are applicable to the rules contained in 875—Chapters 90 to 96.

"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 is considered an alteration.

"ANSI/ASME CSD-1" means Control and Safety Devices for Automatically Fired Boilers.

"Appurtenance" means any item or equipment that is attached to the object and is part of the boiler external piping.

"ASME" means the American Society of Mechanical Engineers.

"Boiler" means a vessel in which water or other liquids are heated, steam or other vapors are generated, steam or other vapors are superheated, or any combination thereof, under pressure or vacuum by the direct application of heat. "Boiler" includes all temporary boilers.

"Boiler external piping" means all boiler piping and components as set forth in the scope of the edition of ASME B31.1 currently adopted by reference in 875—Chapter 91.

"Certificate of noncompliance" means:

1. A certificate of noncompliance issued by the child support recovery unit, department of human services, pursuant to Iowa Code chapter 252J; or
2. A certificate of noncompliance issued by the centralized collection unit of the department of revenue pursuant to Iowa Code chapter 272D.

"CFR" means Code of Federal Regulations.

"Construction or installation code" means the applicable standard for construction or installation in effect at the time of installation.

"CSD-1 report" means Manufacturer's/Installing Contractor's Report for ASME CSD-1.

"Department" means the department of inspections, appeals, and licensing.

"Director" means the director of the department of inspections, appeals, and licensing or the director's designee.

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

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

"External inspection" means a complete examination made of the external surfaces and safety devices while the object is in operation, unless the object is required to be shut down pursuant to 875—subrule 89.3(4).

"High temperature water boiler" means a water boiler intended for operations at pressures in excess of 160 psig or temperatures in excess of 250 degrees F.

"Hot water heating boiler" means a boiler in which no steam is generated, from which hot water is circulated for heating purposes and then returned to the boiler, and that operates at a pressure not exceeding 160 psig or a temperature of 250 degrees F at the boiler outlet.

"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 degrees F at or near the boiler outlet, or,
- Bears a National Board "HLW" stamp and has a temperature less than or equal to 210 degrees 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.

"Institution of health and custodial care" means any of the following:

1. A health care facility as defined by Iowa Code section 135C.1;
2. An assisted living program as defined by Iowa Code section 231C.2;
3. A boarding home as defined by Iowa Code section 135O.1;
4. A hospice that offers inpatient services in an institutional setting;
5. Any institution or facility in which persons are housed to receive medical, health, or other care or treatment; or
6. Any other institution or facility in which persons are housed to receive assistance with meeting personal needs or activities of daily living.

A facility or office that provides care and services only on an outpatient basis is not an "institution of health and custodial care."

"Internal inspection" means as complete an examination as can be reasonably made of the internal surfaces of an object while it is shut down and access for examination is attained through the removal of any manhole plates, handhole plates, blind flanges, piping spools or fittings attached to the object. A determination that an examination cannot be reasonably made is not based on a failure of the owner or user to provide clearance or on failure of the owner or user to provide for the inspector's safety and health.

"ISO" means International Standards Organization.

"Lap seam crack" means a crack found in lap seams, extending parallel to the longitudinal joint and located either between or adjacent to rivet holes.

"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.

"National Board" means the National Board of Boiler and Pressure Vessel Inspectors, whose membership is composed of the chief inspectors of jurisdictions who are charged with the enforcement of the provisions of boiler codes.

"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.

"Object" means a boiler or pressure vessel.

"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.

"Power boiler" means a boiler in which steam or other vapor is generated at a pressure of more than 15 pounds per square inch or a water boiler intended for operation at pressures in excess of 160 pounds per square inch or temperatures in excess of 250 degrees F.

"Process steam generator" means a vessel or system of vessels comprised of one or more drums and one or more heat exchange surfaces as used in waste heat or heat recovery type steam boilers.

"Psig" means pounds per square inch gage.

"Relief valve" means an automatic pressure-relieving device actuated by a static pressure upstream of the valve that opens further with the increase in pressure over the opening pressure and that is used primarily for liquid service.

"Repair" means work necessary to return a boiler or pressure vessel to a safe operating condition.

"Rupture disk device" means a nonreclosing pressure-relief device actuated by inlet static pressure and designed to function by the bursting of a pressure-containing disk.

"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.

"Safety appliance" includes, but not be limited to:

1. Rupture disk device;
2. Safety relief valve;

3. Safety valve;
4. Temperature limit control;
5. Pressure limit control;
6. Gas switch;
7. Air switch; or
8. Any major gas train control.

"Safety relief valve" means an automatic, pressure-actuated relieving device suitable for use as a safety or relief valve, depending on application.

"Safety valve" means an automatic, pressure-relieving device actuated by the static pressure upstream of the valve and characterized by full opening pop action. The safety valve is used for gas or vapor service.

"Special inspection" means an inspection that is not required by Iowa Code chapter 89.

"Temperature and pressure relief valve" means a valve set to relieve at a designated temperature and pressure.

"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.

"Unfired steam boiler" means a vessel or system of vessels intended for operation at a pressure in excess of 15 psig for the purpose of producing and controlling an output of thermal energy.

"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.

"U.S. customary units" means feet, pounds, inches and degrees Fahrenheit.

"Water heater supply boiler" means a closed vessel in which water is heated by combustion of fuels, electricity or any other source and withdrawn for use external to the system at pressure not exceeding 160 psig and includes all controls and devices necessary to prevent water temperatures from exceeding 210 degrees F.

875—90.3(89) Iowa identification numbers. All objects shall be identified by an Iowa identification number. State inspectors and special inspectors shall assign identification numbers as directed by the department to all jurisdictional objects that lack numbers. Identification numbers shall be attached in plain view to the object using one of the following methods:

1. A yellow sticker 2 inches by 3 inches affixed to the object and bearing the number.
2. A metal tag 1 inch by 2½ inches affixed to the object and bearing the number.
3. Numbers at least 5/16 of an inch high and stamped directly on the object.

875—90.4(89) Preinspection owner or user preparation.

90.4(1) *Preparation of objects.* Each owner or user shall ensure that each object covered by Iowa Code chapter 89 is prepared for inspection pursuant to this rule.

90.4(2) *Confined space and lockout, tagout procedures.*

a. If an object is a non-permit-required confined space or a permit-required confined space, the owner or user must prepare the object for inspection accordingly. Otherwise the inspector will not enter the space.

b. It is the duty of the owner or user to inform any inspector of the owner's or user's confined space entry and lockout, tagout procedures and supply to the inspector all information necessary to assess whether the confined space is safe for entry. It is the right of an inspector to verify any of the information supplied.

c. The owner or user shall have all objects locked and tagged, as applicable, prior to the inspector's entry for inspection or testing.

d. For entry into a permit-required confined space, the owner or user shall provide the necessary equipment such as air monitors and a qualified attendant who has received all the information relevant to the entry.

90.4(3) *Hydrostatic tests.* The owner or user shall prepare for and apply a hydrostatic test, whenever necessary, on the date specified by the inspector, which date will be not less than seven days after the date of notification.

90.4(4) *Boilers.* A boiler shall be prepared for internal inspection in the following manner:

a. Fluid will be drawn off and the boiler washed thoroughly.

b. Manhole and handhole plates, washout plugs and inspection plugs in water columns will be removed as required by the inspector. The furnace and combustion chambers will be thoroughly cooled and cleaned.

c. All grates of internally fired boilers will be removed.

d. Brickwork will be removed as required by the inspector in order to determine the condition of the boiler, header, furnace, supports or other parts.

e. Low-water fuel cutoff controls will be opened or removed to allow for visual inspection.

90.4(5) *Pressure vessels.* The extent of inspection preparation for a pressure vessel will vary. If the inspection is to be external only, advance preparation is not required other than to afford reasonable access to the vessel. For combined internal and external inspections of small vessels of simple construction handling air, steam, nontoxic or nonexplosive gases or vapors, minor preparation is required, including affording reasonable means of access and removing manhole plates and inspection openings. In other cases, preparation includes removing the internal fittings and appurtenances to permit satisfactory inspection of the interior of the vessel if required by the inspector.

90.4(6) *Removal of covering or brickwork to permit inspection.* If the object is jacketed so that the longitudinal seams of shells, drums, or domes cannot be seen, sufficient jacketing, setting wall, or other form of casing or housing shall be removed to permit reasonable inspection of the seams and so that the size of rivets, pitch of the rivets, and other data necessary to determine the safety of the object may be obtained, providing the information cannot be determined by other means. Brickwork shall be removed as required by the inspector in order to determine the condition of the boiler, header, furnace, supports or other parts.

90.4(7) *Improper preparation for inspection.* If an object has not been properly prepared for an internal inspection, or if the owner or user fails to comply with the requirements for hydrostatic tests as set forth in this chapter, the inspector may decline to make the inspection or test, and the inspection certificate will be withheld until the owner or user complies with the requirements.

875—90.5(89) Inspections.

90.5(1) *General.* All boilers and unfired steam pressure vessels covered by Iowa Code chapter 89 are inspected according to the requirements of the National Board Inspection Code (2021), which is hereby adopted by reference. A department inspector or special inspector must perform the inspections.

90.5(2) *Schedule.*

a. All required inspections must be performed according to the schedule set forth in Iowa Code section 89.3, unless an exception is set forth in this rule.

b. Except for inspections of unfired steam pressure vessels operating in excess of 15 pounds per square inch and low pressure steam boilers, each certificate inspection must be performed within a 60-day period prior to the expiration date of the operating certificate. Modification of this 60-day period will be permitted only upon written application showing just cause for waiver of the 60-day period.

c. Special inspections may be conducted when deemed necessary by the department and the object's owner or user.

90.5(3) *Inspections conducted by special inspectors.* Special inspectors shall provide copies of the completed report to the insured and to the department within 14 days of completing the inspection. The reports list all noteworthy conditions that are within the scope of Iowa Code chapter 89, all

recommendations, and all requirements. If the special inspector has not provided the results of the inspection within the time frame identified, the department may conduct the inspection.

90.5(4) *Type of inspection.* The inspection will be an internal inspection when required; otherwise, it shall be as complete an external inspection as possible. Conditions including, but not limited to, the following may also be the basis for an internal inspection:

a. Visible metal or insulation discoloration due to excessive heat.

b. Visible distortion of any part of the pressure vessel.

c. Visible leakage from any pressure-containing boundary.

d. Any operating records or verbal reports of a vessel being subjected to pressure above the nameplate rating or to a temperature above or below the nameplate design temperature.

e. A suspected or known history of internal corrosion or erosion.

f. Evidence or knowledge of a vessel having been subjected to external heat from a fire.

g. A welded repair not documented as required.

h. Evidence of an accident, incident or malfunction that could affect or may have resulted from a problem with the object's integrity.

90.5(5) *Internal inspections for unfired steam pressure vessels operating at more than 15 pounds per square inch.* The director may require an internal inspection of an unfired steam pressure vessel operating in excess of 15 psi when an inspector observes any deviation from these rules, Iowa Code chapter 89, the construction code, the installation code, or the National Board Inspection Code.

90.5(6) *Inspection of inaccessible parts.* When, in the opinion of the inspector, as a result of conditions disclosed at the time of inspection, it is advisable to remove the interior or exterior lining, covering, or brickwork to expose certain parts of the vessel not normally visible, the owner or user shall remove such material to permit proper inspection and thickness measurement of any part of the vessel. Nondestructive examination is acceptable.

90.5(7) *Imminent danger.*

a. If the director 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 made to the owner or user through contact information available in the department's records or by posting a notice at the location of the object.

b. Upon such notice, the owner or user shall immediately 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 department 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 all necessary repairs have been completed, the object has passed inspection, all repair documentation is complete, and the department reviews and approves the documentation.

90.5(8) *Internal inspections on a four-year cycle based on process safety management compliance.* The owner demonstrates compliance with the requirements set forth in Iowa Code section 89.3(5)*"a"*(4)*"b"* by annually submitting to the director a notarized affidavit. The affidavit shall be in a format approved by the director and signed by the owner or an officer of the company.

90.5(9) *Internal inspection on a four-year cycle for utility objects.* An object that meets the criteria of this subrule will be inspected internally at least once every four years and externally every year. If at any time the object or the owner no longer meets the criteria of this subrule, internal inspections will be performed on a two-year cycle.

a. The object is owned and operated by an electric public utility subject to rate regulation under Iowa Code chapter 476.

b. The object and the owner meet all the requirements for a two-year internal inspection interval.

c. If the object is shut down for a period sufficient to allow safe entry, and more than two years have passed since the last internal inspection, the owner shall notify the director of the outage and will schedule an internal inspection.

d. If the director determines that an earlier inspection is necessary, the owner shall prepare the object for inspection.

90.5(10) *Request for extended inspection interval.*

a. Owners of objects covered under Iowa Code section 89.3(4)*"a"* may apply for an extended internal inspection interval of up to seven years.

b. The application for an extended internal inspection interval includes the following information submitted to the director:

(1) The name and contact information of the requestor.

(2) The state identification number of the object.

(3) The interval requested with supporting reasons.

(4) An affidavit affirming the following:

1. Compliance with the process safety management standard contained in 29 CFR §1910.119.

2. The object is included as process safety management process equipment in the owner's process safety management program.

3. The object meets the requirements contained in the National Board Inspection Code.

4. The object is fit for service based on the year of fabrication and the estimated service life of the object as determined by Part 2 of the National Board Inspection Code.

5. Practices have been implemented for managing consumable items and ancillary equipment of the object.

(5) The following supporting records:

1. Inspection records of the boiler and ancillary equipment for the prior five years.

2. The most recent Report of Fitness for Service Assessment.

3. Every Form R-1 Report of Repair and Form R-2 Report of Alterations for the prior five years.

(6) A request for an informal conference, if desired.

c. The director will consider, among other things, whether the object meets the requirements contained in the National Board Inspection Code, whether the object is fit for service based on the year of fabrication, the estimated service life of the object as determined by Part 2 of the National Board Inspection Code, and whether the owner has implemented practices for managing consumable items and ancillary equipment of the object.

d. The director may grant an extended inspection interval.

(1) An extended inspection interval lasts until the next inspection, at which time the owner of the object may again apply for an extension.

(2) The owner shall promptly report to the department's boiler and pressure vessel unit any unscheduled shutdowns, significant incidents, near misses, and any other occurrences that might reasonably require reinspection before the extended date. Should the occurrence reasonably require it, or if any such event is not reported within ten days of occurrence, the director may revoke the extended inspection interval.

e. If the director does not intend to grant the extension, the director will give the applicant a Notice of Intent to Deny Extended Inspection Interval, granting ten days for the applicant to provide additional reasons and evidence why the interval should be extended.

875—90.6(89) Fees.

90.6(1) *Special inspector commission fee.* A $55 fee shall be paid annually to the director to obtain a special inspector commission pursuant to Iowa Code section 89.7.

90.6(2) *Certificate fee.* A $40 fee shall be paid for each one-year certificate, an $80 fee shall be paid for each two-year certificate, and a $160 fee shall be paid for each four-year certificate.

90.6(3) *Fees for inspection.* An inspection fee for each object inspected by a department inspector shall be paid by the appropriate party as follows:

a. A $55 fee for each water heater supply boiler.

b. A $95 fee for each boiler, other than a water heater supply boiler, having a working pressure up to and including 450 pounds per square inch or generating between 20,000 and 100,000 pounds of steam per hour.

c. A $215 fee for each boiler, other than a water heater supply boiler, having a working pressure in excess of 450 pounds per square inch and generating in excess of 100,000 pounds of steam per hour.

d. A $55 fee for each pressure vessel, such as steam stills, tanks, jacket kettles, sterilizers and all other reservoirs having a working pressure of 15 pounds or more per square inch.

e. An additional fee will be charged if, upon the request of an owner or user, the director agrees to any non-routine schedule for an inspection outside of normal business hours, a special inspection, or a site visit. The additional fee will be calculated at a rate of $200 per hour, including travel time, with a minimum charge of $400.

f. If a boiler or pressure vessel has to be reinspected, there shall be another inspection fee as specified above.

90.6(4) *Fees for attempted inspections.* A $35 fee is charged for each attempt by a department inspector to conduct an inspection that is not completed through no fault of the department.

875—90.7(89) Certificate. No boiler or pressure vessel shall be operated without a current, valid certificate to operate. A certificate to operate will not be issued until the boiler or pressure vessel is in compliance with the applicable rules and all fees have been paid. The current certificate to operate or a copy of the current certificate to operate shall be conspicuously posted in the room where the object is installed.

875—90.8(89,252J,272D) Special inspector commissions.

90.8(1) *Definition of "reputable insurance company."* As used in this rule, "reputable insurance company" means a company recognized by the Iowa insurance division as a licensed insurer, a risk retention group, an alien surplus lines insurer, or a surplus lines insurer.

90.8(2) *Application.*

a. A person applying for a new or renewed commission shall complete, sign, and submit to the department with the required fee the form entitled "Application for Boiler and Pressure Vessel Special Inspector Commission" provided by the department. Additionally, the applicant shall submit a copy of the applicant's current National Board commission/endorsement with each application.

b. An applicant for a new Iowa special inspector commission shall schedule a meeting with the chief boiler inspector to discuss Iowa law and the responsibilities, expectations, and requirements for a special inspector.

90.8(3) *Expiration.*

a. The commission is for no more than one year and ceases when the special inspector leaves employment with the insurance company, or when the commission is suspended or revoked by the director. Each commission expires no later than December 31 of each year.

90.8(4) *Changes.* The special inspector shall notify the department at the time any of the information on the form or attachments changes.

90.8(5) *Denials.* The director may refuse to issue or renew a special inspector's commission for failure to complete an application package, if the applicant or inspector does not hold a National Board commission, or for any reason listed in subrules 90.8(7) through 90.8(9).

90.8(6) *Investigations.* Investigations will take place at the time and in the places the department directs. The director may investigate for any reasonable cause. The director may conduct interviews and utilize other reasonable investigatory techniques. Investigations may be conducted without prior notice.

90.8(7) *Reasons for probation.* The director may issue a notice of commission probation when an investigation reasonably reveals that the special inspector does not represent a reputable insurance company or the special inspector filed inaccurate reports.

90.8(8) *Reasons for suspension.* The director may issue a notice of commission suspension when an investigation reasonably reveals the following:

a. The special inspector failed to submit and report inspections on a timely basis;

b. The special inspector abused the special inspector's authority;

c. The special inspector misrepresented self as a state inspector or a state employee;

d. The special inspector used commission authority for inappropriate personal gain;

e. The special inspector failed to follow the department's rules for inspection of object repairs, alterations, construction, installation, or in-service inspection;

f. The special inspector committed numerous violations as described in subrule 90.8(7);

g. The special inspector used fraud or deception to obtain or retain, or to attempt to obtain or retain, a special inspector commission whether for one's self or another;

h. The National Board revoked or suspended the special inspector's work card;

i. The department received a certificate of noncompliance;

j. The special inspector failed to take appropriate disciplinary actions against a subordinate special inspector who has committed repeated acts or omissions listed in paragraphs 90.8(8)*"a"* to *"h;"* or

k. The special inspector does not represent a reputable insurance company.

90.8(9) *Reasons for revocation.* The director may issue a notice of revocation of a special inspector's commission when an investigation reveals any of the following:

a. The special inspector filed a misleading, false or fraudulent report;

b. The special inspector failed to perform a required inspection;

c. The special inspector failed to file a report or filed a report that was not in accordance with the provisions of applicable standards;

d. The special inspector failed to notify the department in writing of any accident involving an object;

e. The special inspector committed repeated violations as described in subrule 90.8(8);

f. The special inspector used fraud or deception to obtain or retain, or to attempt to obtain or retain, a special inspector commission whether for one's self or another;

g. The special inspector instructed, ordered, or otherwise encouraged a subordinate special inspector to perform the acts or omissions listed in paragraphs 90.8(9)*"a"* to *"f;"*

h. The National Board revoked or suspended the special inspector's commission card;

i. The department received a certificate of noncompliance; or

j. The special inspector does not represent a reputable insurance company.

90.8(10) *Procedures.* The following procedures apply except in the event of revocation or suspension due to receipt of a certificate of noncompliance. In instances involving receipt of a certificate of noncompliance, the applicable procedures of Iowa Code chapter 252J or 272D apply.

a. Notice of actions. The director shall serve a notice on the special inspector by certified mail to an address listed on the commission application form or by other service as permitted by Iowa Code chapter 17A. A copy will be sent to the insurance company employing the special inspector.

b. Contested cases. The special inspector has 20 days to file a written notice of contest with the director. If the special inspector does not file a written contest within 20 days of receipt of the notice, the action stated in the notice will automatically be effective.

c. Emergency suspension. Pursuant to Iowa Code section 17A.18A, if the director finds that public health, safety or welfare imperatively requires emergency action because a special inspector failed to comply with applicable laws or rules, the special inspector's commission may be summarily suspended.

d. Probation period. A special inspector may be placed on probation for a period not to exceed one year for each incident causing probation.

e. Suspension period. A special inspector's commission may be suspended up to five years for each incident causing a suspension.

f. Revocation period. A special inspector's commission that has been revoked shall not be reinstated for five years.

g. Concurrent actions. Multiple actions may proceed at the same time against any special inspector.

h. Revoked or suspended commissions. Within five business days of final agency action revoking or suspending a special inspector commission, the special inspector shall forfeit the special inspector's commission card to the director.

875—90.9(89) Quality reviews, surveys and audits.

90.9(1) An entity that manufactures or repairs boilers, pressure vessels or related equipment may request quality reviews, surveys or audits from certifying organizations such as the ASME or the National Board. The department is authorized to conduct the quality reviews, surveys or audits. If the department performs the service, the manufacturer or repairer shall pay all applicable expenses.

90.9(2) Quality reviews, surveys and audits for certification to the National Board or ASME standards shall be conducted only by a person or organization designated by the director. Any person or organization seeking this designation on behalf of the department shall provide documented evidence of training, examination, experience, and certification for the type of reviews, surveys and audits to be performed. The director has final authority to determine qualifications and designations.

a. Assessing quality programs. The department recognizes the ASME and the National Board as qualified designees for conducting quality reviews, surveys and audits that lead to ASME or National Board program certification.

b. ISO 9000 assessments. The department recognizes the ASME and the National Board:

(1) To be acceptable ISO 9000 registrars of quality systems for boilers and pressure vessels and the related pressure-technology equipment industry;

(2) To certify auditors and lead auditors to the requirements of ISO 10011-2 1991(E), Annex A; and

(3) To conduct ISO 9000 assessments for the boiler, pressure vessel, and related pressure-technology equipment industry.

875—90.10(89) Reporting requirements.

90.10(1) *Control and safety device reports.* Documentation required by this subrule shall be kept on site and be available for inspection by the department or special inspectors. The owner or user shall mail a copy of the documentation required by this subrule to the department.

a. The requirements of this subrule do not apply to:

(1) An object within the scope of 875—Chapter 96;

(2) A hot water supply boiler covered by ASME Section IV, Part HLW; or

(3) A boiler with a fuel input rating greater than or equal to 12,500,000 Btu per hour, falling within the scope of NFPA 85, Boiler and Combustion Systems Hazards Code.

b. The installer shall complete a CSD-1 report for each installed object. For all objects that do not fall under CSD-1, an I-1 report in accordance with NBIC shall be completed.

c. A person who installs a new burner, new gas train, or new controller on an object shall complete a CSD-1 report.

d. A person who replaces a part or component of an object shall complete the relevant portions of the CSD-1 report unless the replacement satisfies the design specifications. A copy of an invoice containing the same information as the relevant portions of the CSD-1 report is an acceptable alternative.

90.10(2) *Reporting repairs and alterations.* If the National Board Inspection Code requires that a report of repair, alteration or other such documentation is required, a copy of that documentation must be simultaneously filed with the director.

90.10(3) *Reporting explosions and other incidents.*

a. The following definitions apply to this subrule.

"Incident" means the explosion of a covered object or other failure of a component of a covered object causing injury or acute illness.

"Injury" means a personal injury requiring professional medical care or causing disability exceeding one day.

b. The owner or user of a covered object shall notify the director of an incident. A special inspector investigating an incident shall notify the owner or user of this reporting requirement.

c. Incident reports are made by calling 515.669.8945 or 515.725.2050. If the incident occurs during normal department operating hours, notification shall occur before close of business on that day. If the incident occurs when the department office is closed, the notification shall occur no later than close of business on the next department business day. Department hours are 8 a.m. to 4:30 p.m., Monday through Friday, except state holidays.

d. At the request of the director, a person who submits a report pursuant to this subrule shall also submit a written report that includes the state identification number of the object, name of the owner of the object, and description of the incident.

e. The removal of any part of the damaged object from the premises is forbidden until permission to do so is granted by the state inspector or special inspector who investigated the incident.

f. When an incident involves the failure or destruction of any part of the object, the use of the object is forbidden until it has been made safe and it has passed an inspection by the state inspector or special inspector who investigated the incident.

875—90.11(89) Publications available for review. Pursuant to Iowa Code section 89.5(3), the standards, codes, and publications adopted by reference in these rules are available for review in the office of the department, 6200 Park Avenue, Suite 100, Des Moines, Iowa.

875—90.12(89) Notice prior to installation. Written notice of intent to install objects subject to the jurisdiction of Iowa Code chapter 89 shall be provided to the director at least ten days before installation. Written notice is accomplished by completing and submitting to the director either:

1. The form designated by the director, or
2. The National Board's Boiler Installation Report, I-1.

875—90.13(89) Temporary objects.

90.13(1) *Certificate to operate.* A certificate to operate a temporary object expires one year from the date of issuance or when the temporary object is disconnected.

90.13(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.

875—90.14(89) Conversion of a power boiler to a low-pressure boiler. The following requirements apply to the conversion of a power boiler to a low-pressure boiler. The owner shall comply with the requirements of subrule 90.15(1) for each conversion. In addition, the owner shall comply with the requirements of subrule 90.15(2) if the converted object will be located outside of a place of public assembly or with the requirements of subrule 90.15(3) if the converted object will be located in a place of public assembly.

90.14(1) *General requirements.*

a. The owner shall provide to the director written notice of intent to convert a power boiler to a low-pressure boiler prior to conversion. The required form for a notice of conversion is available on the department's website. At a minimum, the notice shall contain the following:

(1) Address, uses, and owner of the building where the boiler is located.

(2) The Iowa identification number assigned to the boiler.

(3) Name and contact information for the person completing the notice.

(4) Name and contact information for the contractor or other person planning to perform the conversion.

b. Pressure controls shall not exceed 15 pounds per square inch.

c. All boiler controls shall comply with ASME CSD-1.

d. Safety valves and safety relief valves shall be manufactured in accordance with a national or international standard.

e. One or more spring-pop safety valves meeting the following requirements shall be installed on each steam boiler:

(1) The valve shall be adjusted and sealed to discharge at a pressure not to exceed 15 psig.

(2) The valve capacity shall be certified by the National Board.

f. The converted boiler shall be subject to post-conversion external inspection to ensure that the requirements of this rule are met.

90.14(2) *Boilers located outside places of public assembly.* A power boiler that was converted to a low-pressure boiler and that is located outside of a place of public assembly shall not be converted back to a power boiler unless the following requirements are met:

a. The owner shall notify the director at least ten days prior to converting the boiler.

b. The owner shall comply with the editions of ASME Section I and CSD-1 in effect at the time of the second conversion.

c. The owner shall comply with the version of 875—Chapter 92 in effect at the time of the second conversion.

90.14(3) *Boilers located in places of public assembly.* A power boiler converted to a low-pressure boiler that is located in a place of public assembly complies with 875—Chapter 94.

875—90.15(89) Definitions regarding objects. The following definitions 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 are applicable to the rules contained in 875—Chapters 90 through 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.

These rules are intended to implement Iowa Code chapters 17A, 89, 252J, and 272D.