Regulatory Analysis

Notice of Intended Action to be published: Iowa Administrative Code 875—Chapter 93
"Miniature Power Boilers Installed Prior to September 20, 2006"

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:

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6200 Park Avenue, Suite 100
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Purpose and Summary

This proposed rulemaking rescinds Chapter 93 in accordance with the goals and directives of Executive Order 10. Proposed Chapter 93 requires certain design and operation standards for miniature power boilers installed prior to September 20, 2006.

Analysis of Impact

1. Persons affected by the proposed rulemaking:

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

Owners of miniature power boilers installed prior to September 20, 2006 will bear the costs.

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

The public and anyone potentially in harm's way of a destructive failure of a boiler covered by this chapter will benefit.

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:

The rulemaking requires certain costs related to inspection and maintenance.

- Qualitative description of impact:

There is no known qualitative impact.

3. Costs to the State:

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

The agency has costs associated with running the Elevator, Boiler, and Amusements section.

- Anticipated effect on state revenues:

The rulemaking has no anticipated fiscal impact.

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

The benefit of safe boilers outweighs the costs.

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

The Department has not identified any less costly or less intrusive methods.

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?

The rules do not have a substantial impact on small business.

Text of Proposed Rulemaking

ITEM 1. Rescind 875—Chapter 93 and adopt the following **new** chapter in lieu thereof:

CHAPTER 93
MINIATURE POWER BOILERS INSTALLED PRIOR TO SEPTEMBER 20, 2006

875—93.1(89) Scope.

93.1(1) This chapter sets forth requirements in addition to those contained in 875—Chapter 92 for boilers that:

a. Have a heating surface of 20 square feet or less;
b. Have a gross volume of 5 cubic feet or less, excluding casing and insulation;
c. Have an inside shell diameter of 16 inches or less;
d. Have 100 psig maximum allowable working pressure; and
e. Were installed prior to September 20, 2006.

93.1(2) For objects covered by this chapter, if there is a conflict between this chapter and 875—Chapter 92, this chapter shall govern the issue.

875—93.2(89) Code adopted by reference. The current edition of the National Board Inspection Code adopted by reference in rule 875—91.1(89) applies to objects covered by this chapter.

875—93.3(89) Maximum working pressure. The maximum allowed working pressure is to be determined by rule 875—92.3(89).

875—93.4(89) Safety valve requirements. Boilers covered by this chapter will be equipped with a sealed spring-loaded pop safety valve of not less than ½-inch pipe size. The minimum relieving capacity of the safety valve will be determined in accordance with rule 875—92.6(89). In addition to these requirements, the safety valve will have sufficient capacity to discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than 6 percent above maximum allowable working pressure.

875—93.5(89) Steam stop valves. Each steam line from a miniature power boiler shall be provided with a stop valve located as close to the boiler shell or drum as is practicable except when the boiler and steam receiver are operated as a closed system.

875—93.6(89) Water gage requirements.

93.6(1) Miniature power boilers for operation with a definite water level will be equipped with a glass water gage for determining the water level. The lowest permissible water level for vertical boilers will be at a point one-third of the height of the shell above the bottom head or tube sheet. When the boiler is equipped with an internal furnace, the water level will not be less than one-third of the length of the tubes above the top of the furnace tube sheet. In the case of small boilers operated in a closed system where there is insufficient space for the usual glass water gage, water level indicators of the glass bull's eye type may be used.

93.6(2) Miniature power boilers will have the lowest visible part of the water gage glass located at least 1 inch above the lowest permissible water level specified by the manufacturer.

875—93.7(89) Feedwater supply requirements.

93.7(1) Except for miniature power boilers operating without the extraction of steam, miniature power boilers will be provided with at least one feed pump or other feeding device unless the boiler feed line is connected to a water main carrying sufficient pressure to feed the boiler. In the latter case, in lieu of a feeding device, a suitable connection or opening will be provided to fill the boiler when cold. Such connection will be no less than ½-inch pipe size for iron or steel pipe and ¼-inch for brass or copper pipe.

93.7(2) The feed pipe will be provided with a check valve and a stop valve of a size not less than that of the pipe. The feed water may be delivered through the blowoff opening if desired.

875—93.8(89) Blowoff. Miniature power boilers shall be equipped with a blowoff connection, not less than ½-inch pipe size, located to drain from the lowest water space practicable. The blowoff shall be equipped with a valve or cock not less than ½-inch pipe size.

875—93.9(89) Washout opening requirements.

93.9(1) Miniature power boilers exceeding 12 inches internal diameter or having more than ten square feet of heating surface will be fitted with not less than three brass washout plugs of 1-inch pipe size that will be screwed into openings in the shell near the bottom. In miniature power boilers of the closed type system heated by removable internal electric heating elements, the openings for these elements when suitable for cleaning purposes may be substituted for washout openings. Boilers not exceeding 12 inches internal diameter and having less than ten square feet of heating surface need not have more than two 1-inch openings for cleanouts, one of which may be used for the attachment of the blowoff valve; these openings will be opposite each other where possible. All threaded openings will

be opposite each other where possible. All threaded openings in the boiler will be provided with a riveted or welded reinforcement to give four full threads therein.

93.9(2) Electric boilers of a design employing a removable top cover flange for inspection and cleaning need not be fitted with washout openings.

875—93.10(89) Fixtures and fittings. All valves, pipe fittings, and appliances connected to a miniature power boiler shall be equal to at least the minimal requirements of the construction or installation code and shall be rated for not less than the maximum allowable working pressure of the miniature power boiler. In no case shall the rating be for less than 125 pounds.

These rules are intended to implement Iowa Code chapter 89.