REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

815 KAR 15:025
Contact Person: Jonathon M. Fuller
Phone: (502) 782-0617
Email: max.fuller@ky.gov

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation establishes the design, construction, and inspection criteria requirements of the boiler inspection section for all boilers and pressure vessels not exempted by KRS 236.060.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to establish the standards for the safe construction, installation, inspection, and repair of boilers, pressure vessels, and associated pressure piping.

(c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 236.030 authorizes the commissioner to promulgate administrative regulations that establish standards for the safe construction, installation, inspection, and repair of boilers, pressure vessels, and associated pressure piping. KRS 236.040 requires all boiler and pressure vessels to conform to the rules and regulations formulated by the commissioner, and establishes the standards for pressure piping and pressure vessels for human occupancy. KRS 236.110 establishes the inspection requirements for boilers, pressure vessels, and pressure piping.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation establishes the standards for boilers and pressure vessels, and the requirements for the initial inspections of new boilers, new pressure vessels, and new pressure piping.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment updates code references, clarifies several topics (including, but not limited to: compliance with minimum standards, pressure piping inspection, and general boiler requirements) and adds provisions for carbon monoxide detection as well as chimney maintenance.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to update code references as well as ensure the safety of building occupants, boiler operators and inspectors.

(c) How the amendment conforms to the content of the authorizing statutes: This amendment establishes the standards and installation of boiler and pressure vessels, and establishes the inspection requirements for boilers and pressure vessels.

(d) How the amendment will assist in the effective administration of the statutes: This amendment updates the standards for boilers and pressure vessels and reorganizes and edits the administrative regulation for clarity and conciseness.

(3) Does this administrative regulation or amendment implement legislation from the previous five years? No.

(4) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: All individuals engaged in the boiler and

pressure vessel industry, building owners, and Department of Housing, Buildings and Construction personnel.

(5) Provide an analysis of how the entities identified in question (4) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (4) will have to take to comply with this administrative regulation or amendment: Regulated entities shall comply with the new codes and standards for the installation and construction of boilers.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (4): The cost will vary based on the installation. For instance, some boilers are condensing boilers, which do not use masonry chimneys. Therefore, chimney inspection would not be required. Similarly, some boilers are mounted outdoors; therefore, carbon monoxide detection would not be required. A typical chimney inspection costs $300. This cost would be incurred every two to four years. To install and link a carbon monoxide detector to boilers costs approximately $1,000. This is a one-time cost.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (4): The standards are more up-to-date and the administrative regulation will be easier to read and understand. Moreover, the carbon monoxide and emergency stop requirements will greatly enhance the safety of building occupants, as well as boiler operators and inspectors.

(6) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: There are no anticipated initial costs to administer this regulatory amendment.

(b) On a continuing basis: There are no anticipated continuing costs to administer this regulatory amendment.

(7) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: Any department costs of implementation will be met with existing department funds.

(8) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: This amendment will not necessitate an increase in fees or require funding from the department for implementation.

(9) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees: There are no fees increased by this amendment.

(10) TIERING: Is tiering applied? Tiering is not applied as all individuals in the boiler and pressure vessel industry and department personnel are affected by this amendment.

FISCAL IMPACT STATEMENT

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Phone: (502) 782-0617
Email: max.fuller@ky.gov

(1) Identify each state statute, federal statute, or federal regulation that requires or authorizes the action taken by the administrative regulation. This regulation is authorized and required by KRS 236.030, 236.040, 236.110, 236.120, and 236.240.

(2) State whether this administrative regulation is expressly authorized by an act of the General Assembly, and if so, identify the act: This regulation is required by KRS 236.030.

(3)(a) Identify the promulgating agency and any other affected state units, parts, or divisions: The Department of Housing, Buildings and Construction, Division of Plumbing, Boiler Inspection Section.

(b) Estimate the following for each affected state unit, part, or division identified in (3)(a):

1. Expenditures:
   For the first year: None
   For subsequent years: None
2. Revenues:
   For the first year: None
   For subsequent years: None
3. Cost Savings:
   For the first year: None
   For subsequent years: None

(4)(a) Identify affected local entities (for example: cities, counties, fire departments, school districts): There are no anticipated local entities that will be affected by this regulatory amendment.

(b) Estimate the following for each affected state unit, part, or division identified in (4)(a):

1. Expenditures:
   For the first year: None
   For subsequent years: None
2. Revenues:
   For the first year: None
   For subsequent years: None
3. Cost Savings:
   For the first year: None
   For subsequent years: None

(5)(a) Identify additional regulated entities not listed in questions (3)(a) or (4)(a): Individuals engaged in the boiler and pressure vessel industry.

(b) Estimate the following for each affected state unit, part, or division identified in (5)(a):

1. Expenditures:

For the first year: Expenditures will vary by type and scope of project. For example, if a boiler vents through a masonry chimney, the cost associated with a chimney inspection will be incurred (approximately $300). However, not all boilers are connected to a masonry chimney.

For subsequent years: Same as first year.

2. Revenues:

For the first year: Increased revenues for those performing the work, depending on type and scope of project and market rate.

For subsequent years: Same as first year.

3. Cost Savings:

For the first year: None

For subsequent years: None

(6) Provide a narrative to explain the following for each entity identified in (3)(a), (4)(a), and (5)(a):

(a) Fiscal impact of this administrative regulation: The state will not have any revenue, cost savings or expenditures because enforcement will take place out of existing funds. Local governments also will not be affected. Boiler contractors may have additional expenditures and revenues. The precise amount of the expenditures and revenues will vary from project to project. For instance chimney inspection will not be required in all buildings as not all buildings have chimneys that serve boilers. Similarly, some boilers are mounted outdoors; therefore, carbon monoxide detection would not be required. A typical chimney inspection costs $300. This cost would be incurred every two to four years. To install and link a carbon monoxide detector to boilers costs approximately $1,000. This is a one-time cost.

(b) Methodology and resources used to reach this conclusion: Please see the response to (5)(a).

(7) Explain, as it related to the entities identified in (3)(a), (4)(a), and (5)(a) :

(a) Whether this administrative regulation will have a "major economic impact" as defined by KRS 13A.010(14): This regulation will not have a major economic impact as defined by KRS 13A.010(14).

(b) The methodology and resources used to reach this conclusion: The total anticipated economic impact of this regulatory amendment is, for the most part, neutral. The increased costs incurred by contractors will be offset by revenues, the added upfront costs for building owners may help offset unanticipated costs affiliated with injury and death due to carbon monoxide poisoning, boiler or pressure vessel failure, or masonry chimney failure.

SUMMARY OF CHANGES TO MATERIAL INCORPORATED BY REFERENCE

(1) The "National Board Inspection Code Part 1, Installation" 2025 Edition, is a 157-page inspection code. This Part includes certain major changes from previous versions, such as:

- "Quality System" has been changed to "Quality Management System" throughout.
- Definitions for Base Metal, Filler Metal, Temporary Location, Weld, Weld Metal, and Weld Consumable have been added to the glossary.
- Carbon monoxide detectors are now required in boiler rooms.
- Form I-1, *Boiler Installation Report,* has been revised.
- A new requirement for air intake installation in sealed combustion systems has been added to section 1.6.6.
- New requirements have been added to sections 2.8.5 and 3.8.1.5 for low-water fuel cutoffs that are installed external to the boiler.
- New drain system requirements have been added to section 3.6.3.
- Sections 3.8.2.2 and 3.8.2.3 have new requirements for thermometers and temperature-sensing elements installed on hot-water heating and hot-water supply boilers.
- Requirements in section 3.9.3 for set pressure and capacity for pressure relief valves on hot-water heating and hot-water supply boilers were updated to better align with ASME Section IV.

(2) The "National Board Inspection Code Part 2, Inspection" 2025 Edition, is a 384-page inspection code. This Part includes certain major changes from previous versions, such as:

- "Quality System" has been changed to "Quality Management System" throughout.
- Definitions for Base Metal, Filler Metal, Temporary Location, Weld, Weld Metal, and Weld Consumable have been added to the glossary.
- Requirements have been updated in section 1.4 regarding owners' or users' responsibility for addressing safety exposure for an inspector.
- Several updates have been made to section 2.3.6.5 to revise inspection requirements for pressure vessels with quick-actuating closures.
- Recommended inspection type/frequency for thermal fluid heaters was added to Table 2.5.8.
- Several revisions were made to section 4.2 to better align the section with NBIC Part 3.
- New inspection requirements for staybolts on historical boilers were added to section S2.10.4.1.
- New sections S2.10.4.3 and S2.10.4.4 have been added to address maximum allowable working pressure (MAWP) calculations for curved stayed surfaces subjected to internal or external pressures in historical boilers.

- Table S6.13.6 has been revised to match the latest U.S. Department of Transportation standards.
- Supplement 14, *Low-Pressure Boiler External Inspection List*, is a new document.

(3) The "National Board Inspection Code Part 3, Repairs and Alterations" 2025 Edition is a 308-page inspection code. This Part includes certain major changes from previous versions, such as:

- "Quality System" has been changed to "Quality Management System" throughout.
- Definitions for Base Metal, Filler Metal, Temporary Location, Weld, Weld Metal, and Weld Consumable have been added to the glossary.
- Requirements for temporary locations have been added to section 1.4.1.
- Paragraph j) in section 3.3.3 has been revised to clarify requirements for nozzle placement.
- New requirements for flush patches have been added to section 3.3.4.6.
- Welding requirements for plugging firetubes have been added to section 3.3.4.9.
- Several updates and revisions have been made to section 4.2.
- Section 5.2.2 has been updated to add guidance for "R" Certificate Holders with the "Design Only" scope.
- Sections 5.2.5 and 5.2.6 have been revised to provide clarification on "NR" Certificate Holder responsibilities when completing Form NR-1 and Form NVR-1.
- A new requirement has been added to section 5.7.1 to waive stamping or nameplate attachment requirements due to personnel safety or potential contamination risks.
- Section S2.4.1 has been added to address reusing parts or attachments on historical boilers.
- Section S2.13.4.1 has been added to address the replacement of through stays on historical boilers.
- Several revisions have been made to the list of graphite pressure vessel routine repairs in section S3.3.
- Section S3.5.4 has been revised to address block holes as well as tubes in graphite pressure vessels.
- Section S3.5.6 has been added to provide a repair procedure for cross-drilled blocks on graphite pressure vessels.
- Supplement 6, *Repair, Alteration, and Modification of DOT Transport (Cargo) Tanks*, has been updated to reflect the latest U.S. Department of Transportation requirements.
- Supplement 10, *Classifying Repairs and Alterations*, has been added to provide a flowchart for determining if an activity would be considered a repair or alteration.
- Supplement 11, *Engineered Repairs and Alterations*, has been added to provide a specific location for repair and alteration methods that require additional engineering considerations. The following methods have been relocated to this supplement:
    - External Weld Metal Buildup
    - Repair of Pressure-Retaining Items Without the Complete Removal of Defects
    - Repair of ASME Section VIII, Division 2 or Division 3 Pressure Vessels

- Encapsulation
- Alteration of ASME Section VIII, Division 2 or Division 3 Pressure Vessels

(4) The "National Board Inspection Code Part 4, Pressure Relief Devices" 2025 Edition is a 131-page inspection code. This Part includes certain major changes from previous versions, such as:

- "Quality System" has been changed to "Quality Management System" throughout.
- Definitions for Base Metal, Filler Metal, Temporary Location, Weld, Weld Metal, and Weld Consumable have been added to the glossary.
- Sections 2.5.1.6 and 3.8.2.3 have new requirements for thermometers and temperature sensing elements installed on hot-water heating and hot-water supply boilers.
- Recommended inspection type/frequency for thermal fluid heaters was added to Table 3.2.6.
- Section 3.3.4.1 has been deleted, and a new section 3.4, *Annual Audits*, has been added to replace 3.3.4.1.
- Section 4.2.2 has been revised to clarify how ASME Code Cases are applied to the repair and conversion of pressure relief devices.

(5) The "Standard for Oil Burning Equipment NFPA 31," 2024 edition is a 65-page standard, which gives the fuel burner, oil supply equipment, and venting standards for equipment that burns oil, and has an input of up to 12,500,000btu.

(6) The "Standard for Oil Burning Equipment NFPA 85," 2023 edition is a 240-page standard, which gives the fuel burner, oil or gas supply equipment, and venting standards for boilers with an input exceeding 12,500,000btu