



## Final Regulation Agency Background Document

<b>Agency name</b>	Virginia Department of Labor and Industry/Safety and Health Codes Board
<b>Virginia Administrative Code (VAC) citation</b>	16 VAC 25-50
<b>Regulation title</b>	Boiler and Pressure Vessel Rules and Regulations
<b>Action title</b>	Final Regulatory Action to Amend the Boiler and Pressure Vessel Rules and Regulations
<b>Date this document prepared</b>	January 28, 2010

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

### Brief summary

*Please provide a brief summary (no more than 2 short paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.*

The Boiler Safety Compliance Program seeks to amend the Boiler and Pressure Vessel Rules and Regulations. The final regulation addresses the following suggested amendments:

1. In Paragraph A of 16 VAC 25-50-150, add a fee of \$10.00 for the reprinting of a certificate to cover direct administrative costs, i.e., printing, mailing and employee's work-related time.
2. In Paragraph D of 16 VAC 25-50-150, Inspection Certificate and Inspection Fees, revise fees from "\$800" to "\$1000" to reflect cost of living adjustment;
3. In 16 VAC 25-50-360, Paragraph C.5.a., the Factors of safety are modified for vessels and a dual standard is established. Prior to January 1, 1999, the Factor of

Safety remains 4.5. Vessels built on or after this date would have a lower factor of safety of 4.0. This revision is necessary to conform to current International Boiler and Pressure Vessel Code.

4. In 16 VAC 25-50-380, paragraph B.3., Factors of safety are modified for vessels and a dual standard is established. Prior to January 1, 1999, the Factor of Safety remains 4.0. Vessels built on or after this date have a lower factor of safety of 3.5. This revision is necessary to conform to current International Boiler and Pressure Vessel Code.
5. In Paragraphs A. and C.2. of 16 VAC 25-50-430, change "1.5" to "1.25" for the maximum allowable working pressure for a hydrostatic pressure test, when applied to boilers or pressure vessels. The revision is necessary to conform to current International Boiler and Pressure Vessel Code;
6. Delete last two sentences of Paragraph D of 16 VAC 25-50-480, which read as follows: "A seal weld is a tube-to-tubesheet weld used to supplement an expanded tube joint to ensure leak tightness. Seal welds on carbon steel (P-1) tube joints made by qualified welders will not require an inspection nor a Form R-1."
7. Delete the term "welded" from Form R-1, Report of Repairs to conform to current forms;
8. Incorporation by reference of the most recent edition (~~2006~~ 2007) of B31.1, ASME Code for ~~Pressure~~ Power Piping, American National Standards Institute;
9. Incorporation by reference of the most recent edition (2006) of API510 as listed in the National Board Inspection Code;
10. Incorporation by reference of the most recent edition (~~2006~~ 2009) of CSD-1, Controls and Safety Devices for Automatically ~~fired~~ Fired Boilers; ~~and related section on maintenance that includes revised inspector's checklist;~~
11. Incorporation by reference of the most recent edition (2007) of the National Board Inspection Code (NBIC); and
12. Incorporation by reference of the most recent edition (2007) of the International Boiler and Pressure Vessel Code, including sections XII and VIII, Div 2.

### Statement of final agency action

*Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.*

On January 14, 2010, the Safety and Health Codes Board adopted the Amendments to 16 VAC 25-50, Boiler and Pressure Vessel Rules and Regulations, as a final regulation of the Board.

### Legal basis

*Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter numbers, if applicable, and (2) promulgating entity, i.e., agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.*

The Safety and Health Codes Board is authorized by Title 40.1-51.6.A. of the *Code of Virginia* to:

“...formulate definitions, rules, regulations and standards which shall be designed for the protection of human life and property from the unsafe or dangerous construction, installation, inspection, operation, maintenance and repair of boilers and pressure vessels in this Commonwealth.”

### Purpose

*Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.*

The purpose of the final regulatory action is to conform to the most current editions of the American Society of Mechanical Engineers (ASME) Pressure Vessel Code and the National Board Safety and Inspection Codes, as well as revising in-house administrative fee adjustments to cover increased costs of doing business.

### Substance

*Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the “All changes made in this regulatory action” section.*

The Boiler Safety Compliance Program seeks to amend the Boiler and Pressure Vessel Rules and Regulations. The final amendment addresses the following suggested revisions:

1. In Paragraph A of 16 VAC 25-50-150, add a fee of \$10.00 for the reprinting of certificate to cover direct administrative costs, i.e., printing, mailing and employee's work-related time.
2. In Paragraph D of 16 VAC 25-50-150, Inspection Certificate and Inspection Fees, revise fees from "\$800" to "\$1000" to reflect cost of living adjustment;
3. In 16 VAC 25-50-360, Paragraph C.5.a., the Factors of safety are modified for vessels and a dual standard is established. Prior to January 1, 1999, the Factor of Safety remains 4.5. Vessels built on or after this date would have a lower factor of safety of 4.0. This revision is necessary to conform to current International Boiler and Pressure Vessel Code.
4. In 16 VAC 25-50-380, paragraph B.3., Factors of safety are modified for vessels and a dual standard is established. Prior to January 1, 1999, the Factor of Safety remains 4.0. Vessels built on or after this date have a lower factor of safety of 3.5. This revision is necessary to conform to current International Boiler and Pressure Vessel Code.
5. In Paragraphs A. and C.2. of 16 VAC 25-50-430, change "1.5" to "1.25" for the maximum allowable working pressure for a hydrostatic pressure test, when applied to boilers or pressure vessels. The revision is necessary to conform to current International Boiler and Pressure Vessel Code;
6. Delete last two sentences of Paragraph D of 16 VAC 25-50-480, which reads as follows: "A seal weld is a tube-to-tubesheet weld used to supplement an expanded tube joint to ensure leak tightness. Seal welds on carbon steel (P-1) tube joints made by qualified welders will not require an inspection nor a Form R-1."
7. Delete the term "welded" from Form R-1, Report of Repairs to conform to current forms;
8. Incorporation by reference of the most recent edition (2006) of B31.1, ASME Code for ~~Pressure~~ Power Piping, American National Standards Institute;
9. Incorporation by reference of the most recent edition (2006) of API510 as listed in the National Board Inspection Code;
10. Incorporation by reference of the most recent edition (~~2006~~ 2009) of CSD-1, Controls and Safety Devices for Automatically ~~-fired~~ Fired Boilers; ~~and related section on maintenance that includes revised inspector's checklist;~~
11. Incorporation by reference of the most recent edition (2007) of the National Board Inspection Code (NBIC); and
12. Incorporation by reference of the most recent edition (2007) of the International Boiler and Pressure Vessel Code, including sections XII and VIII, Div 2.

## Issues

*Please identify the issues associated with the proposed regulatory action, including:*

- 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions;*
  - 2) the primary advantages and disadvantages to the agency or the Commonwealth; and*
  - 3) other pertinent matters of interest to the regulated community, government officials, and the public.*
- If there are no disadvantages to the public or the Commonwealth, please indicate.*

1) The primary advantages and disadvantages to the public associated with this proposed regulatory action are as follows: there will be a \$200 increase in cost to the “R” Stamp holders in the Commonwealth who request a review of a manufacturer’s or repair organization’s facility. The \$200 increase, which will occur once in a three-year period (reviews are performed every three years), will increase the total cost of the review from \$800 to \$1,000. The last time the review fee was increased to address the additional costs of doing business was in the 1999 Edition of the Boiler Pressure Vessel Rules and Regulations. A review performed by the National Board would cost \$3,000.

The Department does not perform a large number of inspections annually, and generally only when requested by the owner. The increase in fees will affect a number of the approximately 50 “R” Stamp holders in the Commonwealth that have their reviews performed by the Department. The Commonwealth of Virginia performs all “R” stamp reviews of shops that possess only an “R” Stamp. Shops that possess an ASME Code stamp are audited by ASME. If the shop also has an “R” stamp, ASME performs that review in conjunction with the Code Stamp review. During calendar years 2006 and 2007, the Department performed 15 and 14 such inspections, respectively and in calendar year 2007, the Department performed 14 such inspections. For 2008, the Department performed 13 inspections and in 2009, 16 inspections have been performed.

While the Department presently does not charge for a duplicate Certificate of Inspection, a \$10.00 fee represents the cost to the Department of generating a duplicate certificate. This fee includes printing, mailing and employee’s work-related time. The fees that the Department charges are based upon state law which requires that the Boiler Safety Compliance Program of the Department of Labor and Industry recoup no more than the Department’s actual costs. The non-fee related changes are deemed necessary to update the proposed regulations to the current editions of ASME and National Board safety and inspection codes which are incorporated by reference into the Commonwealth’s Boiler and Pressure Vessel Rules and Regulations.

With respect to employees, the proposed regulation will provide both increased protection of human life (both employee safety and public safety) as well as property from the unsafe or dangerous construction, installation, inspection, operation, and repair of boilers and pressure vessels in the Commonwealth of Virginia. The proposed regulations create no disadvantages to employees.

- 2) The Department anticipates no additional fiscal impact beyond the cost to promulgate the revisions to the regulation. All revenue from boiler fees is deposited directly into the state general fund. None of the funding stays with the Department.
- 3) There are no disadvantages to the public or to the Commonwealth.

**Changes made since the proposed stage**

*Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.*

<b>Section number</b>	<b>Requirement at proposed stage</b>	<b>What has changed</b>	<b>Rationale for change</b>
Documents Incorporated by Reference	ASME B 31.1, ASME Code for Pressure Piping, American National Standards Institute, 2006.	ASME B 31.1, ASME Code for <del>Pressure</del> <u>Power</u> Piping, American National Standards Institute, <del>2006</del> - <u>2007</u> .	To reflect the correct name and most recent edition of this reference.
	Part CG (Genera), Part CW (Steam and Waterside Control) and Part CF (Combustion Side Control) Flame Safeguard of ANSI/ASME CSD-1, Controls and Safety Devices for Automatically fired Boilers, 2009, American Society of Mechanical Engineers.	Part CG (Genera), Part CW (Steam and Waterside Control) and Part CF (Combustion Side Control) Flame Safeguard of ANSI/ASME CSD-1, Controls and Safety Devices for Automatically <del>fired</del> <u>Fired</u> Boilers, 2009, American Society of Mechanical Engineers.	To more accurately reflect the name of this reference.

**Public comment**

*Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.*

<b>Commenter</b>	<b>Comment</b>	<b>Agency response</b>
Mr. Fred Barton, 7/27/09	“The proposed Boiler Rules revisions are now under public comment. I would like to suggest two (2) editorial changes to clarify the proposed change to paragraph D of 16 VAC25-50-	“Your comments denoting the first sentence in subsection 16 VAC25-50-480 in regards to the reference of a seal weld no longer being appropriate is well taken, since we propose deleting the sentence defining seal welds. Likewise, the

<p>Mr. Kenneth A. Stoller, Senior Counsel, American Insurance Association, 9/18/09</p>	<p>480. Repairs and alterations. The proposed change to Paragraph D is to delete the last sentence relative to tube to tubesheet seal welds.</p> <p>The reference to defining seal welds in the first sentence of Paragraph D should also be deleted since this is the only paragraph (subsection) where seal welds are defined or even mentioned.</p> <p>The same first sentence also refers to a “Welded” Repair form. The title for that form is also being revised later on this same page to just say Repair form so that non-welded repairs to graphite and plastic vessels can be documented on the same form.</p> <p>The first sentence of Paragraph D with suggested editorial changes would then read “All repairs and alterations shall be be [sic] reported on the applicable Report of Repair or Alteration form.” See attached file.”</p> <p><u>Comment 1:</u> Items 3, 4, 5, 12: We recommend changing the references to the “International Boiler and Pressure Vessel Code” to read “ASME Boiler and Pressure Vessel Code.”</p>	<p>reference to the repair form by its old name “Report of <u>Welded</u> Repair” is no longer valid as the National Board has deleted the term “welded” from the report. These suggested changes to the Boiler &amp; Pressure Vessel Rules and Regulations will be incorporated into the final regulations when they are approved.”</p> <p>“As we are restricted by the rule making process to only making modifications to the changes originally proposed, only your comments that pertain to those proposals will be acted upon. I will address your other comments with the understanding that they will not be presented to the Safety &amp; Health Codes Board at this time, though they may be addressed in future revisions.</p> <p>You recommend changing the reference in Items 3, 4, 5, &amp; 12 from the “International Boiler and Pressure Vessel Code” to “ASME Boiler and Pressure Vessel Code”.</p>
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	<p><u>Comment 2:</u> Item 8: We recommend changing the reference to “B31.1, ASME Code for Pressure Piping” to read “B31.1, ASME Code for Power Piping.”</p> <p><u>Comment 3:</u> Item 10: We recommend changing the date of the most recent edition of CSD-1 from 2006 to 2009.</p> <p><u>Comment 4:</u> “16 VAC25-50-150.A.2: We believe the \$4.00 maximum fee that special inspectors may charge owners or users for collecting and forwarding inspection certificate fees is unreasonably low. We recommend either eliminating the maximum or increasing it to \$20.00.”</p> <p><u>Comment 5:</u> “16VAC52-360.A.1/A.3: We believe the hydrostatic pressure test contemplated by these subsections is excessive and</p>	<p>ASME itself refers to its boiler and pressure vessel code as the “International Boiler and Pressure Vessel Code”, (see their website at ASME.org). I do not propose changing this reference.”</p> <p>“You recommend changing the reference in Item 8 from “B31.1 ASME Code for Pressure Piping” to read “B31.1 ASME Code for Power Piping”. As a subsection of B31 ASME Code for Pressure Piping, either term would be appropriate. However, it was a good catch on your part for an item that has been in our rules since it first appeared. I agree with you that it should read “B31.1 ASME Code for Power Piping”.</p> <p>Your final comment on Item 10 on changing the date of the most recent edition of CSD-1 from 2006 to 2009 has already been done.”</p> <p>“Regarding your comment on 16VAC25-50-150.A.2, I am not sure or if you fully comprehend the intent of this section. This paragraph refers to a process which is not currently being used, wherein the Special Inspector could update the Certificate of Inspection with a sticker and collect the certificate fee (\$20.00) at the time of inspection and forward it to the state. This eliminated the invoicing and mailing of the certificate, providing a savings for the state. For this service, the inspection agency was allowed to keep \$4.00 of the \$20.00 fee.”</p> <p>“The following comments were made on Section 16VAC25-50-360, which was erroneously referred to as 16 VAC25-52-360 in your letter.</p>
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	<p>could cause serious damage to boilers. Accordingly, we recommend limiting testing 1-1/4 times maximum allowable working pressure.”</p> <p><u>Comment 6:</u> “16 VAC25-52-360.E: While Section 360 concerns power and high-pressure, high-temperature water boilers, Subsection E addresses pressure on cast iron boilers, which under the ASME code may not be power boilers or high-pressure, high-temperature. Accordingly, we recommend moving the subsection to a more appropriate location in the regulations.”</p> <p><u>Comment 7:</u> “16VAC25-50-360.F.4: We recommend deleting the phrase “except as provided by applicable sections of the ASME Code,” since the applicable section (PG-71.3) prohibits valves of any kind in the inlet or outlet piping of the safety valve.”</p> <p><u>Comment 8:</u> “16 VAC25-50-480.D Deleting the second-to-last sentence would eliminate the definition of “sea weld.” We</p>	<p>16VAV[sic] 25-360A.1/A.3 this section of the Rules and Regulations deals with existing installations regardless of age or construction. It was intended to apply to non-code boilers as well as code constructed boilers. Part of the intent of the hydrostatic pressure test at 1-1/2 times maximum allowable working pressure was to weed out those boilers that were of questionable construction.”</p> <p>“16VAC25-50-360.E this subsection referring to cast iron boilers is due to the fact it is in the “Existing Installations” section. At the time the rules and regulations went into effect, an effort was made to address older boilers and bring them into conformance with the modern codes. High pressure cast iron boilers have existed in the past and this subsection was intended to restrict them to low pressure service.”</p> <p>“16VAC25-50-360.F.4 while the ASME code for power boilers does not permit the installation of valves between the boiler and the safety valve, under the Virginia “Rules and Regulations for Boilers &amp; Pressure Vessels” certain ASME Section VIII Div.1 vessels meet the definition of a boiler. Since Section VIII <b>does</b> allow for stop valves to be placed between the vessel and the safety valve, (UG-135 (d), also Appendix M), it is important that the reference “except as provided by applicable sections of the ASME Code” remain in the rules and regulations.”</p> <p>“Your comment on 16VAC25-50-480.D referencing the seal weld is well taken. It has already been pointed out that there are two sentences that refer to the seal weld in</p>
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	<p>question whether that is the intent of the amendment, since the first sentence continues to refer to that definition.”</p> <p><u>Comment 9:</u> “Documents Incorporated by Reference: We question whether the National Board Bylaws should be included here, since they do not govern boiler and pressure vessel inspection, repair, or alteration.”</p>	<p>this subsection and it is our intention that both references be deleted. This will bring the rules and regulations in line with the National Board requirements for R-Stamp holders being the only authorized companies allowed to make welded repairs to boilers and pressure vessels.”</p> <p>“For your final comment on the Documents Incorporated by Reference, I believe that the National Board Bylaws are included only for their reference as to how the Chief Boiler Inspector and National Board member is elected.”</p>
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**All changes made in this regulatory action**

*Please detail all changes that are being proposed and the consequences of the proposed changes. Detail new provisions and/or all changes to existing sections.*

<b>Current section number</b>	<b>Proposed new section number, if applicable</b>	<b>Current requirement</b>	<b>Proposed change and rationale</b>
16 VAC 25-50-150. A.		<p>2. Payment may be presented to a special inspector, where the inspector is authorized to collect and forward such fees on the department's behalf. The commissioner may authorize special inspectors to collect and forward to the chief inspector \$16 for each inspection certificate. Pursuant to §40.1-51.10:1 of the Code of Virginia, special inspectors may charge owners or users a fee not exceeding \$4.00 for collecting and forwarding inspection certificate fees. An inspection certificate will not be issued to the owner or user until payment is received by either the department or, if</p>	<p>2. Payment may be presented to a special inspector, where the inspector is authorized to collect and forward such fees on the department's behalf. The commissioner may authorize special inspectors to collect and forward to the chief inspector \$16 for each inspection certificate. Pursuant to §40.1-51.10:1 of the Code of Virginia, special inspectors may charge owners or users a fee not exceeding \$4.00 for collecting and forwarding inspection certificate fees. An inspection certificate will not be issued to the owner or user until payment is received by either the department or, if previously authorized, by a special inspector. <u>A fee of \$10.00 will be charged for each reprint of an inspection certificate.</u></p> <p><u>Rationale:</u> Revision for \$10.00 fee added for</p>

<p>16 VAC 25-50-150. D.</p>		<p>previously authorized, by a special inspector.</p> <p>The review of a manufacturer's or repair organization's facility for the purpose of national accreditation will be performed by the chief inspector or his qualified designee for an additional fee of \$800 per review or survey.</p>	<p>the reprinting of a certificate to cover direct administrative costs, i.e., printing, mailing and employee's work-related time.</p> <p>D. The review of a manufacturer's or repair organization's facility for the purpose of national accreditation will be performed by the chief inspector or his qualified designee for an additional fee of <del>\$800</del> <u>\$1000</u> per review or survey.</p> <p><u>Rationale:</u> Revision of fees to reflect cost of living adjustment.</p>
<p>16 VAC 25-50-360. C.5.</p>		<p>a. The lowest factor of safety permissible on existing installations shall be 4.5. Horizontal-return-tubular boilers having continuous longitudinal lap seams more than 12 feet in length, shall have a factor of safety of eight. When this type of boiler is removed from its existing setting, it shall not be reinstalled for pressures in excess of 15 psig.</p>	<p>a. The lowest factor of safety permissible on existing installations shall be 4.5 <u>for vessels built prior to January 1, 1999. For vessels built on or after January 1, 1999, the factor of safety may be 4.0.</u> Horizontal-return-tubular boilers having continuous longitudinal lap seams more than 12 feet in length, shall have a factor of safety of eight. When this type of boiler is removed from its existing setting, it shall not be reinstalled for pressures in excess of 15 psig.</p> <p><u>Rationale:</u> This revision is necessary to conform to current International Boiler and Pressure Vessel Code.</p>
<p>16 VAC 25-50-380. B.</p>		<p>3. Factors of safety. The minimum factor of safety shall in no case be less than four for existing installations. The factor of safety may be increased when deemed necessary by the inspector to insure the operation of the vessel within safe limits. The condition of the vessel and the particular service of which it is subject will be the determining factors.</p>	<p>3. Factors of safety. The minimum factor of safety shall in no case be less than <del>four</del> <u>3.5</u> for <del>existing installations</del> <u>vessels built on or after January 1, 1999. For vessels built prior to January 1, 1999, the minimum factor of safety shall in no case be less than 4.0.</u> The factor of safety may be increased when deemed necessary by the inspector to insure the operation of the vessel within safe limits. The condition of the vessel and the particular service of which it is subject will be the determining factors.</p> <p><u>Rationale:</u> This revision is necessary to conform to the current International Boiler and Pressure Vessel Code.</p>
<p>16 VAC 25-50-430.</p>		<p>A. A hydrostatic pressure test, when applied to boilers or pressure vessels, shall not exceed 1½ times the maximum allowable working pressure, except as provided by the ASME Code.</p>	<p>A. A hydrostatic pressure test, when applied to boilers or pressure vessels, shall not exceed <del>1½</del> <u>1.25</u> times the maximum allowable working pressure, except as provided by the ASME Code. The pressure shall be under proper control so that in no case shall the</p>

<p>16 VAC 25-50-430.</p>		<p>The pressure shall be under proper control so that in no case shall the required test pressure be exceeded by more than 2.0%.</p> <p>C. When a hydrostatic test is to be applied to existing installations, the pressure shall be as follows:</p> <p>2. For all cases involving the question of safety, the pressure shall be equal to 1-1/2 times the maximum allowable working pressure for temperature. During such test the safety valve or valves shall be removed or each valve disk shall be held to its seat by means of a testing clamp and not by screwing down the compression screw upon the spring.</p>	<p>required test pressure be exceeded by more than 2.0%.</p> <p><u>Rationale:</u> This revision is necessary to conform to current International Boiler and Pressure Vessel Code.</p> <p>C. When a hydrostatic test is to be applied to existing installations, the pressure shall be as follows:</p> <p>2. For all cases involving the question of safety, the <u>test</u> pressure shall <del>be equal to 1-1/2</del> <u>not exceed 1.25</u> times the maximum allowable working pressure for temperature. During such test the safety valve or valves shall be removed or each valve disk shall be held to its seat by means of a testing clamp and not by screwing down the compression screw upon the spring.</p> <p><u>Rationale:</u> This revision is necessary to conform to current International Boiler and Pressure Vessel Code.</p>
<p>16 VAC 25-50-480.</p>		<p>D. All repairs and alterations, except seal welds as defined in this subsection, shall be reported on the applicable Report of Welded Repair or Alteration form. The completed form including proper certification shall be forwarded to the chief inspector by the organization performing the repair or alteration. A seal weld is a tube-to-tubesheet weld used to supplement an expanded tube joint to ensure leak tightness. Seal welds on carbon steel (P-1) tube joints made by qualified welders will not require an inspection nor a Form R-1.</p>	<p>D. All repairs and alterations, except seal welds as defined in this subsection, shall be reported on the applicable Report of Welded Repair or Alteration form. The completed form including proper certification shall be forwarded to the chief inspector by the organization performing the repair or alteration. <del>A seal weld is a tube to tubesheet weld used to supplement an expanded tube joint to ensure leak tightness. Seal welds on carbon steel (P-1) tube joints made by qualified welders will not require an inspection nor a Form R-1.</del></p> <p><u>Rationale:</u> The reference to the repair form by its former name “Report of <u>Welded</u> Repair” is no longer valid as the National Board has deleted the term “welded” from the report, therefore, this revision is necessary to conform to the National Board requirements.</p>
<p>FORMS</p>		<p>Form R-1, Report of Welded Repair, National Board Inspection Code (eff.1/1/99).</p>	<p>Form R-1, Report of <del>Welded</del> Repair, National Board Inspection Code (eff.1/1/99).</p> <p><u>Rationale:</u> This revision is necessary to more accurately conform to current forms.</p>

<p>Documents Incorporated by Reference</p>		<p>2001 Boiler and Pressure Vessel Code, ASME Code, American Society of Mechanical Engineers.</p> <p>ANSI/NB 23, 2001 National Board Inspection Code, National Board of Boiler and Pressure Vessel Inspectors.</p> <p>ASME B 31.1, ASME Code for Pressure Piping, American National Standards Institute, 1998.</p> <p>Part CG (General), Part CW (Steam and Waterside Control) and Part CF (Combustion Side Control) Flame Safeguard of ANSI/ASME CSD-1, Controls and Safety Devices for Automatically fired Boilers, 1998, American Society of Mechanical Engineers.</p> <p>API510, Pressure Vessel Inspection Code, Maintenance Inspection, Rating, Repair and Alteration, Sixth Edition, June 1989, American Petroleum Institute.</p>	<p><del>2001</del> <u>2007</u> Boiler and Pressure Vessel Code, ASME Code, American Society of Mechanical Engineers.</p> <p>ANSI/NB 23, <del>2001</del> <u>2007</u> National Board Inspection Code, National Board of Boiler and Pressure Vessel Inspectors.</p> <p>ASME B 31.1, ASME Code for <del>Pressure</del> <u>Power Piping</u>, American National Standards Institute, <del>1998</del> <u>2006</u> <u>2007</u>.</p> <p>Part CG (General), Part CW (Steam and Waterside Control) and Part CF (Combustion Side Control) Flame Safeguard of ANSI/ASME CSD-1, Controls and Safety Devices for Automatically <del>fired</del> <u>Fired</u> Boilers, <del>1998</del> <u>2006</u> <u>2009</u>, American Society of Mechanical Engineers.</p> <p>API510, Pressure Vessel Inspection Code, Maintenance Inspection, Rating, Repair and Alteration, <del>Sixth Edition, June 1989</del> <u>Seventh Edition, June 2006</u>, American Petroleum Institute.</p> <p><u>Rationale:</u> Revisions to forms are necessary to conform with the most current versions of the American Society of Mechanical Engineers (ASME) Pressure Vessel Code and the National Board Safety and Inspection Codes.</p>
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**Regulatory flexibility analysis**

*Please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.*

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The non-fee related changes are necessary to update the Boiler and Pressure Vessel Rules and Regulations to conform to those of the most current editions of the American Society of Mechanical Engineers (ASME) Pressure Vessel Code and the National Board Safety and Inspection codes; therefore, there were no alternative regulatory methods to achieve this goal.

The proposed \$200 would raise the review fee for national accreditation from \$800 to \$1,000 for employers, which is considerably less than the \$3,000 fees charged by the National Board for the review. The purpose of this increase is to reflect a cost of living adjustment. The last time the review fee was increased to address the additional costs of doing business was in the 1999 Edition of the Boiler and Pressure Vessel Rules and Regulations.

With respect to the \$10 charge for a replacement certificate, at least one comment felt that the Department should charge \$20 to cover the Department's time to process the requests. Most commenters felt that other fees should have been increased as well to more accurately reflect the true cost of the inspections and of the cost of living adjustment.

### Family impact

*Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.*

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The final amendments to 16 VAC 25-50, Boiler and Pressure Vessel Rules and Regulations will have no impact on the institution of the family and family stability.