TITLE 675 FIRE PREVENTION AND BUILDING SAFETY COMMISSION

Proposed Rule

LSA Document #20-627

DIGEST

Amends 675 IAC 12-3-13 to clarify the language and remove outdated provisions concerning fees for boiler and pressure vessel inspections, permitting, inspector licensing, and variances. Amends 675 IAC 30-1-1, 675 IAC 30-1-2, 675 IAC 30-1-4, 675 IAC 30-1-5, 675 IAC 30-3-3, 675 IAC 30-3-5, 675 IAC 30-3-9, 675 IAC 30-3-10, 675 IAC 30-3-11, 675 IAC 30-3-12, 675 IAC 30-3-13, 675 IAC 30-3-15, 675 IAC 30-3-17, 675 IAC 30-3-18, 675 IAC 30-3-19, 675 IAC 30-3-20, 675 IAC 30-3-21, 675 IAC 30-3-23, 675 IAC 30-4-2, 675 IAC 30-4-3, 675 IAC 30-4-4, 675 IAC 30-4-5, 675 IAC 30-4-14, 675 IAC 30-4-15, 675 IAC 30-4-17, 675 IAC 30-4-18, 675 IAC 30-4-19, 675 IAC 30-4-20, 675 IAC 30-4-23, 675 IAC 30-4-25, 675 IAC 30-4-26, 675 IAC 30-4-27, 675 IAC 30-4-29, 675 IAC 30-4-30, 675 IAC 30-4-31, 675 IAC 30-4-32, 675 IAC 30-4-33, 675 IAC 30-4-34, 675 IAC 30-4-35, 675 IAC 30-4-36, 675 IAC 30-4-38, 675 IAC 30-4-39, 675 IAC 30-4-45, 675 IAC 30-4-47, 675 IAC 30-4-49, 675 IAC 30-4-50, 675 IAC 30-4-51, 675 IAC 30-4-52, 675 IAC 30-5-1, 675 IAC 30-5-2, 675 IAC 30-5-5, 675 IAC 30-5-6, 675 IAC 30-5-7, 675 IAC 30-5-8, 675 IAC 30-5-9, 675 IAC 30-5-10, 675 IAC 30-5-11, 675 IAC 30-5-12, 675 IAC 30-5-13, 675 IAC 30-5-14, 675 IAC 30-5-15, 675 IAC 30-6-1, 675 IAC 30-6-2, 675 IAC 30-7-1, 675 IAC 30-7-2, 675 IAC <u>30-8-1, 675 IAC 30-8-2, 675 IAC 30-8-3, 675 IAC 30-8-4, 675 IAC 30-8-6, 675 IAC 30-8-7, 675 IAC 30-8-9, 675</u> IAC 30-8-10, 675 IAC 30-8-11, 675 IAC 30-8-12, 675 IAC 30-8-13, 675 IAC 30-8-14, 675 IAC 30-8-15, 675 IAC 30-8-16, 675 IAC 30-10-1, 675 IAC 30-10-2, 675 IAC 30-10-3, 675 IAC 30-10-4, 675 IAC 30-10-5, 675 IAC 30-10-7, 675 IAC 30-10-8, 675 IAC 30-10-9, 675 IAC 30-10-10, 675 IAC 30-10-11, 675 IAC 30-10-12, 675 IAC 30-10-13, 675 IAC 30-10-14, 675 IAC 30-10-15, 675 IAC 30-10-16, 675 IAC 30-11-1, 675 IAC 30-11-2, 675 IAC 30-11-3, 675 IAC 30-11-4, 675 IAC 30-11-5, and 675 IAC 30-11-6 and adds 675 IAC 30-3-4.1, 675 IAC 30-3-26, 675 IAC 30-4-1.1, 675 IAC 30-4-18.1, 675 IAC 30-4-18.2, 675 IAC 30-4-18.3, 675 IAC 30-4-18.4, 675 IAC 30-4-20.1, 675 IAC 30-4-25.1, 675 IAC 30-4-28.1, 675 IAC 30-4-30.1, 675 IAC 30-4-31.1, 675 IAC 30-4-31.2, 675 IAC 30-4-34.1, 675 IAC 30-4-35.1, 675 IAC 30-4-37.1, 675 IAC 30-4-38.1, 675 IAC 30-4-38.2, 675 IAC 30-4-42.1, 675 IAC 30-4-48.1, 675 IAC 30-4-49.1, 675 IAC 30-4-49.2, 675 IAC 30-4-50.1 to make technical changes and modernize regulations governing the design, manufacture, fabrication, assembly, installation, alteration, repair, maintenance, operation, and inspection of regulated boilers and pressure vessels. Repeals 675 IAC 30-1-3, 675 IAC 30-2, 675 IAC 30-3-1, 675 IAC 30-3-2, 675 IAC 30-3-4, 675 IAC 30-3-6, 675 IAC 30-3-8, 675 IAC 30-3-14, 675 IAC 30-3-16, 675 IAC 30-3-22, 675 IAC 30-3-24, 675 IAC 30-3-25, 675 IAC 30-4-7, 675 IAC 30-4-8, 675 IAC 30-4-9, 675 IAC 30-4-12, 675 IAC 30-4-13, 675 IAC 30-4-21, 675 IAC 30-4-22, 675 IAC 30-4-24, 675 IAC 30-4-28, 675 IAC 30-4-37, 675 IAC 30-4-43, 675 IAC 30-4-46, 675 IAC 30-4-48, 675 IAC 30-5-3, 675 IAC 30-6-3, and 675 IAC 30-9. Effective July 1, 2021.

675 IAC 12-3-13; 675 IAC 30-1-1; 675 IAC 30-1-2; 675 IAC 30-1-3; 675 IAC 30-1-4; 675 IAC 30-1-5; 675 IAC 30-2; 675 IAC 30-3-1; 675 IAC 30-3-2; 675 IAC 30-3-3; 675 IAC 30-3-4; 675 IAC 30-3-4.1; 675 IAC 30-3-5; 675 IAC 30-3-6; 675 IAC 30-3-8; 675 IAC 30-3-9; 675 IAC 30-3-10; 675 IAC 30-3-11; 675 IAC 30-3-12; 675 IAC 30-3-13; 675 IAC 30-3-14; 675 IAC 30-3-15; 675 IAC 30-3-16; 675 IAC 30-3-17; 675 IAC 30-3-18; 675 IAC 30-3-19; 675 IAC 30-3-20; 675 IAC 30-3-21; 675 IAC 30-3-22; 675 IAC 30-3-23; 675 IAC 30-3-24; 675 IAC 30-3-25; 675 IAC 30-3-26; 675 IAC 30-4-1.1; 675 IAC 30-4-2; 675 IAC 30-4-3; 675 IAC 30-4-4; 675 IAC 30-4-5; 675 IAC 30-4-7; 675 IAC 30-4-8; 675 IAC 30-4-9; 675 IAC 30-4-12; 675 IAC 30-4-13; 675 IAC 30-4-14; 675 IAC 30-4-15; 675 IAC 30-4-17; 675 IAC 30-4-18; 675 IAC 30-4-18.1; 675 IAC 30-4-18.2; 675 IAC 30-4-18.3; 675 IAC 30-4-18.4; 675 IAC 30-4-19; 675 IAC 30-4-20; 675 IAC 30-4-20.1; 675 IAC 30-4-21; 675 IAC 30-4-22; 675 IAC 30-4-23; 675 IAC 30-4-24; 675 IAC 30-4-25; 675 IAC 30-4-25.1; 675 IAC 30-4-26; 675 IAC 30-4-27; 675 IAC 30-4-28; 675 IAC 30-4-28.1; 675 IAC 30-4-29; 675 IAC 30-4-30; 675 IAC 30-4-30.1; 675 IAC 30-4-31; 675 IAC 30-4-31.1; 675 IAC 30-4-31.2; 675 IAC 30-4-32; 675 IAC 30-4-33; 675 IAC 30-4-34; 675 IAC 30-4-34.1; 675 IAC 30-4-35; 675 IAC 30-4-35.1; 675 IAC 30-4-36; 675 IAC 30-4-37; 675 IAC 30-4-37.1; 675 IAC 30-4-38; 675 IAC 30-4-38.1; 675 IAC 30-4-38.2; 675 IAC 30-4-39; 675 IAC 30-4-42.1; 675 IAC 30-4-43; 675 IAC 30-4-45; 675 IAC 30-4-46; 675 IAC 30-4-47; 675 IAC 30-4-48; 675 IAC 30-4-48.1; 675 IAC 30-4-49; 675 IAC 30-4-49.1; 675 IAC 30-4-49.2; 675 IAC 30-4-50; 675 IAC 30-4-50.1; 675 IAC 30-4-51; 675 IAC 30-4-52; 675 IAC 30-5-1; 675 IAC 30-5-2; 675 IAC 30-5-3; 675 IAC 30-5-5; 675 IAC 30-5-6; 675 IAC 30-5-7; 675 IAC 30-5-8; 675 IAC 30-5-9; 675 IAC 30-5-10; 675 IAC 30-5-11; 675 IAC 30-5-12; 675 IAC 30-5-13; 675 IAC 30-5-14; 675 IAC 30-5-15; 675 IAC 30-6-1; 675 IAC 30-6-2; 675 IAC 30-6-3; 675 IAC 30-7-1; 675 IAC 30-7-2; 675 IAC 30-8-1; 675 IAC 30-8-2; 675 IAC 30-8-2 8-3; 675 IAC 30-8-4; 675 IAC 30-8-6; 675 IAC 30-8-7; 675 IAC 30-8-9; 675 IAC 30-8-10; 675 IAC 30-8-11; 675 IAC 30-8-12; 675 IAC 30-8-13; 675 IAC 30-8-14; 675 IAC 30-8-15; 675 IAC 30-8-16; 675 IAC 30-9; 675 IAC 30-10-1; 675 IAC 30-10-2; 675 IAC 30-10-3; 675 IAC 30-10-4; 675 IAC 30-10-5; 675 IAC 30-10-7; 675 IAC 30-10-8; 675 IAC 30-10-9; 675 IAC 30-10-10; 675 IAC 30-10-11; 675 IAC 30-10-12; 675 IAC 30-10-13; 675 IAC 30-10-14; 675 IAC 30-10-15; 675 IAC 30-10-16; 675 IAC 30-11-1; 675 IAC 30-11-2; 675 IAC 30-11-3; 675 IAC

30-11-4; 675 IAC 30-11-5; 675 IAC 30-11-6

SECTION 1. 675 IAC 12-3-13 IS AMENDED TO READ AS FOLLOWS:

675 IAC 12-3-13 Boiler and pressure vessel inspection, permitting, and licensing fees

Authority: IC 22-12-6-6; IC 22-13-2-13

Affected: <u>IC 22-15-6</u>

Sec. 13. (a) The division may not charge an owner or user more than two (2) of the fees described in subsections (b) through (e) for inspections of regulated boilers and pressure vessels during a particular calendar year. However The fees for an initial operating permit and renewal of an operating permit are as follows:

- (1) An operating permit processing fee of twenty-five dollars (\$25) per regulated boiler or pressure vessel.
- (2) If the inspections of the regulated boiler or pressure vessel are conducted by the division, an operating permit inspection fee calculated in accordance with subsections (b) through (e), for all inspections conducted and required under 675 IAC 30-3-9 to obtain an operating permit.
- (3) Any outstanding fees resulting from sanctions issued by the division and related to the boiler or pressure vessel.

Additionally, a fee of twenty-five dollars (\$25) shall may be paid by an owner or user who has failed to do either of the following:

- (1) Prepare charged if a boiler or pressure vessel is not prepared for the required inspection on the date specified by the inspector under 675 IAC 30-3-10.
- (2) Make repairs or otherwise correct conditions of noncompliance applicable to regulated equipment within the time frame specified in a correction order under IC 22-12-7-5.

Verification of the conditions noted in either subdivision (1) or (2) shall be documented on the inspection report form mandated by the boiler and pressure vessel safety section (BPVSS) to report inspection activities relating to equipment regulated by BPVSS.

(b) The fees for the internal inspection of regulated boilers shall be as follows:

> 10,000	\$75/hour but no less than \$300
1,001–10,000	\$90
501–1,000	\$48
101–500	\$36
0–100	\$24
Heating Surface Area (in square feet)	Amount

Fees for internal inspection of regulated boilers exceeding ten thousand (10,000) square feet of heating surface shall be charged at the rates specified in subsection (i).

(c) The fees for the external inspection of regulated boilers shall be as follows:

Heating Surface Area (in square feet)	Amount
0–50	\$18
51–150	\$24
151 or more	\$40

(d) The fees for the internal or external inspection of regulated pressure vessels shall be based on the sectional area of the vessel (overall length head to head times the width or outside diameter) expressed in square feet as follows:

Area (in square feet)	Amount
0–50	\$15
51–150	\$30
Greater than 150	\$60

- (e) The fee for internal or external inspection of a service water heater shall be ten dollars (\$10).
- (f) The operating permit processing fee for all certificates of inspection (operating permits) issued by the

division shall be twenty five dollars (\$25). In all cases, this fee is in addition to fees for inspection activities.

- (g) A request to recreate an operating permit that has been lost shall be accompanied by a payment of fifteen dollars (\$15).
- (h) An application for a variance from a rule adopted by the boiler and pressure vessel rules board shall be accompanied by a fee of two hundred dollars (\$200). An additional five hundred dollars (\$500) shall accompany the application when engineering calculations are included for review.
- (i) The fees for inspection or audit, or both, activities requested that are not otherwise listed in this section shall be either of the following:
 - (1) Three hundred dollars (\$300) per day, not to exceed four (4) regular working hours.
 - (2) Six hundred dollars (\$600) per day exceeding four (4) regular working hours, plus seventy-five dollars (\$75) per hour exceeding eight (8) regular working hours in a particular day, plus actual expenses incurred, such as:

(A) travel;

(B) lodging; and

(C) dining;

expenses.

A fee computed under this subsection must cover the period from the time the inspector leaves the inspector's regular work schedule to the time the inspector returns to the inspector's regular work schedule and is payable upon receipt of an invoice.

- (f) If conducted upon request, the division may charge a fee for any audit inspection conducted by the division. The audit inspection fee shall be charged as specified in subsections (b) through (e) or, for items not covered in these subsections, at a rate of seventy-five dollars (\$75) per hour.
- (j) A payment of twenty dollars (\$20) per object inspected shall accompany the annual report of inspection of owner or user inspection agencies.
- (k) An application for an owner or user inspection agency certificate shall be accompanied by payment of five hundred dollars (\$500).
- (+) (g) An application to sit for an inspector examination shall be accompanied by payment of one hundred dollars (\$100).
- (m) (h) The annual renewal of an inspector license shall be accompanied by payment of twenty-five dollars (\$25).
- (n) (i) All payments to the office division are payable to the fire and building services fund. The state fire marshal or the building law compliance officer division may authorize the refunding of any fee specified in this section that was paid or collected in error.

(Fire Prevention and Building Safety Commission; <u>675 IAC 12-3-13</u>; filed Dec 9, 2002, 11:15 a.m.: 26 IR 1556, eff Apr 1, 2003; filed Aug 30, 2006, 2:25 p.m.: <u>20060927-IR-675050108FRA</u>; readopted filed Aug 8, 2012, 8:08 a.m.: <u>20120905-IR-675120260RFA</u>; readopted filed Jul 3, 2018, 2:22 p.m.: <u>20180801-IR-675180204RFA</u>)

SECTION 2. 675 IAC 30-1-1 IS AMENDED TO READ AS FOLLOWS:

Rule 1. Adoption by Reference; Title; Scope; Applicability; Violations; Exemptions from Inspection

675 IAC 30-1-1 Adoption by reference; approval of revisions

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-13-2; IC 22-15-2; IC 22-15-6

- Sec. 1. (a) Those certain four (4) The following documents, being titled are hereby adopted by reference as if fully set out in this article:
 - (1) the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, 1992 (ASME B&PVC), 2019 edition, published by the American Society of Mechanical Engineers, 345 East 47th Street Two Park Avenue, New York, New York 10017-2392 10016-5990, limited to the following sections:
 - (A) Section I Rules for Construction of Power Boilers.
 - (B) Section II Material Specifications and Properties; Parts A, B, C, and D.
 - (C) Section III Nuclear Power Plant Components.
 - (D) Section IV Rules for Construction of Heating Boilers.
 - (E) Section V Nondestructive Examination.
 - (F) Section VIII Rules for Construction of Pressure Vessels; Division 1, 2, and 3.
 - (G) Section IX Welding, Brazing, and Fusing Qualifications.
 - (H) Section X Fiber-Reinforced Plastic Pressure Vessels.
 - (I) Section XI Rules for In-service Inspection of Nuclear Power Plant Components.
 - (J) Section PVO Pressure Vessels for Human Occupancy.
 - (2) the American Petroleum Institute American Society of Mechanical Engineers Code for Unfired Pressure Vessels, 1951 edition, published by the American Society of Mechanical Engineers and the American Petroleum Institute, 345 East 47th Street, New York, New York 10017-2392.
 - (3) the National Board of Boiler and Pressure Vessel Inspection Code (NBIC) Parts 1, 2, 3, and 4, also known as the American National Standards Institute's (ANSI) NB-23 standard, 1992 2019 edition, published by the National Board of Boiler and Pressure Vessel Inspectors (NBBI), 1055 Crupper Avenue, Columbus, Ohio 43229-1183. and
 - (4) the American Petroleum Institute (API) Standard 510 Pressure Vessel Inspection Code, Seventh Tenth Edition, 1992 May 2014, Addendum 1, May 2017 and Addendum 2, March 2019, published by the American Petroleum Institute, 2101 L Street, NW 200 Massachusetts Avenue NW, Suite 1100, Washington, D.C. 20037 20001-5571.
 - (5) American Petroleum Institute API 579/ASME FFS-1 Fitness for Service Code, Second Edition, Two Park Avenue, New York, New York 10016-5990.

are hereby adopted by reference, as provided for in other sections of this article, and as if fully set out in this rule for new construction, and as specifically set forth in subsection (b).

- (b) As incorporated by reference in Sec. (a)(1), the adoption of the American Society of Mechanical Engineers Code shall be limited to the following sections:
 - (1) Section I Power Boilers.
 - (2) Section II Material Specifications.
 - (3) Section III Nuclear Power Plant Components.
 - (4) Section IV Low Pressure Heating Boilers.
 - (5) Section V Nondestructive Examination.
 - (6) Section VIII Division 1 and Division 2 Pressure Vessels.
 - (7) Section IX Welding Qualifications.
- (c) No revision, amendment, or interpretation of any of the codes adopted by the rules board as specified in <u>IC</u> <u>22-12-4</u> shall apply in any way to regulated boilers or unfired pressure vessels unless and until it shall have been approved and adopted by the rules board under <u>IC 22-13-2-8</u>.
- (d) The adoption of documents by reference in subsection (a) shall not allow a delegation of authority in conflict with that for the rules board as set forth at <u>IC 22-12-7</u>, <u>IC 22-13-2</u>, and <u>IC 22-15-6</u> nor for the office of the state building commissioner as set forth at <u>IC 22-12-7</u>, <u>IC 22-5-2</u>, and <u>IC 22-15-5</u>.
- (b) No language in the documents adopted by reference in subsection (a) shall be construed as delegating authority in a manner that conflicts with the authority of the commission as set forth in <u>IC 22-12-7</u>, <u>IC 22-13-2</u>, and <u>IC 22-15-6</u> or the division as set forth in <u>IC 22-12-7</u>, <u>IC 22-15-2</u>, and <u>IC 22-15-6</u>.

(Fire Prevention and Building Safety Commission; 675 IAC 30-1-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1110; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-1-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-1-1) by P.L.249-2019, SECTION 15,

effective July 1, 2019.

SECTION 3. 675 IAC 30-1-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-1-2 Title; scope; applicability; definition

Authority: IC 22-13-2-8

Affected: IC 22-12-1-5; IC 22-12-7; IC 22-13-2; IC 22-15-2-7; IC 22-15-6

Sec. 2. (a) This rule article shall be known as the Indiana Boiler and Pressure Vessel Rules.

- (b) The purpose of this article shall be to specify minimum standards that govern the **design**, construction, installation, **examination**, inspection, and repair, and alteration of regulated boilers and unfired pressure vessels in Indiana.
- (c) This article does not presume to limit in any way the builder's right to choose any method of design or form of construction that conforms to the standards prescribed, or provided for in this article, as such standards cover certain fundamental features of construction and leave a number of details to the judgment of designers and acceptance of inspectors.
- (d) Any condition not specifically covered by this article the provisions in this section through 675 IAC 30-11-6 shall comply with the applicable provisions of the ASME code or the API-ASME code B&PVC and the NBIC, as adopted in section 1 of this rule.
- (e) "Regulated boiler or pressure vessel" refers to any part of a Any boiler or unfired pressure vessel not described in subsection (f) is regulated by this article, regardless of whether it is stationary, portable, leased, rented, or owned and qualifies as a regulated boiler or pressure vessel as mentioned in IC 22-15-6-0.5. The vessels listed in subsection (f) are exempted from both the ASME standard B&PVC construction and periodic standards, inspection by the boiler and pressure vessel safety section of the department of homeland security requirements, and operating permit requirements.
- (f) The term "regulated boiler or pressure vessel" does not include any of the following vessels are not regulated by this article:
 - (1) Water heaters commonly known as domestic water heaters having a size and heat input that do not exceed that specified by the rules board. Boilers meeting the requirements of clauses (A), (B), and (C) as follows:
 - (A) Located in:

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- (i) a Class 2 structure as defined in IC 22-12-1-5;
- (ii) a residential structure with fewer than seven (7) apartments; or
- (iii) a place other than a place of public assembly, if not used for residential occupancy.
- (B) Operated for heating purposes, either at a pressure not exceeding fifteen (15) psig, if qualifying as a steam boiler, or at a pressure not exceeding thirty (30) psig, if qualifying as a hot water heating boiler.
- (C) Having a gross output rating not exceeding two hundred fifteen thousand (215,000) Btu per hour.
- (2) Exhibition traction engine boilers as defined in <u>675 IAC 30-4-16</u> or another boiler used solely for exhibition purposes.
- (3) Historical boilers as defined in 675 IAC 30-4-18.4.
- (4) Locomotive boilers used only on a railway that is used as a tourist attraction.
- (5) Miniature boilers as defined in 675 IAC 30-4-29.
- (6) Model boilers as defined in 675 IAC 30-4-30.
- (7) Vessels subject to federal regulation.
- (8) Unfired pressure vessels installed before July 1, 1971, for which the volume of each chamber in the vessel is:
 - (A) fifteen (15) cubic feet or less, if located in a place other than a place of public assembly; or
 - (B) five (5) cubic feet or less, if located in a place of public assembly.
- (9) Unfired pressure vessels, other than nuclear vessels, installed after June 30, 1971, if the volume of each chamber is:
 - (A) fifteen (15) cubic feet or less, if adequately protected by pressure relieving devices set to

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- function at three hundred (300) psig or less and located in a place other than a place of public assembly:
- (B) five (5) cubic feet or less, if adequately protected by pressure relieving devices set to function at two hundred fifty (250) psig, or less, and located in a place of public assembly; or
- (C) one and one-half (1 1/2) cubic feet or less regardless of pressure or location.
- (10) Unfired pressure vessels, other than nuclear vessels, that have each of their chambers protected by an adequate pressure relieving device set to function at not over fifteen (15) psig.
- (2) (11) Unfired pressure vessels, other than nuclear vessels, where each of their chambers are operated entirely full of water, or other liquid that the rules board specifically found to be is not materially more hazardous than water, if the temperature of the vessel's contents does not exceed one hundred eighty (180) degrees Fahrenheit.
- (3) Boilers and pressure vessels under federal regulation.
- (4) Pressure vessels meeting the requirements of the Interstate Commerce Commission for shipment of liquids or gases under pressure.
- (12) Unfired pressure vessels used as part of a fire protection or suppression system regulated by another article of the commission's rules.
- (5) Air tanks (13) Unfired pressure vessels located on vehicles operating under the rules of other state authorities agencies and that are also used for carrying passengers or freight.
- (6) Air tanks (14) Unfired pressure vessels installed on the right-of-way of railroads and used directly in the operation of trains.
- (7) Pressure vessels that were installed before July 1, 1971, and that have a volume of:
 - (A) fifteen (15) cubic feet or less if located in a place other than a place of public assembly; and
 - (B) five (5) cubic feet or less if located in a place of public assembly.
- (8) Pressure vessels, other than nuclear vessels that were installed after June 30, 1971, and that have a volume of:
 - (A) fifteen (15) cubic feet or less, if adequately protected by pressure relieving devices set to function at three hundred (300) pounds per square inch or less and located in a place other than a place of public assembly;
 - (B) five (5) cubic feet or less if adequately protected by pressure relieving devices set to function at two hundred fifty (250) pounds per square inch or less and located in a place of public assembly; or
 - (C) one and one-half (1 1/2) cubic feet or less regardless of pressure or location, unless otherwise covered by this article.
- (9) Pressure vessels, other than nuclear vessels protected by adequate pressure relieving devices, set to function at not over fifteen (15) pounds per square inch gauge.
- (10) (15) Unfired pressure vessels containing liquefied petroleum gases and regulated by another article of the commission commission's rules.
- (11) Surgical sterilizers, coffee urns, and steam jacketed food cookers that do not exceed size limits specified by the rules board.
- (12) Commercial toy boilers and miniature model boilers constructed as a hobby that do not exceed a size specified by the board.
- (13) (16) Unfired pressure vessels containing anhydrous ammonia that are used in transportation, distribution, or use end-user storage of the product as a liquid fertilizer, and for which a general scheme of construction, installation, and safety requirements has been adopted by statute or rule of another state agency. This exemption does not apply to vessels in refineries a refinery, utility, or in manufacturing or processing plants plant.
- (14) Nuclear (17) Unfired pressure vessels for the collection and disposal of nuclear waste from a nuclear energy system that are not subject to pressures greater than would prevail if they were vented to the atmosphere with a nominal capacity of no more than eighty-five (85) gallons that are used for the temporary storage of chemical or nuclear waste.
- (15) Standard and miniature traction engine boilers and other boilers used solely for exhibition purposes.
- (16) A locomotive boiler used only on a railway that is used as a tourist attraction.
- (18) Unfired pressure vessels used as an integral part of an electrical circuit breaker.
- (19) Unfired pressure vessels containing multiple chambers where each chamber meets one (1) of the criteria described in any of the subdivisions of this subsection for an unfired pressure vessel.
- (20) Domestic water heaters as defined in 675 IAC 30-4-15.
- (21) Fired process heaters as defined in 675 IAC 30-4-18.1.
- (22) Instant-on water heaters as defined in 675 IAC 30-4-25.1.
- (23) Pool/spa heaters, either as defined in 675 IAC 30-4-38.1 or that are regulated by another state agency.
- (24) Steam kettles, as defined in 675 IAC 30-4-49.1, with a jacket pressure less than fifty (50) psig.

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(25) Water softeners as defined in 675 IAC 30-4-52.

(Fire Prevention and Building Safety Commission; <u>675 IAC 30-1-2</u>; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1110; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; filed Dec 18, 2006, 1:17 p.m.: <u>20070117-IR-680060124FRA</u>; readopted filed Sep 21, 2007, 9:16 a.m.: <u>20071010-IR-680070389RFA</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RFA</u>; readopted filed Sep 5, 2013, 10:09 a.m.: <u>20131009-IR-680130182RFA</u>; readopted filed Sep 4, 2019, 2:20 p.m.: <u>20191002-IR-675190336RFA</u>) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (<u>680 IAC 2-1-2</u>) to the Fire Prevention and Building Safety Commission (<u>675 IAC 30-1-2</u>) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 4. 675 IAC 30-1-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-1-4 Violations

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-7</u>

Sec. 4. (a) Any person violating any of the provisions of this article is subject to action by the appropriate entity sanctions under the provisions of IC 22-12-7.

(b) Any person aggrieved or adversely affected by any order issued by the office or the board shall have the right to an administrative review as set forth in <u>IC 22-12-7</u> and <u>IC 4-21.5-3</u>.

(Fire Prevention and Building Safety Commission; 675 IAC 30-1-4; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1110; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-1-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-1-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 5. 675 IAC 30-1-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-1-5 Exemptions from inspection

Authority: IC 22-13-2-8

Affected: IC 22-12-1-5; IC 22-12-7; IC 22-13-2; IC 22-15-2-7; IC 22-15-6

Sec. 5. (a) Boilers and pressure vessels are exempt from this article as set forth in section 2 of this rule.

- (b) Regulated boilers and pressure (a) Each of the following vessels must comply with the applicable requirements of the edition of the ASME B&PVC in effect at the time of construction, but are exempt from inspection programs and operating permit requirements: as set forth as follows:
 - (1) Any regulated boiler or pressure vessel Vessels located on a farm and used solely for agricultural purposes.
 - (2) Any steam boiler or water heating boiler meeting the following requirements:
 - (A) Located in:
 - (i) an owner occupied residence;
 - (ii) a residential structure with fewer than seven (7) apartments; or
 - (iii) a place other than a place of public assembly.
 - (B) Operated for heating purposes at a pressure not exceeding fifteen (15) pounds per square inch gauge, if qualifying as a steam boiler, and operated at a pressure not exceeding thirty (30) pounds per square inch gauge. If qualifying as a water heating boiler.
 - (2) Boilers meeting the requirements of clauses (A), (B), (C), and (D) as follows:
 - (A) Contain a volume less than one and one half (1 1/2) cubic feet.
 - (B) Operate entirely full of a liquid heat transfer fluid that will not vaporize at the operating temperature and atmospheric pressure.
 - (C) Having Have a gross output rating not exceeding two hundred fifteen thousand (215,000) British thermal units three hundred thousand (300,000) Btu per hour. if
 - **(D) Are** not located in a place of public assembly.
 - (3) Any Unfired pressure vessel vessels that:

- (A) containing contain only water under pressure for domestic supply purposes, including one those containing air, if the compressed air serves only as a cushion or as part of an airlift pumping system; and
- (B) are located in an owner occupied residence a Class 2 structure as defined in <u>IC 22-12-1-5</u> or a residential structure with less than seven (7) apartments.
- (4) Any pressure vessel used as an integral part of an electrical circuit breaker. Steam cleaner as defined in 675 IAC 30-4-49.
- (c) The (b) Each of the following regulated objects are covered under the scope of the permit for the system of which they are it is a part and do does not require a separate operating permit; however, they the object must meet all other requirements of IC 22-15-6 and this article:
 - (1) Expansion tanks located within a system where the boiler in that system is regulated with the division by this article.
 - (2) Hot water storage tanks that contain only water under pressure under the following conditions:
 - (A) Temperature not to exceed two hundred ten (210) degrees Fahrenheit.
 - (B) Protected from overpressure.
 - (3) Refrigeration vessels located in a system of refrigeration wherein skid-mounted unit where said system unit is regulated with the division by this article.

(Fire Prevention and Building Safety Commission; 675 IAC 30-1-5; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1111; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; filed Dec 18, 2006, 1:17 p.m.: 20070117-IR-680060124FRA; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-1-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-1-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 6. 675 IAC 30-3-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-3 Application for inspector's license

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 3. (a) Examination to determine the qualifications of a person or persons for an inspector's license shall be held at the office of the division, or at any location to be selected by the division, four (4) times each year namely, the first Wednesday of the months of March, June, September, and December. To receive consideration for taking a stated examination, an applicant must have his or her application received by the division not later than the tenth day of the month preceding the one in which the examination is scheduled to be held.
- (b) Applicants for an inspector's license shall meet one (1) of the following minimum requirements for education and experience: To qualify for an inspector's license, an applicant must do the following:
 - (1) Apply for an inspector's license on a form and in a manner approved by the division, which shall include:
 - (A) the applicant's name;
 - (B) the applicant's address;
 - (C) the education and experience of the applicant;
 - (D) a list of the applicant's current and previous employers, including the applicant's period of employment and positions held with each employer; and
 - (E) a statement swearing that the information provided is true, accurate, and complete.
 - (2) Meet one (1) of the following eligibility requirements:
 - (A) Hold a current NBBI commission.
 - (B) Hold a boiler and pressure vessel inspector's license issued by another state that requires qualifications that are substantially equal to the qualifications required in Indiana.
 - (C) Hold an API 510 certification by way of passing the API 510 certification exam.
 - (D) Pass an examination administered under section 4.1 of this rule.
 - (3) Meet one (1) of the following minimum requirements for education and experience:
 - (1) (A) Hold a bachelor's degree in engineering plus one (1) year experience in design, construction, operation, or inspection of power boilers and unfired pressure vessels.
 - (2) **(B) Hold** an associate degree in mechanical technology plus two (2) years experience in design, construction, operation, or inspection of high pressure power boilers and unfired pressure vessels.

- (3) A (C) Graduate from high school education or the equivalent plus three (3) years experience in one (1) of the following: design, construction, operation, or inspection of power boilers and unfired pressure vessels.
- (A) High pressure boiler and pressure vessel construction or repair.
- (B) In charge of high pressure boiler and pressure vessel operation.
- (C) The inspection of high pressure boilers and pressure vessels.
- (4) Pay the inspector licensing fee in 675 IAC 12-3-13.
- (c) A Nondestructive Examination Level II examiner of ASME code boilers and pressure vessels may be credited with one (1) year towards the experience requirements of this section provided the applicant has five (5) years of documented experience in that position and meets all of the other requirements listed in this section.
- (d) A quality control inspector of ASME code boilers and pressure vessels applying under subsection (b)(3) may be credited with four (4) months of experience under the experience requirements of this section for each year of documented, diversified experience he or she possesses in the implementation of an ASME accepted written quality control/assurance system as put forth in the referenced document at 680 IAC 2-1-1(a)(1), up to a maximum of twenty-four (24) months of such credit, provided that he or she has the balance of experience required under subsection (b)(3) in actual work described in subsection (b)(3)(A), (b)(3)(B), or (b)(3)(C).
- (e) Application for an inspector's license shall be in writing upon a form to be furnished by the director stating the age and education of applicant, a list of his or her employers, and his or her period of employment and positions held with each employer. If the applicant's history and experience meet with the approval of the division, the applicant shall be given a written examination issued by the division, which the applicant shall be required to pass in order to be accepted. If the applicant is successful in meeting the requirements of the division, an inspector's license will be issued by the division. After the expiration of ninety (90) days, an applicant who fails to pass the examination will be permitted to take another written examination which the applicant is required to pass in order to be accepted.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1113; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-3) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-3) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 7. 675 IAC 30-3-4.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-3-4.1 Examination for inspector's license

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 4.1. (a) An examination for an inspector's license, approved by the commission under <u>IC 22-15-6-5(b)(2)</u>, shall be administered by the division or its designee.
 - (b) The division shall offer to administer the examination quarterly.
 - (c) To become eligible to sit for the examination, an applicant must:
 - (1) apply to the division at least ten (10) days prior to the examination date;
 - (2) pay the examination fee in 675 IAC 12-3-13; and
 - (3) demonstrate the applicant meets the minimum requirements for education and experience as set forth in section 3(3) of this rule.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-4.1)

SECTION 8. 675 IAC 30-3-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-5 Issuance; renewal; sanction of licenses

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-15-6

Sec. 5. (a) The director division shall issue a boiler and pressure vessel inspector license to an applicant who qualifies as set forth in LC 22-15-6-5 section 3 of this rule.

- (b) The director shall maintain a record of the qualifications of each person applying for such authorization and of the results of any examination of such person by the rules board, which record shall be available during regular business hours to the applicant. A boiler and pressure vessel inspector license expires on December 31 of the year of issuance.
- (c) The license and identifying card issued to an inspector in the employ of an authorized inspection agency shall be forwarded by the director to the home office of such agency. To renew a boiler and pressure vessel inspector license, an applicant must do the following:
 - (1) File an application on a form approved by the division containing any information the division requires to determine compliance with this article.
 - (2) Complete a program of continuing education for all renewals subsequent to the first year of licensure:
 - (A) in accordance with the requirements of the National Board to maintain a NBBI commission; or
 - (B) that is equivalent to the National Board requirements and approved by the division.
 - (3) Pay the fee in <u>675 IAC 12-3-13</u>.
- (d) The agency shall retain the license in its home office and shall forward the identifying card to the inspector. Both the license and the identifying card shall be returned to the director when the inspector to whom the license was issued is no longer in the employ of the agency. If at any time an inspector no longer holds a commission, license, or certification as set forth in section 3(2) of this rule, the inspector shall immediately notify the division, and the license issued under subsection (a) is invalid. If any disciplinary action is taken against a commission, license, or certification mentioned in section 3(2) of this rule, the holder shall immediately notify the division and is subject to disciplinary action under subsection (e).
- (e) The validity of the identifying card shall expire on December 31 of each year and may be renewed without charge upon application of the employing agency to the director. division, and the commission under <u>IC 22-15-6-5(d)</u>, may sanction a boiler and pressure vessel inspector under <u>IC 22-12-7</u> if the inspector is found in violation of <u>IC 22-15-6</u> or any rule of the commission.
- (f) The license issued to an inspector in the employ of an authorized inspection agency may be subject to sanction by the office of the state building commissioner in accordance with the provisions of <u>IC 22-12-7</u>. If the license is revoked, the license and identifying card shall be returned to the director.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-5; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1114; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 9. 675 IAC 30-3-9 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-9 Operating permits and inspection schedules

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-15-6

Sec. 9. (a) All boilers subject to inspection, other than steam generating equipment which is an integral part of a continuous processing unit such as used in chemical manufacture or petroleum refining, shall be inspected at the interval specified as follows: Unless exempted by 675 IAC 30-1-2(b) or 675 IAC 30-1-5, no boiler or

unfired pressure vessel may be operated until an operating permit is issued.

- (b) Unless stated otherwise, a boiler or unfired pressure vessel shall be inspected annually, and its operating permit expires one (1) year after issuance. The following is a list of specific boiler and unfired pressure vessel operating permit expiration periods and inspection schedules:
 - (1) Operating permits for power boilers and miniature boilers shall be given certificate inspections at expire one (1) year after issuance. Power boilers shall be inspected as follows:
 - (A) Externally every twelve (12) month intervals internally where construction permits, and externally while not under pressure; and shall also be inspected externally months while under pressure, if possible, which shall occur approximately six (6) months from the date of the certificate inspection issuance of the operating permit.
 - (B) Within every twelve (12) months of issuance of an operating permit or renewal, while not under pressure, both:
 - (i) internally, where construction permits; and
 - (ii) externally.
 - (2) Operating permits for low pressure steam heating boilers, hot water heating boilers, hot water supply boilers, and service water heaters expire two (2) years after issuance. These boilers and water heaters shall be inspected every twenty-four (24) months both internally, where construction permits, and externally.
 - (3) Operating permits for unfired pressure vessels and any steam generating equipment that is an integral part of a continuous processing unit, such as used in chemical manufacturing or petroleum refining, expire three (3) years after issuance, unless inspection results indicate a one (1) or two (2) year permit shall be issued. However, if systematic corrosion data supports an extended inspection frequency, the operating permit shall be extended up to five (5) years, if approved by the inspector. Unfired pressure vessels shall be inspected as follows:
 - (A) Externally, on a schedule that corresponds with the duration of the operating permit.
 - (B) Internally, if the unfired pressure vessel is subject to internal corrosion following the requirements in Part 2 of the NBIC or API 510. In lieu of an internal inspection, any of the following unfired pressure vessels may be examined using an alternate examination method that ensures integrity and safe operation:
 - (i) Vessels in which human entry cannot be accomplished (e.g., small vessels and vessels without manway openings).
 - (ii) Vessels that cannot be safely entered (e.g., vessels with configuration hazards).
 - (iii) Vessels in a service in which opening the vessel can cause more harm than good (e.g., vessels in ammonia service where the introduction of oxygen and water have been shown to contribute to stress corrosion cracking).

Alternate examination methods may include ultrasonic thickness measurement, phased array ultrasonic examination, eddy current examination, radiography, borescope or other viewing devices, or other examination methods which provide meaningful results and are acceptable to the inspector. The alternate examination methods need not be performed by the inspector but must be performed by qualified personnel. It is not necessary for the internal inspection to coincide with the operating permit inspection.

- (2) The certificate inspection period for a specific boiler may be extended to a maximum of six (6) months beyond the certificate expiration date with the approval of the inspection agency having jurisdiction and the office of the state building commissioner in order to allow for unexpected plant operational difficulties. A written request for an extension beyond the certificate expiration date in the form of a letter stating the operational difficulties shall be submitted by the owner to the office. An extension shall be permitted at the discretion of the office.
- (c) In addition to the operating permit expiration dates and inspection schedules provided in subsection (b), the following extensions may be granted by the division:
 - (3) A (1) For power boilers with rated steaming capacity of three hundred thousand (300,000) pounds per hour or more, shall be permitted to be inspected internally at a greater interval provided the conditions of subsection (3)(A), (B), and (C) are met; however, external inspections shall continue to be conducted at approximately six (6) month intervals, while the boiler is under pressure. the operating permit and inspection schedule may be extended from one (1) year, as provided in subsection (b)(1), to up to thirty-six (36) months, in twelve (12) month increments, if the following items are submitted to the division:
 - (A) A written request, **by the owner or user,** for an extension beyond the certificate operating permit expiration date. shall be submitted by the owner to the board.

- (B) A report of inspection indicating that a certificate inspection has been completed is submitted to the board by the inspection agency. all external inspections required by subsection (b)(1)(A).
- (C) A document, such as a letter from the inspection agency, signed by a responsible person of that agency shall accompany the report of inspection an inspector attesting to the following:
- (i) The use of the boiler.
- (ii) The nameplate data, state registration number, and any National Board numbers of the boiler.
- (iii) The name and pertinent qualifications of the person(s) individual in charge of water treatment.
- (iv) Adequacy of the laboratory facilities and a review of written procedures and data for water chemistry analysis and treatment of boiler water, The written procedure for sampling water is to which shall include the method, frequency, parameters, and limits.
- (v) A review of the record of boiler outages occurring since the last internal inspection.
- (vi) The acceptability of the documentation reviewed and acceptance of the extended interval.
- (vii) The historical safety relief valve inspection reports.
- (D) External inspections shall be conducted at approximately six (6) month intervals while the boiler is under pressure during the period of extension.

If the request for an extended certificate in subsection (a)(3) is granted, the certificate shall not exceed twenty four (24) months. At the end of the interval, the boiler for which the request was made **Upon** expiration of the extension, the operating permit and inspection schedule shall revert to the twelve (12) month inspection requirement of subsection (a)(1) for power boilers unless a request is submitted to, and approved by, the office, requirements of subsection (b)(1).

- (4) Low pressure steam heating boilers, hot water heating boilers and hot water supply boilers, and service water heaters shall be given a certificate inspection biennially externally and, where construction will permit, internally. The internal inspection of low pressure hot water heating boilers, hot water supply boilers, and service water heaters shall be at the direction of the inspector.
- (b) All unfired pressure vessels subject to inspection under IC 22-15-6, and any steam generating equipment subject to such inspection that is an integral part of any continuous processing unit such as used in chemical manufacture or petroleum refining, shall be given a certificate inspection at intervals not exceeding three (3) years. Where systematic corrosion data are available, the maximum period between certificate inspections shall be five (5) years, or such shorter period as the inspection agency having jurisdiction deems proper. The maximum period between certificate inspections shall be indicated on the inspector's report.
 - (2) For boilers, other than steam generating equipment that is an integral part of a continuous processing unit such as used in chemical manufacturing or petroleum refining, the operating permit and inspection schedule may be extended up to six (6) months to allow for unexpected plant operational difficulties. A request for an extension must be submitted by the owner or user prior to expiration of the operating permit. External inspections shall continue to be conducted at approximately six (6) month intervals while the boiler is under pressure.
- (c) (d) The periods specified in subsections (a) and (b) expiration date of the operating permits described in subsection (b) shall be subject to a extended for two (2) month grace period months, for unexpected issues, upon submitting notification to the division in any approved manner.
- (d) Owner or user inspection agencies shall observe the same frequencies of inspection as outlined in subsections (a) (b) and shall be permitted a corresponding two (2) month grace period on intervals between inspections; however, inspection certificates are not required in such cases.
- (e) To qualify for an operating permit, or to renew an operating permit, an applicant must do the following:
 - (1) Apply on a form and in a manner approved by the division.
 - (2) Demonstrate through inspections:
 - (A) performed by an inspector licensed under IC 22-15-6-5; and
 - (B) performed in accordance with the inspection schedule described in subsection (b) or (c); that the regulated boiler or unfired pressure vessel covered by the application complies with this article.
 - (3) Submit a report of the inspections performed in subdivision (2) to the division.
 - (4) Submit payment of the operating fees provided for in 675 IAC 12-3-13 to the division.
- (f) The division shall issue a permit covering the operation of a boiler or unfired pressure vessel to an applicant who qualifies.

(g) The division may sanction an operating permit, under <u>IC 22-12-7</u>, for violation of any relevant equipment law.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-9; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1114; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-9) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-9) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 10. 675 IAC 30-3-10 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-10 Preparation for inspection; notice

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 10. The owner or user shall prepare each boiler or unfired pressure vessel for internal inspection and shall prepare for and apply a hydrostatic pressure leak test whenever necessary, on the date specified by the inspector responsible for inspection of the equipment in question, which date shall be no less than fourteen (14) days after the date of notification.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-10; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1115; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-10) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-10) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 11. 675 IAC 30-3-11 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-11 Inspection reports

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 11. (a) State inspectors and owner or user inspectors shall report their The first operating permit inspection of each nonstandard a boiler or unfired pressure vessel shall be reported on a form patterned after Form NB-5 set forth in the document referenced at subsection 1-1(a)(3) of this article Part 2 of the NBIC. Subsequent internal or certificate operating permit inspections of these these objects may shall be reported on a form patterned after Form NB-6 set forth in the document referenced at subsection 1-1(a)(3) of this article Part 2 of the NBIC.
- (b) On all standard boilers or unfired pressure vessels, The first internal or certificate operating permit inspection performed by state inspectors and owner or user inspectors of an unfired pressure vessel shall be submitted reported on a form patterned after Form NB-6 NB-5 in Part 2 of the NBIC. code. Subsequent internal or certificate operating permit inspections of those these objects may shall be reported on a form patterned after Form NB-6 NB-7 in Part 2 of the NBIC.
- (c) The inspection reports mentioned in subsections (a) and (b) shall be submitted to the chief inspector division within thirty (30) days of the date of the inspection. External The results of inspections shall be reported on a form patterned after Form NB-6 of the NBIC immediately when to the division whenever a hazardous conditions affecting the safety of the condition concerning a boiler or unfired pressure vessel are is found to exist.
 - (b) Owner or user inspection agencies may report subsequent inspections annually or on a form patterned

after Form NB-6 set forth in the document referenced at subsection 1-1(a)(3) of this article or, at their option, upon special forms approved by the division. Such reports shall be filed in accordance with the requirements of IC 22-15-6-4(e). Each annual report of an owner or user inspection agency shall cover the inspections made by such agency during the twelve (12) month period beginning on July 1, in the preceding calendar year and ending on June 30, in the current year; and each such report shall be filed with the chief inspector within sixty (60) days after the expiration of the period covered thereby.

(c) All of the aforementioned forms shall be printed on eight and one half (81/2) by eleven (11) inch sheets, and each inspection agency shall provide such supplies of said forms as are needed for the reports it makes unless provided by the division.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-11; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1115; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-11) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-11) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 12. 675 IAC 30-3-12 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-12 Notice of unsafe boilers and pressure vessels; corrective measures; suspension of operating permit

Authority: IC 22-13-2-8

Affected: IC 4-21.5-4; IC 22-12-7-6

Sec. 12. If, upon inspection, a boiler or unfired pressure vessel is found to be unsafe for further operation, the inspector shall immediately notify the division and the owner or user shall immediately suspend operation of the boiler or unfired pressure vessel. The division shall issue an order to suspend the operating permit and to stop operation as set forth in IC 22-12-7-6 and IC 4-21.5-4 to the owner or user stating what repairs or other corrective measures are required. Until such repairs and other corrective measures have been made or adopted, no further operation of the boiler or pressure vessel involved shall be permitted. and, if an inspection certificate for the equipment is then in force, it shall be suspended.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-12; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1115; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-12) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-12) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 13. 675 IAC 30-3-13 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-13 Notice of new, canceled, or suspended insurance policies

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-15-6

Sec. 13. (a) Insurance inspection agencies shall notify the director of the division in writing when an installation of a regulated boiler or pressure vessel requires assignment of a state number on forms provided by the secretary. The secretary upon receipt of notification shall assign a state employed inspector to perform the initial inspection of the installation and assignment of the state number. All insurance companies shall notify the director within thirty (30) days of all boiler or unfired pressure vessel risks policies written, canceled, or not renewed.

(b) If coverage on a boiler or unfired pressure vessel is rejected or suspended because of unsafe conditions, the ehief inspector shall be notified in accordance with the requirements of this article notify the division as required in section 12 of this rule.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-13; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1116; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-13) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-13) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 14. 675 IAC 30-3-15 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-15 Availability of operating permits

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 15. Inspection certificates required or provided for either boilers or unfired pressure vessels An operating permit for a boiler or unfired pressure vessel shall be posted under glass in the room containing the equipment to which they apply; or, in the case of outdoor or portable boilers or vessels, shall be kept in a metal container fastened to the equipment or be kept on file indoors readily available for review in a place convenient to the equipment. Inspection certificates are provided for unfired pressure vessels inspected by an owner or user inspection agency by means of filing the annual report as set forth at LC 22-15-6-4. Such agency shall keep on file in its office in the establishment where the equipment is located a true record or copy of the report of the latest of each such inspection signed by the inspector who made such inspection.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-15; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1116; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-15) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-15) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 15. 675 IAC 30-3-17 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-17 Notice of violations; issuance of orders

Authority: IC 22-13-2-8

Affected: IC 4-21.5-3-6; IC 22-12-7; IC 22-15-6

Sec. 17. If, upon the inspection of any boiler or unfired pressure vessel in service, it is found that the same does not fully conform to the standards prescribed in this article for the service in which said boiler or vessel is being used, and if, in the opinion of the inspector making the inspection and the owner or user of the equipment involved, it would be but the same is still deemed safe to continue operation thereof for a limited period of time, an order shall be issued the inspector or the employing inspection agency shall submit an inspection report documenting the violations to the division. Upon confirming the violations, the division shall issue an order as set forth at IC 22-12-7 and IC 4-21.5-3-6 granting a reasonable time in which to correct the violation covered by the order. In such case, the inspector or his or her employing inspection agency shall advise the chief inspector of such order: violations.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-17; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1117; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-17) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-17) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 16. 675 IAC 30-3-18 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-18 Assignment of state registration numbers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 18. Where a state serial numbers are to be applied on boilers and registration number is assigned to a boiler or unfired pressure vessels vessel as hereinafter provided in this article, the director division will assign blocks of such serial state registration numbers in blocks to state inspectors and owner or user inspectors upon their request. The director will furnish metal tags to be used where construction does not permit stamping on the equipment.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-18; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1117; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-18) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-18) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 17. 675 IAC 30-3-19 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-19 Restamping

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 19. When the **ASME** stamping on a boiler or unfired pressure vessel becomes indistinct, the inspector shall instruct the owner or user to have it restamped Request for permission to restamp the boiler or unfired pressure vessel shall be made to the chief inspector, and proof of the original stamping shall accompany the request authorized by the inspector. Restamping authorized by the chief inspector shall be done only by an inspector and shall be identical with the original stamping except that it will not be permitted to restamp the code symbol. in accordance with the requirements in Part 2 of the NBIC. Notice of the completion of such stamping together with a facsimile of the stamping applied shall be filed with the chief inspector division within thirty (30) days after the restamping is completed. by the inspector who restamped the boiler or unfired pressure vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-19; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1117; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-19) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-19) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 18. 675 IAC 30-3-20 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-20 Condemned boilers and pressure vessels; stamping; penalties for use or sale

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-15-6

Sec. 20. (a) Any boiler or unfired pressure vessel that fails an inspection and is determined by the inspector to be irreparable shall be **promptly** reported **by the inspector** to the chief inspector **division** who shall declare it prohibited from further use or operation **by issuing** an order shall be issued appropriate to this circumstance and as set forth at <u>IC 22-12-7</u>. and <u>IC 4-21.5-3-6</u>.

(b) Any boiler or unfired pressure vessel declared prohibited from further use by the chief inspector division shall be stamped by a state an inspector with the letters "XXX" and the letters "IND", as shown by the following facsimile, which will designate a condemned boiler or unfired pressure vessel:

XXX IND XXX

(c) Any person using or offering for sale **(other than for salvage)** a boiler or unfired pressure vessel declared prohibited from further use for operation within the purview of this article shall be subject to the penalties provided in <u>IC 22-12-7</u>.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-20; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1117; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-20) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-20) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 19. 675 IAC 30-3-21 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-21 Incident reports

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 21. When an incident occurs which that serves to render a boiler or pressure vessel inoperative and results in personal injury or major property damage, the owner or user or authorized inspection agency responsible for the inspection of the boiler or pressure vessel their designee shall, immediately, within forty-eight (48) hours of the incident, notify the chief inspector division and submit a detailed an initial report of the incident. In case of a serious incident such as an explosion or loss of life, notice shall be given immediately within twenty-four (24) hours of the incident by telephone telegraph, or messenger or email and neither the boiler nor the unfired pressure vessel nor any of the parts thereof shall be removed or disturbed before an inspection has been made unless for the purpose of saving human life protecting health and safety. The inspector owner or user shall submit cause a detailed report of the incident to the director be completed by an inspector and submitted to the division. Such report shall include the cause and the origin of the incident, where determinable, and recommendations to prevent a recurrence of the incident. If major repairs are required, the inspector responsible shall also submit a repair report on the form approved by the division.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-21; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1117; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-21) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-21) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 20. 675 IAC 30-3-23 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-3-23 Reinstallations

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 23. In any case where when a stationary boiler or unfired pressure vessel is moved and reinstalled in the state, the state registration number must remain with the boiler or unfired pressure vessel and the owner or user must notify the division of the location change. The operating permit of the boiler or unfired pressure vessel becomes invalid when it is moved, and a new inspection and operating permit is required to ensure the fittings and appliances must comply with the rules for new installations.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-23; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1118; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-3-23) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-23) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 21. 675 IAC 30-3-26 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-3-26 Factor of safety for regulated equipment

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 26. When performing strength calculations (e.g., minimum required thickness, design pressure or design temperature, remaining useful life) for components of boilers or unfired pressure vessels, a factor of safety lower than that allowed by the edition of the original code of construction (in order to provide allowable stress values exceeding those values specified by the edition of the original code of construction) may not be used.

(Fire Prevention and Building Safety Commission; 675 IAC 30-3-26)

SECTION 22. 675 IAC 30-4-1.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-1.1 "Alteration" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 1.1. "Alteration" means a change in a pressure-retaining part that meets the requirements of Part 3 of the NBIC but is not a repair, as that term is defined in section 42.1 of this rule.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-1.1)

SECTION 23. 675 IAC 30-4-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-2 "API-ASME" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 2. "API-ASME" means the code for unfired pressure vessels for petroleum liquids and gases, as set forth in 680 IAC 2-1-1(a)(2) 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1118; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 24. 675 IAC 30-4-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-3 "API 510" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 3. "API 510" means the pressure vessel inspection code American Petroleum Institute Standard 510 – Pressure Vessel Inspection Code as set forth in 680 IAC 2-1-1(a)(4) 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1118; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-

4-3) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-3) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 25. 675 IAC 30-4-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-4 "ASME B&PVC" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 4. "ASME code B&PVC" means the boiler and pressure vessel code American Society of Mechanical Engineers Boiler and Pressure Vessel Code as set forth in 680 IAC 2-1-1(a)(1) 675 IAC 30-1-1 unless context indicates that an earlier edition of the code is intended.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-4; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1118; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 26. 675 IAC 30-4-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-5 "Boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 5. (a) "Boiler" means a closed vessel in which water **or other liquid** is heated, steam **or vapor** is generated, steam is superheated, or any combination thereof, under pressure or vacuum for **use** external use **to itself** by the direct application of heat caused by the combustion of fuels, by electricity, or by nuclear or solar any source of energy. This definition does not include unfired pressure vessels as defined in section 50 of this rule. The term shall include the apparatus used to generate heat and all controls and safety devices associated with such apparatus or closed vessel.
- (b) The term "boiler" shall include, fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves. but is not limited to, the following:
 - (1) Exhibition traction engine boilers as defined in section 16 of this rule.
 - (2) Heaters as defined in section 18.2 of this rule.
 - (3) Heat recovery steam generators (HRSG boilers) as defined in section 18.3 of this rule.
 - (4) Historical boilers as defined in section 18.4 of this rule.
 - (5) Hot water heating boilers as defined in section 19 of this rule.
 - (6) Hot water supply boilers as defined in section 20 of this rule.
 - (7) Low pressure heating boilers as defined in section 27 of this rule.
 - (8) Miniature boilers as defined in section 29 of this rule.
 - (9) Model boilers as defined in section 30 of this rule.
 - (10) Modular boilers as defined in section 30.1 of this rule.
 - (11) Nonstandard boilers as defined in section 34 of this rule.
 - (12) Portable boilers as defined in section 38.2 of this rule.
 - (13) Power boilers as defined in section 39 of this rule.
 - (14) Steam cleaners as defined in section 49 of this rule.
 - (15) Waste heat boilers as defined in section 51 of this rule.

(c) It is not intended to include steam cleaners in this definition which are defined in section 49 of this rule.

(Fire Prevention and Building Safety Commission; <u>675 IAC 30-4-5</u>; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1118; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: <u>20071010-IR-680070389RFA</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RFA</u>; readopted

filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 27. 675 IAC 30-4-14 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-14 "Division" defined

Authority: IC 22-13-2-8

Affected: IC 10-19-7-1; IC 22-15-6

Sec. 14. "Division" means the division of boiler and pressure vessel fire and building safety established in £22-15-2-3 IC 10-19-7-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-14; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1119; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-14) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-14) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 28. 675 IAC 30-4-15 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-15 "Domestic water heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 15. "Domestic water heater" means a water heater which that consists of a coil or a closed tank, heated either by direct flame or electrical heating elements, for supplying potable water used external to itself and not exceeding any of the following limits:

- (1) Eighty (80) gallons nominal water containing capacity.
- (2) One hundred thousand (100,000) Btu per hour heat input.
- (3) One hundred fifty (150) psig pressure MAWP.
- (4) Two hundred ten (210) degrees Fahrenheit (210°F) outlet water temperature.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-15; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1119; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-15) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-15) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 29. 675 IAC 30-4-17 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-17 "Existing installation" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 17. "Existing installation" means and includes any boiler or unfired pressure vessel installed and placed in operation before the first day of July 1, 1953, which was the effective date of the Indiana Boiler and Pressure Vessel Law, which accepted already installed boilers and unfired pressure vessels not constructed or installed to any standard. See 675 IAC 30-8, 675 IAC 30-10, and 675 IAC 30-11.

(Fire Prevention and Building Safety Commission; <u>675 IAC 30-4-17</u>; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: <u>20071010-IR-680070389RFA</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RFA</u>; readopted

filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-17) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-17) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 30. 675 IAC 30-4-18 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-18 "External inspection" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 18. "External inspection" means an inspection in accordance with Part 2 of the NBIC or API 510 that does not involve examination of the interior surfaces of pressure parts of a boiler or unfired pressure vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-18; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-18) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-18) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 31. 675 IAC 30-4-18.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-18.1 "Fired process heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 18.1. "Fired process heater" means a direct fired heat exchanger that uses hot gases of combustion to raise the temperature of a process liquid or gas flowing directly through coils or tubes.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-18.1)

SECTION 32. 675 IAC 30-4-18.2 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-18.2 "Heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 18.2. (a) "Heater" means a boiler in which water or other liquid is heated under pressure for use external to itself by the direct application of any source of energy.

- (b) The term includes, but is not limited to, the following types of units:
- (1) Domestic water heaters as defined in section 15 of this rule.
- (2) Fired process heaters as defined in section 18.1 of this rule.
- (3) Instant-on water heaters as defined in section 25.1 of this rule.
- (4) Pool/spa heaters as defined in section 38.1 of this rule.
- (5) Service water heaters as defined in section 45 of this rule.
- (6) Thermal fluid heaters as defined in section 49.2 of this rule.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-18.2)

SECTION 33. 675 IAC 30-4-18.3 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-18.3 "Heat recovery steam generator (HRSG boiler)" defined

Authority: IC 22-13-2-8

Indiana Register

Affected: IC 22-15-6

Sec. 18.3. "Heat recovery steam generator (HRSG boiler)" means an energy recovery heat exchanger that recovers heat from a hot gas stream. It produces steam that can be used in process operations or used to drive a turbine.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-18.3)

SECTION 34. 675 IAC 30-4-18.4 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-18.4 "Historical boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 18.4. "Historical boiler" means a steam boiler of riveted or welded construction. Historical boilers include steam tractors, traction engines, hobby steam boilers, portable steam boilers, and other such boilers that are being preserved, restored, and maintained for demonstration, viewing, or educational purposes.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-18.4)

SECTION 35, 675 IAC 30-4-19 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-19 "Hot water heating boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 19. "Hot water heating boiler" means a boiler in which is used for heating water or other fluid is heated primarily for space heating purposes and is operated at a pressure does not exceeding exceed any of the following operational limits:

- (1) One hundred sixty (160) psig and a temperature not exceeding MAWP.
- (2) Two hundred fifty (250) degrees Fahrenheit (250°F) at the boiler outlet.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-19; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-19) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-19) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 36. 675 IAC 30-4-20 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-20 "Hot water supply boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 20. "Hot water supply boiler" means a boiler which is as follows:

(1) Used **completely filled with water**, **used** primarily for heating an expendable (normally nonreturnable) supply of hot water for distribution in plumbing systems, er for consumption in industrial processes, or for other comparable uses, **and that does not exceed any of the following operational limits:**

(2) Operated at a pressure not exceeding (1) one hundred sixty (160) psig and temperature not exceeding MAWP.

(2) Two hundred fifty (250) degrees Fahrenheit (250°F) at the boiler outlet.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-20; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted

filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-20) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-20) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 37. 675 IAC 30-4-20.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-20.1 "Hydrostatic leak test" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 20.1. "Hydrostatic leak test" means a test performed by filling a boiler or unfired pressure vessel with water or other incompressible liquid and pressurizing the vessel to a predetermined pressure. This method of testing is used to detect leaks and to determine the overall integrity of the vessel, especially after a repair or alteration has been performed.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-20.1)

SECTION 38. 675 IAC 30-4-23 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-23 "Inspector" defined

Authority: IC 22-13-2-8

Affected: IC 22-15-2; IC 22-15-6-5

Sec. 23. "Inspector" means the chief inspector, any other state inspector, or any special inspector who holds an Indiana boiler and pressure vessel inspector's license issued under IC 22-15-6-5.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-23; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-23) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-23) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 39. 675 IAC 30-4-25 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-25 "Inspector's license" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 25. "Inspector's license" means the license issued as set forth at in IC 22-15-6-5.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-25; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-25) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-25) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 40. 675 IAC 30-4-25.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-25.1 "Instant-on water heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u> Sec. 25.1. "Instant-on water heater" (also known as a tankless water heater or instantaneous water heater) means a water heater in which water is heated by direct flame or passes over or through a heating coil or element to produce rapid heating of potable water that does not exceed any of the following limits:

(1) Two hundred thousand (200,000) Btu per hour (or fifty-seven (57) kW) heat input.

- (2) One hundred sixty (160) psig MAWP.
- (3) Two hundred ten (210) degrees Fahrenheit outlet water temperature.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-25.1)

SECTION 41. 675 IAC 30-4-26 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-26 "Internal inspection" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 26. "Internal inspection" means an inspection in accordance with Part 2 of the NBIC or API 510 that includes the examination of the interior surface of pressure parts of a boiler or unfired pressure vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-26; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-26) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-26) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 42. 675 IAC 30-4-27 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-27 "Low pressure heating boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 27. "Low pressure heating boiler" means a boiler which is operated at a pressure not exceeding that does not exceed any of the following limits:

- (1) Fifteen (15) psig MAWP for steam. or at a pressure not exceeding
- (2) One hundred sixty (160) psig **MAWP** and temperature not exceeding two hundred fifty (250) degrees Fahrenheit (250°F) outlet temperature for water.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-27; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1120; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-27) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-27) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 43. 675 IAC 30-4-28.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-28.1 "MAWP" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 28.1. "MAWP" means maximum allowable working pressure designated by the manufacturer.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-28.1)

SECTION 44. 675 IAC 30-4-29 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-29 "Miniature boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 29. "Miniature boiler" means any boiler which that does not exceed any of the following limits:

- (1) Sixteen (16) inches inside diameter of shell.
- (2) Five (5) cubic feet gross volume (exclusive of casing and insulation).
- (3) Twenty (20) square feet of water heating surface.
- (4) One hundred (100) psig maximum allowable working pressure MAWP.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-29; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-29) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-29) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 45. 675 IAC 30-4-30 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-30 "Model boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 30. "Model boiler" means any boiler that does not exceed any of the following limits:

- (1) Two (2) cubic feet total gross volume (exclusive of casing and insulation).
- (2) One and one-half (11/2) square feet of grate area.
- (3) One hundred (100) psig maximum allowable working pressure MAWP.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-30; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-30) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-30) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 46. 675 IAC 30-4-30.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-30.1 "Modular boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 30.1. "Modular boiler" means a packaged boiler system normally consisting of a series of three (3) or more packaged boilers that operate in a parallel or series to provide a varying supply of steam.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-30.1)

SECTION 47. 675 IAC 30-4-31 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-31 "National Board" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 31. "National Board" means the National Board of Boiler and Pressure Vessel Inspectors. as identified at 680 IAC 2-1-1(a)(3).

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-31; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-31) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-31) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 48. 675 IAC 30-4-31.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-31.1 "National Board Commission" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6-5

Sec. 31.1. "National Board Commission" means the license issued to an inspector by the NBBI.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-31.1)

SECTION 49. 675 IAC 30-4-31.2 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-31.2 "NBBI" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 31.2. "NBBI" means the National Board of Boiler and Pressure Vessel Inspectors.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-31.2)

SECTION 50. 675 IAC 30-4-32 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-32 "NBIC" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 32. "NBIC" means the National Board Inspection Code as set forth in 680 IAC 2-1-1(a)(3) 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-32; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-32) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-32) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 51. 675 IAC 30-4-33 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-33 "New installation" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 33. "New installation" means and includes any boiler or unfired pressure vessel installed and placed in operation after the first day of July 1, 1953, which was the effective date of the Indiana Boiler and Pressure Vessel Law which initially required and that was the first statewide requirement for boilers and unfired pressure vessels to be constructed, installed, inspected, and repaired to a standard.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-33; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-33) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-33) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 52. 675 IAC 30-4-34 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-34 "Nonstandard boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 34. "Nonstandard boiler" or unfired pressure vessel" means a boiler or unfired pressure vessel that does not bear the an API-ASME or ASME or the API-ASME stamp B&PVC certification mark.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-34; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-34) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-34) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 53. 675 IAC 30-4-34.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-34.1 "Nonstandard unfired pressure vessel" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 34.1. "Nonstandard unfired pressure vessel" means an unfired pressure vessel that does not bear an API-ASME or ASME B&PVC certification mark.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-34.1)

SECTION 54. 675 IAC 30-4-35 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-35 "Operating permit" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-2</u>

Sec. 35. "Operating permit" means that the permit required to operate a boiler or unfired pressure vessel as set forth at <u>IC 22-15-6-2(a)</u> and <u>IC 22-15-6-2(c)</u>, and is referred to as inspection certificate throughout this article in <u>IC 22-15-6-2</u>.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-35; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-35) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-35) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 55. 675 IAC 30-4-35.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-35.1 "Operating permit inspection" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6-5

Sec. 35.1. "Operating permit inspection" means an inspection of a boiler or unfired pressure vessel conducted pursuant to the requirements in Part 2 of the NBIC or API 510, the report that is required to be submitted to qualify for an operating permit.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-35.1)

SECTION 56. 675 IAC 30-4-36 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-36 "Owner or user" defined

Authority: IC 22-13-2-8

Affected: IC 22-12-1-18; IC 22-15-6

Sec. 36. "Owner or user" means any person, firm, or corporation as defined in IC 22-12-1-18, owning or operating any boiler or unfired pressure vessel within this the state of Indiana.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-36; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-36) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-36) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 57. 675 IAC 30-4-37.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-37.1 "Person" defined

Authority: IC 22-13-2-8

Affected: IC 22-12-1-18; IC 22-15-6-5

Sec. 37.1. "Person" has the meaning set forth in IC 22-12-1-18.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-37.1)

SECTION 58. 675 IAC 30-4-38 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-38 "Place of public assembly" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 38. "Place of public assembly" means a location:

- (1) a location at which persons assemble for civic, educational, religious, social, or recreational purposes; or
- (2) which that is provided by a common carrier for passengers awaiting transportation; or
- (3) in which persons are:
 - (A) housed to receive medical, charitable, or other care or treatment; or
 - (B) are held or detained for public, civic, or correctional purposes.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-38; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1121; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-38) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-38) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 59. 675 IAC 30-4-38.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-38.1 "Pool/spa heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 38.1. "Pool/spa heater" means a heater used to heat water for use in pools or spas that:

- (1) has no intervening valves on the return or discharge piping, has no reduction in size in the return or discharge, and does not generate more than circulating pump pressure;
- (2) does not exceed two hundred thousand (200,000) Btu per hour heat input; and
- (3) does not exceed two hundred ten (210) degrees Fahrenheit outlet water temperature.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-38.1)

SECTION 60. 675 IAC 30-4-38.2 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-38.2 "Portable boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 38.2. "Portable boiler" means a boiler that is primarily intended for temporary location, and its construction and usage allow it to be readily moved from one (1) location to another.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-38.2)

SECTION 61. 675 IAC 30-4-39 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-39 "Power boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 39. "Power boiler" means a boiler exceeding in which steam or other vapor is generated at an internal pressure greater than fifteen (15) psig for use external to itself and that exceeds the limits of a commercial toy boiler, a miniature boiler, a low pressure heating boiler, a hot water supply boiler, a steam cleaner, or a model boiler, as defined in this rule. The term shall include heat recovery steam generators (HRSG boilers).

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-39; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1122; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-39) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-39) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 62. 675 IAC 30-4-42.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-42.1 "Repair" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 42.1. "Repair" means the work necessary to restore a pressure-retaining item to a safe and satisfactory operating condition in accordance with Part 3 of the NBIC.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-42.1)

SECTION 63. 675 IAC 30-4-45 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-45 "Service water heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 45. "Service water heater" means a water heater that exceeds any of the limits for domestic water heaters as defined in section 14 of this rule section 15 of this rule, but does not exceed any of the following limits:

- (1) One hundred twenty (120) gallons nominal water containing capacity.
- (2) Two hundred thousand (200,000) Btu per hour heat input.
- (3) One hundred sixty (160) psig pressure MAWP.
- (4) Two hundred ten degrees (210) Fahrenheit (210°F) outlet water temperature.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-45; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1122; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-45) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-45) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 64. 675 IAC 30-4-47 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-47 "Standard boiler or unfired pressure vessel" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 47. "Standard boiler or unfired pressure vessel" means a boiler or unfired pressure vessel which that bears the ASME or API-ASME stamp B&PVC certification mark.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-47; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1122; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-47) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-47) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 65. 675 IAC 30-4-48.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-48.1 "State registration number" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 48.1. "State registration number" means a number assigned to a boiler or unfired pressure vessel by an inspector upon completion of the first operating permit inspection, thereby registering the item with the state.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-48.1)

SECTION 66. 675 IAC 30-4-49 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-49 "Steam cleaner" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 49. "Steam cleaner" means a hot water boiler **typically used for cleaning purposes**, without any steam space, and **from which** water flashes into steam when released through a manually operated nozzle for cleaning purposes, and none of the following are exceeded that does not exceed any of the following limits:

- (1) Three-fourths (3/4) inch diameter tube or pipe size.
- (2) Tube or pipe are not attached to a drum or header.
- (3) Nominal water containing capacity of six (6) gallons.
- (4) Water temperature of three hundred fifty (350) degrees Fahrenheit. (350°F).

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-49; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1123; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-49) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-49) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 67. 675 IAC 30-4-49.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-49.1 "Steam kettle" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 49.1. "Steam kettle" means a vessel (open or closed) having an external jacket containing steam used to provide uniform heating of the kettle's contents.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-49.1)

SECTION 68. 675 IAC 30-4-49.2 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-49.2 "Thermal fluid heater" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 49.2. "Thermal fluid heater" (also known as a hot oil heater or hot oil furnace) means a closed vessel in which a heat transfer other than water is heated by the direct application of heat from a thermal energy source, but no vaporization takes places within the vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-49.2)

SECTION 69. 675 IAC 30-4-50 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-50 "Unfired pressure vessel" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 50. "Unfired pressure vessel" means a closed vessel in which internal pressure is obtained generated from an external source or from an indirect application of heat. An unfired pressure vessel may contain more than one (1) pressure retaining chamber (for example, a heat exchanger or jacketed vessel).

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-50; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1123; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-50) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-50) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 70. 675 IAC 30-4-50.1 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-50.1 "Vessel" defined

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6-5

Sec. 50.1. "Vessel" means a generic term that refers to any boiler or unfired pressure vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-50.1)

SECTION 71. 675 IAC 30-4-51 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-4-51 "Waste heat boiler" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 51. (a) "Waste heat boiler" means a closed vessel which that is intended to be operated under pressure or vacuum for the purpose of heating water or generating steam for external use by the application of heat.

- (b) The configuration of the unit shall govern the parts and sections of the boiler and pressure vessel rules this article applicable to its design, construction, fabrication, and inspection as follows:
 - (1) If the unit contains tubes, drums, and accessories commonly associated with boilers, the sections applicable to power boilers shall apply.
 - (2) If the unit contains a shell, tube bundle, and channel commonly associated with heat exchangers, the sections applicable to unfired pressure vessels shall apply.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-51; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1123; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-51) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-51) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 72. 675 IAC 30-4-52 IS ADDED TO READ AS FOLLOWS:

675 IAC 30-4-52 "Water softener" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6-5</u>

Sec. 52. "Water softener" means a vessel used to reduce the concentrations of certain minerals (primarily calcium and magnesium) that produces either water or a product that is not materially more hazardous than water, where the temperature of the vessel's contents does not exceed one hundred eighty (180) degrees Fahrenheit.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-52)

SECTION 73. 675 IAC 30-5-1 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-1 Inspections

Authority: IC 22-13-2-8

Affected: IC 22-12-7; IC 22-15-6

Sec. 1. (a) All boilers and unfired pressure vessels not exempted by <u>IC 22-12-1-20</u> or <u>IC 22-15-6-1</u> 675 IAC 30-1-2 or 675 IAC 30-1-5 shall be inspected at intervals as specified in this article 675 IAC 30-3-9.

- (b) In making inspections of installed boilers and unfired pressure vessels, inspectors may use either:
- (1) the documents adopted in subsection 1-1(a) and (b) of this article, but shall in all cases comply with the minimum requirements of the documents in effect at the time of manufacture codes in effect at the time of manufacture, repair, or installation of the unit; or
- (2) the codes adopted in 675 IAC 30-1-1, if not more stringent.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1123; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 74. 675 IAC 30-5-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-2 Preparation for inspection

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 2. (a) The owner or user of a boiler or unfired pressure vessel required to be inspected shall upon due notice, prepare the boiler or vessel for the proposed inspection at the appointed an agreed upon time in the manner specified established by the inspector and the owner or user.
- (b) For internal and external inspection of boilers not under pressure and unfired pressure vessels, the boiler inspector shall be prepared for inspection specify the nature and extent of preparatory work expected to be completed prior to the inspector's arrival, by which shall include, but is not limited to, the following, as applicable for the equipment design:
 - (1) drawing the water from the boiler Isolating the boiler or unfired pressure vessel from its source of pressure.
 - (2) removing all manhole plates, all handhole plates, wash-out plugs, and plugs in water column connections Isolating and securing the fuel source.
 - (3) cooling and thoroughly cleaning the boiler and its setting Draining liquid that is present.
 - (4) providing safeguards to prevent leakage or accidental inflow of steam or hot water into the boiler Venting and purging the boiler or unfired pressure vessel of toxic, explosive, or other harmful gases or vapors.
 - (5) in the case of an internally fired boiler, removing the grates. The owner or user shall, upon request from the inspector, remove Cooling and thoroughly cleaning the interior of the boiler or unfired pressure vessel and its surroundings.
 - (6) Providing safeguards to prevent leakage or accidental inflow of steam, hot water, or other harmful substances into the boiler or unfired pressure vessel.
 - (7) Removing manhole plates, handhole plates, and other inspection opening closures, wash-out plugs, and plugs in water column connections.
 - (8) Establishing means of access to the surfaces to be inspected where these do not already exist.
 - (9) Removing internal fittings and appurtenances, where applicable.
 - (10) Removing the grates, in the case of an internally fired boiler.
 - (11) Removing insulation material, masonry, or other parts so that an inspection can be made. No advance preparation of the equipment is required for external inspection of a boiler under operating conditions. However, if evidence of a leak or crack in the boiler is found during such an inspection, enough of the covering of the boiler shall be removed to enable the inspector to be satisfied as to the safety of the boiler.

If a boiler or unfired pressure vessel has not been properly prepared for internal inspection, the inspector may decline to perform the inspection and the operating permit will be withheld until the owner or user complies with the requirements.

(c) If the inspection of an a boiler or unfired pressure vessel is to be external only, no advance preparation is required is other than to provide reasonable means of access to the boiler or unfired pressure vessel where necessary. However, if evidence of a leak or crack in the boiler or unfired pressure vessel is found during an inspection, enough of the covering (e.g., insulation, sheathing, casing, or refractory) of the boiler or

unfired pressure vessel shall be removed to enable the inspector to perform a thorough inspection to be satisfied as to the safety of the boiler or unfired pressure vessel.

(d) In the case of a combined internal and external inspection of a small unfired vessel of simple construction handling air, steam or similar nontoxic or nonexplosive gases or vapors (for example, most air receivers), advance preparation required is isolating the vessel from its source of pressure, providing means of access where necessary, and removing manhole plates and inspection-opening closures upon the inspector's arrival.

(e) As to other cases, the inspector who is to make the inspection shall specify in the notice setting the date for inspection the nature and extent of preparatory work expected to be done on the vessel prior to the inspector's arrival. Advance preparation includes the following tasks as needed:

- (1) Establishing means of access to the surfaces to be inspected where these do not already exist.
- (2) Isolating the vessel from its source of pressure.
- (3) Draining out any liquid that is present.
- (4) Venting and purging the vessel to free it of toxic, explosive, or other harmful gases or vapors.
- (5) Providing safeguards to prevent leakage or accidental inflow of harmful substances into the vessel.
- (6) Removing manhole plates and inspection-opening closures.
- (7) Cooling and cleaning the interior of the vessel.
- (8) Removing internal fittings and appurtenances.

(f) If the inspector requests during the course of the inspection that certain portions of insulation or other coverings mentioned in subsection (b) be properly removed to permit inspection of the vessel, or, if the inspector requests that certain internal fittings or appurtenances not removed be removed so that data needed for determining the safety of the vessel may be obtained, the owner or user shall remove upon receipt of request.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1123; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 75. 675 IAC 30-5-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-5 Hydrostatic leak tests; alternative tests

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 5. (a) The pressure of a hydrostatic pressure leak test, when applied to boilers performed on a boiler or unfired pressure vessels vessel of riveted or welded construction, except a locomotive boilers boiler, shall not exceed one and one half (11/2) times the maximum allowable working pressure. Hydrostatic pressure applied to glass lined vessels shall not exceed the maximum allowable working pressure original hydrostatic test pressure. The pressure of a hydrostatic leak test performed on a locomotive boiler shall not exceed one and one-fourth (1 1/4) times the MAWP. During the hydrostatic pressure leak test, the safety valve or valves shall be removed, or each valve disk shall be held down by means of a testing clamp and not by applying additional load to the spring with the compression screw. The minimum water temperature of the water used to apply perform a hydrostatic leak test shall be not less than seventy degrees Fahrenheit (70°F) but meet the requirements of the applicable construction or repair code; however, the maximum water temperature shall not exceed one hundred twenty (120) degrees Fahrenheit.(120°F).

- (b) When a hydrostatic test is to be applied to regulated equipment, the pressure shall be as follows:
- (1) For all cases involving the question of tightness, the pressure shall be equal to the release pressure of the safety valve or valves having the highest release setting.
- (2) For all cases involving the question of safety, the pressure shall be equal to one and one half (11/2) times the maximum allowable working pressure, except for locomotive boilers in which case it shall be one and one fourth (11/4) times the maximum allowable working pressure.

(c) (b) If the inspector and the owner or user so agree, other examinations or tests in accordance with the API-ASME code B&PVC or Part 3 of the ASME code NBIC may be substituted for the tests leak test required by this section.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-5; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1124; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 76. 675 IAC 30-5-6 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-6 Safety appliances; removal or alteration

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 6. (a) No person, except under the direction of an inspector, shall attempt to remove, or do any work upon alter, any safety appliances appliance prescribed by this article while a boiler or unfired pressure vessel is in operation, except for the purpose of making emergency repairs.
- (b) Should any of these appliances be If a safety appliance is repaired during an outage of a boiler or unfired pressure vessel, they it must be reinstalled in accordance with the provisions of this article.
- (c) The resetting of **a** safety appliances at either the former set pressure or **appliance** at a new pressure shall be done only with the approval of an inspector.
- (d) No person shall in any manner load the a safety valve or valves to maintain a working pressure in excess of that stated on the inspection certificate MAWP of the boiler or unfired pressure vessel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-6; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1124; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-6) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-6) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 77. 675 IAC 30-5-7 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-7 Low water fuel cut-off devices

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 7. (a) All automatically-fired steam or vapor boilers, excepting boilers having a constant attendant who has no other duties while the boiler is in operation, shall be equipped with an automatic low water fuel cut-off device so constructed that the water inlet valve cannot feed water into the boiler through the float chamber, and so located as to automatically cut off the fuel supply when the surface of the water falls to the lowest safe water line. This point may not be lower than the bottom of the water gage gauge glass.
- (b) Such a fuel cut-off device may be attached directly to a boiler or to the tapped openings provided for attaching a water gage glass directly to a boiler, provided that such connections from the boiler are nonferrous tees or Ys not less than one-half (1/2) inch pipe size between the boiler and the water gauge glass. The water gage glass shall be attached as close as possible to the boiler. The ends of all nipples shall be reamed to full size.

(c) Designs embodying a float bowl shall have a vertical straight-a-way valved drain pipe at the lowest point in the water equalizing pipe connections by which the bowl and the equalizing pipe can be flushed and the device tested.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-7; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1125; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-7) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-7) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 78. 675 IAC 30-5-8 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-8 Blow-off tanks; outlets and discharges

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 8. (a) Blow-off piping from a power boiler or a miniature boiler shall not discharge directly into a sewer.

- (b) A blow-off tank shall be used where conditions do not provide an adequate and safe open discharge. A blow-off tanks tank and associated piping shall meet one (1) of the following requirements:
 - (1) The **cross-sectional area of the** outlet from the blow-off tank shall be twice the **cross-sectional** area of the inlet pipe and made to extend internally within eight (8) inches from the bottom of the tank. A
 - (2) The vent pipe shall have a cross-sectional area at least four (4) times the cross-sectional area of the inlet pipe, shall lead to the outer atmosphere. Vents shall be as direct as possible to the outside and discharge at a safe location or the blow-off tank shall meet one (1) of the following requirements:
 - (A) It shall be constructed for a pressure equal to that allowed on the boiler to which it is attached.
 - (B) It shall be equipped with a safety valve or valves of sufficient capacity to prevent the pressure from exceeding the safe working pressure of the tank.
 - (3) There shall be no valve or other possible obstructions, such as water pockets, between the tank and the discharge end of the vent pipe.
 - (4) All pipe connections between the tanks and the boiler shall be as direct as possible and shall conform to the ASME code. For convenience in cleaning the tank, B&PVC.
 - (5) A manhole or an access opening shall be provided. Where a blow-off tank is not vented as specified in this subdivision, it shall be constructed for a pressure equal to that allowed on the boiler to which it is attached or shall be equipped with a safety valve or valves of sufficient capacity to prevent the pressure from exceeding the safe working pressure of the tank.
 - (2) Boiler blow off equipment which cannot be designed in accordance with subdivision (1) shall be referred to the board for consideration.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-8; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1125; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-8) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-8) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 79. 675 IAC 30-5-9 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-9 Location of discharge piping outlets

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 9. The discharge of **a** safety valves, valve, a blow-off pipes, and pipe, or any other outlets discharge piping outlet shall be adequately supported and located so as to prevent injury to personnel.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-9; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1125; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-9) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-9) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 80. 675 IAC 30-5-10 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-10 Pressure reducing valves; relief or safety valves; hand-controlled bypasses

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 10. (a) Where pressure reducing valves are used, one (1) or more relief or safety valves shall be provided on the low pressure side of the **pressure** reducing valve in case the boilers boiler or unfired pressure vessels vessel on the low pressure side de does not meet the **pressure** requirements for the full initial high pressure side. The combined discharge capacity of the relief or safety valves shall be such that the pressure rating of the boilers or unfired pressure vessels shall not be exceeded in case the **pressure** reducing valve sticks open. The relief or safety valves shall be located adjoining adjacent to or as close as possible to the **pressure** reducing valves. Protection shall be provided to prevent injury or damage caused by the escaping fluid from the discharge of the relief or safety valves if vented to the atmosphere.

- (b) The use of hand-controlled bypasses around **pressure** reducing valves is permissible. The **Such** a bypass if used around a reducing valve, shall not be greater in capacity than the **pressure** reducing valve unless the boilers boiler or unfired pressure vessels vessel downstream therefrom are is adequately protected by relief or safety valves or meet meets the requirements of the high pressure system. A **pressure** gauge shall be installed on the low pressure side of such a pressure reducing valve.
- (c) It is mandatory that a pressure gage be installed on the low pressure side of such a reducing valve as set forth in subsection (b). All pressure relief valves covered by this article must be repaired by an organization in possession of a valid "VR" or "VR/NR" Certificate of Authorization issued by the NBBI.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-10; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1125; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-10) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-10) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 81. 675 IAC 30-5-11 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-11 Repairs or alterations to boilers and pressure vessels

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 11. (a) This section covers rules for repairs and alterations to boilers and **unfired** pressure vessels. Where applicable rules for a repair or alteration are not provided by this rule, details of design and construction will shall be consistent with the rules of in the ASME code, API-ASME code B&PVC, or the rules for repairs contained in the National Board Inspection Code Part 3 of the NBIC, the API 510, or the code to which the item was originally constructed.

(b) This section applies to all repairs and alterations to boiler and pressure vessel pressure retaining parts, except that an owner or user of unfired pressure vessels, qualified in accordance with <u>IC 22-15-6-4(a)(2)</u>, shall have the option of using the provisions of API-510 for the inspection and repair of unfired pressure vessels.

- (c) All boilers (b) Each boiler and unfired pressure vessels vessel covered by this article that are repaired beginning one (1) year from the effective date of this article, must be repaired by one (1) of the following: an organization in possession of a valid "R" or "NR" Certificate of Authorization issued by the NBBI. The following are clarifications for repairs:
 - (1) An organization in possession of a valid ASME "S", "H", or "U" certificate of authorization applicable to the scope of work being performed.
 - (2) An organization in possession of a valid "R" certificate of authorization issued by the National Board of Boiler and Pressure Vessel Inspectors.
 - (3) An organization authorized by the office of the state building commissioner who shall receive recommendation from the rules board under this section.
 - (1) Repairs may be categorized as repairs or routine repairs as defined in Part 3 of the NBIC.
 - (2) Rerolled replacement tubes shall be considered a repair and shall be performed in accordance with Part 3 of the NBIC.
 - (3) Rerolling an existing tube is not considered a repair.
 - (4) Seal welding or explosive welding of tube plugs shall be considered a repair and shall be performed in accordance with Part 3 of the NBIC.
- (d) All boilers (c) Each boiler and unfired pressure vessels vessel covered by this article altered beginning one (1) year from the effective date of this article shall only be altered in accordance with the requirements in Part 3 of the National Board Inspection Code NBIC as set forth at 680 IAC 2 4 31 or as approved by the rules board as provided by its variance authority set forth at IC 22-13-2-11. in 675 IAC 30-1-1.
- (e) The office of the state building commissioner shall authorize the division to develop a procedure for the issuance and use of the authorization to repair boilers and pressure vessels under subsection (c)(3). This procedure shall consist of a review and evaluation of the repair organization's quality control manual, and a report shall be submitted to the rules board. Based upon the results of the division review of the quality manual and the quality system, the office of the state building commissioner shall, based upon the recommendation from the rules board, consider approval or denial of the request for repair authorization.
- (d) When an alteration consists of re-rating a boiler or unfired pressure vessel, allowable stress values from the edition of the code of construction to which the item was originally fabricated shall be used.
- (e) All applicable NBBI forms shall be filed with the division upon completion of any repair or alteration.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-11; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1125; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-11) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-11) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 82. 675 IAC 30-5-12 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-12 State inspection fees

Authority: IC 22-12-6-6; IC 22-13-2-8

Affected: IC 22-15-6

Sec. 12. (a) The shop inspection of new boilers and unfired pressure vessels shall be charged in accordance with the provisions of IC 22-12-6-12. Inspections by any state inspector If performed by request, a fee for an inspection made at the request of a boiler or unfired pressure vessel manufacturer, repairer, or owner or user inspection agency shall by a state inspector may be charged in accordance with the provisions in IC 22-12-6-12. This charge shall not void the regular charge or fee for inspection or certificate when the boiler or unfired pressure vessel is installed. operating permit inspection fees listed in 675 IAC 12-3-13, regardless of whether the inspection is being performed for purposes of obtaining an operating permit.

(b) Inspections made for any other purpose or for inspection of any device listed under IC 22-12-1-20(b) shall be charged in accordance with the provisions in IC 22-12-6-12. Any incidental expense incurred under this subsection such as motel, per diem, and traveling expenses shall be computed and charged in addition to the hourly rate. The fees computed under this subsection must cover the period from the time the inspector leaves the inspector's regular schedule to the time the inspector returns to the inspector's regular schedule.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-12; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1126; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-12) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-12) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 83. 675 IAC 30-5-13 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-13 Masonry or structural supports

Authority: <u>IC 22-12-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 13. Each boiler or **unfired** pressure vessel shall be supported by masonry or structural supports of sufficient strength and rigidity to safely support the equipment. There shall be no excessive vibration in either the boiler or **unfired** pressure vessel or its connecting piping.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-13; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1126; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-13) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-13) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 84. 675 IAC 30-5-14 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-14 Service water heaters; exceptions; relief valves

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 14. (a) A service water heater, as defined in this article 675 IAC 30-4-45, need not be a code vessel; however, it shall be provided with a properly sized ASME temperature and pressure relief valve. conforming to the requirements of this section.

(b) It is required that domestic water heaters be provided with suitable temperature and pressure relief valves.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-14; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1126; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-14) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-14) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 85. 675 IAC 30-5-15 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-5-15 Conditions not covered by this rule

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 15. Any condition not covered by this article rule shall comply with the applicable provisions of the ASME code or the API-ASME code codes adopted in 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-5-15; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1126; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-5-15) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-15) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 86. 675 IAC 30-6-1 IS AMENDED TO READ AS FOLLOWS:

Rule 6. New Installations of Boilers (after July 1, 1953)

675 IAC 30-6-1 Compliance with ASME B&PVC; special designs

Authority: IC 22-13-2-8

Affected: IC 22-13-2-11; IC 22-15-6

Sec. 1. (a) No boiler, except an existing boilers installation of a boiler to be reinstalled and those or one exempted by the provisions of IC 22-12-1-20 675 IAC 30-1-2, shall hereafter be installed in this state on or after July 1, 1953, unless it has been constructed, inspected, and stamped in conformity conforms with the edition of the ASME code Boilers requiring B&PVC in effect when the boiler was designed or constructed. A boiler installed on or after January 5, 1996, that requires an ASME B&PVC manufacturer's data reports report shall be registered with the National Board. NBBI.

- (b) All new boiler installations, including reinstalled and secondhand boilers, Each reinstalled or secondhand boiler shall be installed in accordance with the requirements of the ASME code adopted under this article Part 1 of the NBIC, as referenced in 675 IAC 30-1-1.
- (c) Where **a boiler of** special designs do design does not comply with the adopted standards in this article their 675 IAC 30-1-1, its construction must be approved in accordance with the variance procedure established in IC 22-13-2-11. and as set forth in 680 IAC 2-2.
- (d) A boiler shall not be operated until a valid operating permit is issued, as required by 675 IAC 30-3-9.

(Fire Prevention and Building Safety Commission; 675 IAC 30-6-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1126; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-6-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-6-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 87. 675 IAC 30-6-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-6-2 Inspection; assignment of state registration number

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 2. (a) Upon completion of the installation all boilers of a boiler, it shall be inspected by a state inspector or an owner or user an inspector. At the time of this internal or certificate the first operating permit inspection, each boiler shall be stamped by the inspector with a serial number of the shall assign and attach a state of Indiana registration number, preceded by the letters "IND", the "IN". The letters and figures to shall not be not less than one-fourth (1/4) inch in height and shall be arranged as follows:

IND 1234 IN 123456

- (b) All cast iron boilers shall have securely attached to the front of the boiler a metal tag not less than one (1) inch in height which shall have the serial number of the state of Indiana stamped thereon.
- (c) (b) The number applied assigned shall be one (1) from the series assigned provided to the state inspector or owner or user inspector in accordance with this article under 675 IAC 30-3-18.
- (d) (c) The stamping number shall not be concealed by lagging or paint and shall be exposed visible at all times.

(Fire Prevention and Building Safety Commission; 675 IAC 30-6-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1127; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-6-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-6-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 88. 675 IAC 30-7-1 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-7-1 Compliance with ASME code; special designs

Authority: IC 22-13-2-8

Affected: IC 22-13-2-11; IC 22-15-6

- Sec. 1. (a) No unfired pressure vessel, except an existing vessels installation of an unfired pressure vessel to be reinstalled and those or one exempted by the provisions of IC 22-12-1-20 675 IAC 30-1-2, shall hereafter be installed in this state on or after July 1, 1953, unless it has been constructed, inspected, and stamped in conformity conforms with Section VIII of the ASME code and the edition of the ASME B&PVC in effect at the time of design or construction. An unfired pressure vessel installed on or after January 5, 1996, that requires an ASME B&PBV manufacturer's data report shall be registered with the National Board.
- (b) All new installations of unfired pressure vessels, including Each reinstalled and secondhand unfired pressure vessels, vessel shall be installed in accordance with the requirements of Section VIII of the ASME code Part 1 of the NBIC, as adopted in 675 IAC 30-1-1.
- (c) Where **an unfired pressure vessel of** special designs do design does not comply with the adopted standards in this article, their its construction must be approved in accordance with the variance procedure established by in <u>IC 22-13-2-11</u>.
- (d) An unfired pressure vessel cannot be operated until an operating permit is issued, as required by 675 IAC 30-3-9.

(Fire Prevention and Building Safety Commission; 675 IAC 30-7-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1127; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-7-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-7-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 89. 675 IAC 30-7-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-7-2 Inspection; assignment of state registration number

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 2. (a) Upon completion of the installation all of the unfired pressure vessels vessel, it shall be inspected by a state inspector or an owner or user inspector. At the time of this certificate the first operating permit inspection, each unfired pressure vessel shall be stamped by the inspector with a serial number of the shall assign and attach a state of Indiana registration number, preceded by the letters "IND", the "IN". The letters and figures to be shall not be less than one-fourth (1/4) inch in height and shall be arranged as follows:

 IND 1234 IN 123456
- (b) Any unfired pressure vessel constructed of cast iron or of a material of such thickness that it should not be stamped shall have securely attached a metal tag not less than one (1) inch in height, which shall have the serial number of the state of Indiana stamped thereon.
- (c) (b) The number applied assigned shall be one (1) from the series assigned to the state provided to the inspector or owner or user inspector in accordance with this article 675 IAC 30-3-18.
- (d) (c) The stamping number shall not be concealed by lagging or paint and shall be exposed visible at all times. unless a suitable record is kept of the location of the stamping so that it may be readily uncovered at any time.

(Fire Prevention and Building Safety Commission; 675 IAC 30-7-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1127; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-7-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-7-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 90. 675 IAC 30-8-1 IS AMENDED TO READ AS FOLLOWS:

Rule 8. Existing Installations of Power Boilers (prior to July 1, 1953)

675 IAC 30-8-1 MAWP for standard boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 1. The maximum allowable working pressure MAWP for a standard boilers boiler shall be determined in accordance with the applicable provision provisions of the edition of the ASME ede B&PVC under which they were it was constructed and stamped.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1127; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 91. 675 IAC 30-8-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-2 MAWP for nonstandard boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 2. (a) The maximum allowable working pressure on **MAWP for** the shell of a nonstandard boiler or drum shall be determined by the strength of the weakest section of the structure, computed from the thickness of the plate, the tensile strength of the plate, the efficiency of the longitudinal joint or tube ligaments, the inside diameter of the outside course, and the factor of safety. allowed by this section. The equation shall be:

$$P = \frac{(TS) (t) (E)}{(R) (FS)}$$

Where: P = Maximum allowable working pressure, in psig.

TS = Ultimate tensile strength of shell plates, in psi.

t = Minimum thickness of shell plate, in weakest course, in inches.

E = Efficiency of longitudinal joint or tube hole ligaments, whichever is less. For riveted construction, E shall be determined by the methods illustrated in Section I of the ASME ede B&PVC (1971 edition). For tube hole ligaments, E shall be determined by the rules in Section I of the ASME ede B&PVC.

R = One-half (1/2) the inside diameter of the weakest course of shell or drum in inches.

FS = Factor of safety as permitted in subsection (e).

- (b) When the tensile strength of steel or wrought iron shell plates is not known, it shall be taken as fifty-five thousand (55,000) psi for steel and forty-five thousand (45,000) psi for wrought iron.
- (c) The resistance to crushing of mild steel shall be taken as ninety-five thousand (95,000) psi for each square inch of cross-sectional area.
- (d) When computing the ultimate strength of rivets in shear, the following values in psi of the cross-sectional area of the rivet shank shall be used:

Iron rivets in single shear	38,000
Iron rivets in double shear	76,000
Steel rivets in single shear	44,000
Steel rivets in double shear	88,000

When the diameter of the rivet holes in the longitudinal joints of a boiler is not known, the diameter and cross-sectional area of rivets, after driving, may be selected by cutting out one (1) rivet in the body of the joint **and measuring it,** or as follows:

SIZES OF RIVETS BASED ON PLATE THICKNESS

1/4" t (11/16" rivet) 9/32" t (11/16" rivet) 5/16" t (3/4" rivet) 11/32" t (3/4" rivet) 3/8" t (13/16" rivet) 13/32" t (13/16" rivet)

7/16" t (15/16" rivet)

15/32" t (15/16" rivet) 1/2" t (15/16" rivet)

1/2" t (15/16" rivet) 9/16" t (17/16" rivet)

5/8" t (17/16" rivet).

Rivet size is based on diameter after driving.

- (e) The following factors of safety shall be increased based on an extrapolation of them as a function of the age and condition of the boiler:
 - (1) The lowest factor of safety permissible on existing nonstandard installations shall be four and one-half (41/2) excepting for horizontal return tubular boilers having continuous lap seams more than twelve (12) feet in length where the factor of safety shall be eight (8), and provided that, when this latter type of boiler is removed from its existing setting, it shall not be reinstalled for pressures in excess of fifteen (15) psig.
 - (2) Reinstalled or secondhand boilers shall have a minimum factor of safety of six (6) when the longitudinal seams are of lap riveted construction, and a minimum factor of safety of five (5) when the longitudinal seams are of butt and double strap construction.
- (f) The age limit of a horizontal return tubular, flue, or cylinder boiler having a longitudinal lap joint and operating at a pressure in excess of fifty (50) psig shall be thirty (30) years. A variance from this may be granted by the rules board as set forth at <u>IC 22-12-2-11</u> and rule 2 of this article

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(Fire Prevention and Building Safety Commission; 675 IAC 30-8-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1128;

readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 92. 675 IAC 30-8-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-3 Maximum working pressure for all boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 3. In no case shall the maximum working pressure of any boiler be increased to a greater pressure greater than would be allowed for a new boiler of the same construction.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1128; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-3) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-3) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 93. 675 IAC 30-8-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-4 MAWP for water tube boilers

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 4. The maximum allowable working pressure on **MAWP** for a water tube boiler, the tubes of which are secured to cast iron or malleable iron headers, or which have cast iron mud drums, shall not exceed one hundred sixty (160) psig.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-4; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1129; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 94. 675 IAC 30-8-6 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-6 Access for inspection of drum heads

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 6. Heads of lower drums of boilers shall be thoroughly examined at the certificate operating permit inspection, and either a sufficient amount of brickwork shall be removed or inspection doors provided to enable this examination to be made.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-6; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1129; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-6) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-6) by P.L.249-2019, SECTION 15,

effective July 1, 2019.

SECTION 95. 675 IAC 30-8-7 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-7 Inspection; assignment of state registration number; alternative standards

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 7. (a) At the time of the first internal certificate operating permit inspection, each boiler shall be stamped by the inspector with a serial shall assign and attach a state registration number of the state of Indiana preceded by the letters "IND". The letters and figures to be shall not be less than one-fourth (1/4) inch in height and shall be arranged as follows:

IND 1234

- (b) The number applied assigned shall be one (1) from the series assigned provided to the state inspector or owner or user inspector in accordance with this article 675 IAC 30-3-18.
 - (c) The stamping number shall not be concealed by lagging or paint and shall be exposed visible at all times.
- (d) All existing power boiler installations shall conform to sections 8 through 16 of this rule or shall conform to the edition of the ASME code **B&PVC** under which they were constructed and stamped, or to the ASME code **B&PVC** as defined adopted in 680 IAC 2-1-1 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-7; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1129; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-7) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-7) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 96. 675 IAC 30-8-9 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-9 Fire-actuated fusible plugs

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 9. Fire-actuated fusible plugs, if used, shall conform to the requirements of the ASME code, Section I, or as set forth in section 7(d) of this rule edition of the ASME B&PVC under which the power boiler in which the plugs are installed was constructed and stamped, or to the ASME B&PVC as adopted in 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-9; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1129; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-9) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-9) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 97. 675 IAC 30-8-10 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-10 Water columns, gauge cocks, and gauge glasses

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 10. (a) As set forth in section 7(d) of this rule, No outlet connections shall be placed on the piping that

connects the water column to the boiler. The only exceptions allowed are as follows:

- (1) Damper regulator.
- (2) Feed water regulator.
- (3) Low water fuel cut-out.
- (4) Drains.
- (5) Gages Gauges.
- (6) Such apparatus that does not permit the escape of an appreciable amount of steam or water. The water column shall be provided with a valved drain of at least three-fourths (3/4) inch pipe size.
- (b) Each boiler shall have three (3) or more gage gauge cocks, located within the range of the visible length of the water glass, except when such boiler has two (2) water glasses with independent connections to the boiler,
- (c) For all installations where the water gage gauge glass or glasses are more than thirty (30) feet from the boiler operating floor, water level indicating or recording gages gauges shall be installed in such a manner that they are clearly visible from the operating floor.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-10; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1130; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-10) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-10) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 98. 675 IAC 30-8-11 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-11 Steam gauges; shutoff valves; nipple and globe valves

located on the same horizontal line and not less than two (2) feet apart.

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 11. (a) As set forth in section 7(d) of this rule, Each steam boiler shall have a steam gage gauge, with a dial range not less than one and one-half (11/2) times the maximum allowable working pressure MAWP, that is connected to the steam space or to the steam connection to the water column. The steam gage gauge shall be connected to a siphon or equivalent device of sufficient capacity to keep the gage gauge tube filled with water, and so arranged that the gage gauge cannot be shut off from the boiler except by a cock placed near the gage gauge and provided with a tee or lever handle arranged to be parallel to the pipe in which it is located when the cock is open.
- (b) When a steam gage gauge connection longer than eight (8) feet becomes necessary, a shut off valve may be used near the boiler provided the valve is of the outside screw and yoke type and is locked open. The line shall be ample size with provision provisions for free blowing.
- (c) Each boiler shall be provided with a one-fourth (1/4) inch nipple and globe valve connected to the steam space for the exclusive purpose of attaching a test gage gauge when the boiler is in service so that the accuracy of the boiler steam gage gauge may be ascertained.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-11; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1130; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-11) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-11) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 99. 675 IAC 30-8-12 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-12 Stop valves; drainage

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Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 12. (a) As set forth in section 7(d) of this rule, Each steam outlet from a boiler (except safety valve connections) shall be fitted with a stop valve located as close as practicable to the boiler.
- (b) When a stop valve is so located that water can accumulate, ample drains shall be provided. The drainage shall not be discharged on the top of the boiler or its setting.
- (c) When boilers provided with manholes are connected to a common steam main, the steam connection from each boiler shall be fitted with two (2) stop valves having an ample free blow drain between them. The discharge of this drain shall be visible to the operator while manipulating the valves and shall be piped clear of the boiler stetting setting. The stop valves shall consist preferably of one (1) automatic nonreturn valve (set next to the boiler) and a second valve of the outside-screw-and-yoke type.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-12; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1130; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-12) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-12) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 100. 675 IAC 30-8-13 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-13 Blow-off piping; heat protection; fittings

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 13. (a) As set forth in section 7(d) of this rule, The construction of the setting openings and their sealing around each blow-off pipe shall permit free expansion and contraction.
- (b) All blow-off piping, when exposed to furnace heat, shall be protected by fire brick or other heat resisting material, so constructed that the piping may be readily inspected.
- (c) Each boiler shall have a blow-off pipe, fitted with a valve or cock, in direct connection with the lowest water space. Cocks shall be of the gland or guard type and suitable for the pressure allowed. The use of globe valves shall not be permitted. If the maximum allowable working pressure exceeds one hundred (100) psig, each blow-off pipe shall be provided with two (2) valves or a valve and a cock, such valves and cocks to be suitable for the intended pressure and temperature.
- (d) When the maximum allowable working pressure exceeds one hundred (100) psig, blow-off piping shall be suitable for the intended pressure and temperature. The piping shall not be galvanized.
- (e) All fittings between the boiler and blow-off valve shall be constructed of material suitable for the intended pressure and temperature. In case of renewal of blow-off pipe or fittings, they shall be installed in accordance with the rules governing new installations.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-13; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1130; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-13) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-13) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 101. 675 IAC 30-8-14 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-14 Safety valves; prohibited types; installation; standards; relieving capacity

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 14. (a) As set fourth in section 7(d) of this rule, The use of weighted-lever safety valves is prohibited and these valves shall be replaced by direct spring loaded pop type valves that conform to the requirements in Section I of the ASME code, Section I B&PVC.

- (b) Safety valves having either the seat or disc of cast iron shall not be used.
- (c) Each boiler shall have at least one (1) safety valve. Each boiler having more than five hundred (500) square feet of water heating surface shall have two (2) or more safety valves.
- (d) The valve or valves shall be connected to the boiler, independent of any other steam connection, and attached as close as possible to the boiler, without unnecessary intervening pipe or fittings.
- (e) No valve of any description shall be placed between the safety valve and the boiler nor on the escape pipe (if used) between the safety valve and the atmosphere. When an escape pipe is used, its area shall not be less than the **cross-sectional** area of the valve or aggregate areas based on the nominal diameters of the valves with which it connects. The escape pipe shall be fitted with an open drain to prevent water from lodging in the upper part of the valve or in the pipe. When an elbow is placed on a safety valve escape pipe, it shall be located close to the safety valve outlet, and the escape pipe shall be securely supported. All safety valve discharges shall be so located or piped as to be carried clear from walkways or platforms used to control the main stop valves of boilers or steam headers and discharged to a safe location.
- (f) The safety valve capacity of each boiler shall be such that the safety valve or valves will discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than six percent (6%) above the highest pressure to which any valve is set, and in no case to more than six percent (6%) above the maximum allowable working pressure.
- (g) One (1) or more safety valves on every boiler shall be set at or below the maximum allowable working pressure. The remaining valves may be set not to exceed three percent (3%) above the maximum allowable working pressure, but the range of setting of all the safety valves on a boiler shall not exceed 40 ten percent (10%) of the highest pressure to which any valve is set.
- (h) When two (2) or more boilers operating at different pressures and safety valve settings are interconnected, the lower pressure boilers or interconnected piping shall be equipped with safety valves of sufficient capacity to prevent over pressure considering the generating capacity of all the boilers.
- (i) In those cases where the boiler is supplied with feed water directly from pressure mains without the use of feeding apparatus (not to include return traps), no safety valve shall be set at a pressure greater than ninety-four percent (94%) of the lowest pressure obtained in the supply main feeding the boiler.
- (j) When the required relief capacity is unknown, the relieving capacity of the safety valves on any boiler shall be checked by one (1) of the following methods and, if found to be insufficient, additional valves shall be provided:
 - (1) By making an accumulation test, which consists of shutting off all other steam-discharge outlets from the boiler and forcing the fires to the maximum. The safety valve capacity shall be sufficient to prevent a pressure in excess of six percent (6%) above the maximum allowable working pressure.
 - (2) (1) By measuring the maximum amount of fuel that can be burned and computing the corresponding evaporative capacity (steam generating capacity) upon the basis of heating value of this fuel. These computations shall be made as outlined in the Appendix in Section I of the ASME code, Section I B&PVC.
- (3) (2) By determining the maximum evaporative capacity by measuring the feed water. When either of the these methods outlined in subdivision (2) or (3) is are employed, the sum of the safety valve

capacities shall be equal to or greater than the maximum evaporative capacity (maximum steam generating capacity) of the boiler.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-14; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1131; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-14) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-14) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 102. 675 IAC 30-8-15 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-15 Repair or replacement of fittings or appliances

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 15. As set forth in section 7(d) of this rule, Whenever repairs are made to fittings or appliances or it becomes necessary to replace them, the work shall comply with the edition of the ASME ede B&PVC or the NBIC under which the power boiler was constructed and stamped, the ASME B&PVC, or the NBIC.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-15; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1131; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-15) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-15) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 103. 675 IAC 30-8-16 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-8-16 Conditions not covered by this rule

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 16. As set forth in section 7(d) of this rule, all cases Any condition not specifically covered by this article rule shall be treated as new installations or may be referred to the chief inspector for instructions concerning the requirements and comply with the applicable provisions of the codes adopted in 675 IAC 30-1-1.

(Fire Prevention and Building Safety Commission; 675 IAC 30-8-16; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1132; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-8-16) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-16) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 104. 675 IAC 30-10-1 IS AMENDED TO READ AS FOLLOWS:

Rule 10. Existing Installation of Heating Boilers (prior to July 1, 1953)

675 IAC 30-10-1 MAWP for standard boilers

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 1. The maximum allowable working pressure MAWP of a heating boiler built in accordance with the ASME code B&PVC shall in no case exceed the pressure indicated by the manufacturer's identification stamped or cast upon the boiler or upon an identification plate secured to it.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1133; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 105. 675 IAC 30-10-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-2 MAWP for nonstandard riveted boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 2. The maximum allowable working pressure on MAWP for the shell of a nonstandard heating riveted boiler shall be determined in accordance with 675 IAC 30-8 this article covering existing installations of power boilers, except that in no case shall the maximum allowable working pressure MAWP of such a boiler exceed fifteen (15) psig for steam or one hundred sixty (160) psig for water, at a temperature not exceeding two hundred fifty (250) degrees Fahrenheit. (250°F).

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1133; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 106. 675 IAC 30-10-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-3 MAWP for nonstandard welded boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 3. The maximum allowable working pressure on a non-standard MAWP of a nonstandard steel or wrought iron low pressure heating boiler of welded construction shall not exceed fifteen (15) psig for steam. For other than steam service, the maximum allowable working pressure shall be calculated in accordance with Section IV of the ASME code B&PVC.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1133; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-3) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-3) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 107. 675 IAC 30-10-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-4 MAWP for nonstandard cast iron boilers

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 4. The maximum allowable pressure of MAWP for a nonstandard boiler composed principally of cast iron, or having cast iron shell or head and steel or wrought iron tubes, shall not exceed fifteen (15) psig for steam service or thirty (30) psig for water service.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-4; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 108. 675 IAC 30-10-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-5 Feed water connections; stop and check valves

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 5. Feed water connections shall be independent of any water gage gauge connections and be made to the condensate return pipe or reservoir of the condensate return pump. There shall be a stop valve and a check valve in the feed water line at the boiler.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-5; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 109. 675 IAC 30-10-7 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-7 Water gauge glasses; location

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 7. Each steam **heating** boiler shall have at least one (1) water gage gauge glass with the lowest visible part above the heating surfaces in the primary combustion chamber. When the heating surfaces above the low water line may be injured by contact with gases of high temperature, the water gage gauge shall be raised until the lowest visible part of the gage gauge glass is above such heating surface.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-7; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-7) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-7) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 110. 675 IAC 30-10-8 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-8 Steam gauges for low pressure steam heating boilers; connections; dial range; stops

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 8. (a) Each low pressure steam heating boiler shall have a steam gage gauge connected to its steam space or to its water column, or its steam connections by means of a siphon or equivalent device to keep the gage gauge tube filled with water and so arranged that the gage gauge cannot be shut off from the boiler except by a cock with a tee or lever handle, placed in the pipe near the gage gauge. The handle of the cock shall be parallel to the pipe in which it is located when the cock is open.

- (b) The scale on the dial of a low pressure steam heating boiler gage gauge shall be graduated to not less than thirty (30) psig. The gage gauge shall be provided with effective stops for the indicating pointer at the zero (0) point and at the maximum pressure point. The travel of the pointer from zero (0) to thirty (30) psig pressure shall be at least three (3) inches.
 - (c) Connections to steam-gage steam-gauge siphons shall be of nonferrous metal when either:
 - (1) smaller than one (1) inch pipe size and longer than five (5) feet between siphon and the point of connection of pipe and boiler; and also when; or
 - (2) smaller than one-half (1/2) inch pipe size and shorter than five (5) feet between the siphon and point of connection of pipe to the boiler.
- (d) On a compound gage gauge, effective stops shall be set at the limits of the gage gauge readings on both pressure and vacuum sides.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-8; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-8) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-8) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 111. 675 IAC 30-10-9 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-9 Pressure or altitude gauges for hot water heating boilers; connections; dial range; stops

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 9. (a) Each hot water heating boiler shall have a pressure or altitude gage gauge connected to it or to its flow connection in such a manner that it cannot be shut off from the boiler except by a cock with a tee or lever handle, placed on the pipe near the gage. gauge. The handle of the cock shall be parallel to the pipe in which it is located when the cock is open.
- (b) The scale on the dial of the pressure or altitude gage gauge shall be graduated to not less than one and one-half (11/2) times the maximum allowable working pressure. MAWP. The gage gauge shall be provided with effective stops for the indicating pointer at the zero (0) point and at the maximum pressure point.
- (c) Pressure or altitude gage gauge connections shall be of nonferrous composition when smaller than one (1) inch pipe size.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-9; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-9) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-9) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 112. 675 IAC 30-10-10 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-10 Thermometers for hot water heating boilers; location and connection

Authority: <u>IC 22-13-2-8</u> Affected: IC 22-15-6

Sec. 10. Each hot water heating boiler shall have a thermometer so located and connected that it shall be easily readable when observing the water pressure or altitude. The thermometer shall be so located that it shall at

all times indicate the temperature in degrees Fahrenheit of the water in the boiler, at or near the outlet. The pressure or altitude gages gauges and thermometer may be separate devices, or a combination device.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-10; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1134; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-10) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-10) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 113. 675 IAC 30-10-11 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-11 Stop valves and check valves

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 11. (a) If a **heating** boiler may be closed off from the heating system by closing a steam stop valve, there shall be a check valve in the condensate return line between the boiler and the system.

(b) If any part of a heating system may be closed off from the remainder of the system by closing a steam stop valve, there shall be a check valve in the condensate return pipe from that part of the system.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-11; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1135; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-11) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-11) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 114. 675 IAC 30-10-12 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-12 Safety valves for low pressure steam heating boilers; dimensions and capacity

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 12. (a) Each low pressure steam heating boiler shall have one (1) or more safety valves of the spring-pop type adjusted and sealed to discharge at a pressure not to exceed fifteen (15) psig.

- (b) Each safety valve for a low pressure steam heating boiler shall, if that has a diameter three-fourths (3/4) inch or larger shall have a substantial device which that will positively lift the disk from its seat at least one-sixteenth (1/16) inch when there is no pressure on the boiler. The seats and disks shall be of suitable material to resist corrosion.
- (c) No safety valve for a low pressure steam heating boiler shall be smaller than three-fourths (3/4) inch and shall have a substantial device which that will positively lift the disk from its seat at least one-sixteenth (1/16) inch when there is no pressure on the boiler. The seats and disks shall be of suitable material to resist corrosion.
- (d) The minimum capacity of the valve or valves shall be governed by the capacity marking on the boiler called for in Section IV of the ASME code **B&PVC**.
- (e) The minimum valve capacity in pounds per hour shall be determined by dividing the maximum Btu output at the boiler nozzle obtained by the firing of any fuel for which the unit is designed by one thousand (1,000). In every case the requirements of subsection (f) shall be met.

- (f) The steam safety valve capacity for each low pressure steam heating boiler shall be such that with the fuel-burning equipment installed, and fires at a maximum rate, the pressure of the low pressure steam heating boiler shall not exceed fifteen (15) psig with all safety valves open.
- (g) When operating conditions are changed or additional boiler heating surface is installed, the valve capacity shall be checked and increased if necessary to meet the new conditions and be in accord with subsection (f). The additional valves required may be installed on the outlet pipe providing there is no intervening valve nor any other branching pipes between additional valves and the boiler.
- (h) When there is any doubt as to the total capacity of the safety valve or valves, an accumulation test shall be run.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-12; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1135; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-12) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-12) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 115. 675 IAC 30-10-13 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-13 Relief valves for hot water heating or supply boilers; settings; dimensions; relief capacity

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 13. (a) Each hot water heating or hot water supply boiler shall have one (1) or more relief valves of the spring-loaded type without disk guides on the pressure side of the valve. The valves shall be set to relieve at a pressure at or below the maximum allowable working pressure MAWP of the boiler and so arranged that they cannot be reset to relieve at a pressure higher than the maximum allowable working pressure MAWP of the boiler. The capacity of water relief valves that have not been officially rated in accordance with the ASME eede B&PVC shall not be taken into consideration in determining the required relieving capacity.
- (b) Each relief valve shall have a substantial device which that will positively lift the disk from its seat at least one-sixteenth (1/16) inch when there is no pressure on the boiler.
- (c) The seats and disks of relief valves shall be of material suitable to resist corrosion and withstand the preliminary test prescribed in the ASME ede B&PVC for low pressure heating boilers. No materials liable to fail due to deterioration or vulcanization when subjected to any temperature not exceeding two hundred seventy-five (275) degrees Fahrenheit (275°F) shall be used for any part.
- (d) No relief valve shall be smaller than three-fourths (3/4) inch nor larger than four and one-half (41/2) inches standard pipe size. The inlet opening shall have an inside diameter equal to, or greater than, the seat diameter. In no case shall the minimum opening through any part of the valve be less than one-fourth (1/4) inch diameter or its equivalent area.
- (e) The relieving capacity in pounds per hour shall be determined from the maximum Btu output at the boiler nozzle obtained by the firing of any fuel for which the unit is designed. In many cases a greater relieving capacity than the minimum specified will be necessary. In every case, the requirements of subsection (g) shall be met.
- (f) When operating conditions are changed or additional boiler heating surface is installed, the valve capacity shall be increased, if necessary, to meet the new conditions and be in accordance with subsection (g). The additional valves required by changed conditions may be installed on the outlet pipe providing there is no intervening valve, nor any other branching pipes between valve and boiler.

(g) Relief valve capacity for each boiler shall be such that with the fuel-burning equipment installed, pressure cannot rise more than twenty percent (20%) above the highest maximum allowable working pressure for pressure up to and including thirty (30) psig and ten percent (10%) for pressures over thirty (30) psig.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-13; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1135; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-13) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-13) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 116. 675 IAC 30-10-14 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-14 Installation of safety and relief valves

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 14. (a) Safety valves shall be connected to boilers a heating boiler with the spindle vertical if possible, either directly to a tapped or flanged opening in the boiler, to a fitting connected to the boiler by a close nipple, to a Y base, to a valveless steam pipe between adjacent boilers, or to a valveless header connecting steam outlets on the same boiler.

- (b) Relief valves shall be connected to the top of boilers a heating boiler, with spindle vertical if possible, either directly to a tapped or flanged opening on the boiler, to a fitting connected to the boiler by a close nipple, to a Y base, or to a valveless header connecting water outlets on the same boiler.
- (c) When a Y base is used, the inlet area shall not be less than the combined outlet areas. When the size of the boiler requires a safety valve or relief valve larger than four and one-half (41/2) inches in diameter, two (2) or more valves having the required combined capacity shall be used.
- (d) No shut-off of any description shall be placed between the safety or relief valve and the boiler, or on discharge pipes between such valves and the atmosphere. Safety and relief valves shall not be connected to an internal pipe in the boiler.
- (e) When a discharge pipe is used, its **cross-sectional** area shall be not less than the **cross-sectional** area of the valve or aggregate area based on the nominal diameters of the valves with which it connects, and the discharge pipe shall be fitted with an open drain to prevent water from lodging in the upper part of the valve or in the pipe. When an elbow is placed on a safety or relief valve discharge pipe, it shall be supported so that no stress is placed on the valve body. The discharge from **a** safety or relief valves valve shall be **directed** to a point of safe discharge location.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-14; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1136; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-14) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-14) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 117. 675 IAC 30-10-15 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-15 Repair or replacement of fittings or appliances

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 15. Whenever repairs are made to fittings or appliances or it becomes necessary to replace them, the

work must comply with the ASME code B&PVC or the NBIC. as applicable.

(Fire Prevention and Building Safety Commission; 675 IAC 30-10-15; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1136; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-15) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-15) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 118. 675 IAC 30-10-16 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-10-16 Inspection; assigning state registration number

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 16. (a) At the time of the first internal or certificate operating permit inspection, each boiler shall be stamped by the inspector with a serial shall assign and attach a state registration number of the state of Indiana preceded by the letters "IND". The letters and figures to be shall not be less than one-fourth (1/4) inch in height and shall be arranged as follows:

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- (b) All cast iron heating boilers shall have securely attached to the front of the boiler a metal tag not less than one (1) inch in height which that shall have the serial state registration number of the state of Indiana stamped thereon.
- (c) The number applied assigned shall be one (1) from the series assigned provided to the state inspector or owner or user inspector in accordance with 680 IAC 2-3-18 675 IAC 30-3-18.
- (d) The stamping **number** shall not be concealed by lagging or paint and shall be exposed **visible** at all times. (Fire Prevention and Building Safety Commission; 675 IAC 30-10-16; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1136; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-10-16) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-16) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 119. 675 IAC 30-11-1 IS AMENDED TO READ AS FOLLOWS:

Rule 11. Existing Installations of Unfired Pressure Vessels (prior to July 1, 1953)

675 IAC 30-11-1 MAWP for standard unfired pressure vessels

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 1. The maximum allowable working pressure MAWP for a standard unfired pressure vessels vessel shall be determined in accordance with the edition of the ASME ede B&PVC or API-ASME code under which they were it was constructed and stamped.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-1; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1136; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-1) by P.L.249-2019, SECTION 15,

effective July 1, 2019.

SECTION 120. 675 IAC 30-11-2 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-11-2 MAWP for nonstandard unfired pressure vessels

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

- Sec. 2. (a) The maximum allowable working pressure MAWP for a nonstandard unfired pressure vessels vessel, for which data are is available evidencing they have it has been so designed and constructed as to be substantially equivalent to a standard unfired pressure vessels vessel except for the stamping, shall be determined on the same basis as for a standard unfired pressure vessels vessel.
- (b) The maximum allowable working pressure for a nonstandard **unfired** pressure vessel not covered by subsection (a) shall be the least of the values found for allowable working pressure for any of the essential parts of the vessel (such as shell, heads, or nozzle openings) by the principles given **described** in this subsection or subsection (c) and section 3 of this rule as adjusted for any difference in static head that may exist between the part considered and the top of the vessel **as follows:**
 - (1) For internal pressure, the allowable working pressure for the shell of **a** nonstandard cylindrical **unfired** pressure **vessels vessel** such as considered in this subsection shall be determined by the strength of the weakest course computed from the thickness of the plate, the tensile strength of the plate, the efficiency of the longitudinal joint, the inside radius of the course, and the factor of safety. allowed under section 3 of this rule. The equation shall be:

$$P = \frac{(TS) (t) (E)}{(R) (FS)}$$

Where: P = Allowable working pressure for the shell, in psig. for the shell.

For seamless shells

- TS = Ultimate tensile strength of shell material in pounds per square inch. For carbon steel plates, when psi. When the tensile strength of carbon steel plate is not known, it shall be taken as fifty-five thousand (55,000) psi for temperatures not exceeding seven hundred (700) degrees Fahrenheit (700°F). Where the tensile strength of cast iron is not known, it shall be taken to be twenty thousand (20,000) psi.
 - t = Minimum thickness of shell plate of weakest course, in inches. When the contents of a vessel are corrosive, it shall be taken as the last measured minimum thickness minus twice the thickness expected to be lost by corrosion before the next inspection.
 - E = Efficiency of longitudinal joint depending upon construction. Use values as follows:

For riveted joints **E** = calculated joint efficiency For fusion welded, forge welded, or brazed joints: For fusion single lap weld welds E = 40%For fusion double lap weld welds E = 60%For fusion single butt weld welds E = 50%For fusion double butt weld welds E = 70%For forge weld welds E = 70%E = 80%For brazed steel joints For brazed copper joints E = 90%

Vessels with brazed joints shall not be operated with metal temperatures in excess of four hundred six degrees Fahrenheit (406°F).

E = 4 100%

- R = Inside radius of weakest course of shell, in inches, provided the thickness does not exceed ten percent (10%) of the radius. If the thickness is over ten percent (10%) of the radius, the outer radius, **in inches**, shall be used.
- FS = Factor of safety allowed by this section 3 of this rule.

Note: Vessels with brazed joints shall not be operated with metal temperatures in excess of four hundred six (406) degrees Fahrenheit.

(2) The allowable working pressure for heads of **a** nonstandard **unfired** pressure vessels **vessel** such as considered in this subsection shall be determined by the applicable formulas in the **ASME B&PVC or**

API-ASME code, or Section VIII of the ASME code, based on the last measured minimum thickness of the head in question or, in the case of heads, subject thickness expected to be lost by corrosion before the next inspection. Efficiencies for joints in a head shall be taken to be the same as specified in subdivision (1) for shell joints. The joints, in a head, shall be taken to be the same as specified in subdivision (1) for shell joints. The joint efficiencies are to be used in the head formulas only to the extent that the heads themselves actually contain a joint or joints, as distinguished from the joint between the head and shell; however, a determination also shall be made as to whether the strength of the joint between the head and shell is adequate to withstand the pressure imposed on the projected area of the head (namely, 3.14 PR²), based on the least thickness of head or shell plate adjacent to such joint and the applicable joint efficiency specified in subdivision (1); and if the strength of this joint fails to meet this criterion, the allowable working pressure for the head (as determined by the applicable head formula) shall be reduced accordingly.

- (3) The allowable working pressure for a shell course, or head, in which there is any opening larger than two (2) inch pipe size in the solid plate (or larger than three (3) inch pipe size if the net thickness of the plate, after deducting corrosion allowance, is three-eighths (3/8) inch or less) and which that has no more reinforcement for such opening than that inherent in the manway or nozzle neck and its attachment welds, shall be taken to be sixty percent (60%) of the allowable working pressure computed for a seamless shell course, or head, of the same dimensions, using in such computations the last measured thickness of the vessel element in question minus twice the thickness expected to be lost by corrosion before the next inspection. Or, alternatively, the effect of such opening on the allowable working pressure for such shell course, or head, shall be computed in accordance with applicable provisions of the API-ASME code or Section VIII, **Division 1** of the ASME code **B&PVC** using the dimensions of the materials actually available for reinforcement of such opening after deducting corrosion allowance as established in this subsection.
- (4) For conditions not covered in this subsection, applicable provisions of the API-ASME code or Section VIII, in **Division 1 of** the ASME code **B&PVC** shall apply. or the case may be referred to the chief inspector division for instruction concerning the requirements.
- (c) The maximum allowable working pressure for cylindrical vessels subjected to external or collapsing pressure shall be determined by the applicable rules of the API-ASME code or Section VIII, **Division 1** of the ASME code **B&PVC**.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-2; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1137; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 121. 675 IAC 30-11-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-11-3 Safety factor

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 3. The minimum factor of safety shall in no case be less than four (4) for carbon steel or low-alloy steel vessels operating with metal temperatures below seven hundred (700) degrees Fahrenheit. (700°F), and For high alloy steel the maximum allowable stress value shall not be less than that indicated to be permissible in the applicable table of maximum allowable stress values given provided in Section II of the applicable provisions of the ASME code B&PVC in effect at the time of fabrication for the material and temperature involved. The factor of safety may be increased (or the maximum allowable stress may be reduced) when deemed necessary by the inspector to ensure the operation of the vessel is within safe limits.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-3; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1138; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-3) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-3) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 122. 675 IAC 30-11-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-11-4 Safety appliances

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 4. Each unfired pressure vessel shall be protected by such safety and relief valves and interlocking, indicating, and controlling safety devices as will ensure its safe operation. These valves and devices shall be so constructed, located, and installed that they cannot readily be rendered inoperative. The relieving capacity of safety valves shall be such as to prevent a rise of pressure in the vessel in excess of that permitted by applicable provisions of the API-ASME **code** or the ASME **codes B&PVC**, taking into account the effect of static head. Safety valve discharges shall be carried to a point where damage to property or injury to personnel is minimized.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-4; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1138; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 123. 675 IAC 30-11-5 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-11-5 Inspection; assignment of state registration number

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 5. (a) At the time of the first internal or certificate operating permit inspection, each unfired pressure vessel shall be stamped by the state inspector or the owner or user inspector with a serial shall assign and attach a state registration number of the state of Indiana preceded by the letters "IND". The letters and figures to be shall not be less than one-fourth (1/4) inch in height and shall be arranged as follows:

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- (b) Any unfired pressure vessel constructed of cast iron, or of a material, or of such thickness that it should not be stamped, shall have securely attached a metal tag not less than one (1) inch in height, that has a which shall have the state serial registration number stamped thereon.
- (c) The number applied assigned shall be one (1) from the series assigned provided to the state inspector or owner or user inspector in accordance with this article 675 IAC 30-3-18.
- (d) The stamping number shall not be concealed by lagging or paint and shall be exposed visible at all times unless a suitable record is kept of the location of the stamping so that it may be readily uncovered at any time.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-5; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1138; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 124. 675 IAC 30-11-6 IS AMENDED TO READ AS FOLLOWS:

675 IAC 30-11-6 Repair or replacement of fittings or appliances

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

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Sec. 6. Whenever repairs are made to fittings and appliances or it becomes necessary to replace them, the work shall comply with the applicable provisions of the ASME eede **B&PVC**, the API-ASME code, NBIC, API 510, or this article.

(Fire Prevention and Building Safety Commission; 675 IAC 30-11-6; filed Jan 5, 1996, 10:15 a.m.: 19 IR 1138; readopted filed Jul 9, 2001, 1:33 p.m.: 24 IR 3822; readopted filed Sep 21, 2007, 9:16 a.m.: 20071010-IR-680070389RFA; readopted filed Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 5, 2013, 10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-11-6) to the Fire Prevention and Building Safety Commission (675 IAC 30-11-6) by P.L.249-2019, SECTION 15, effective July 1, 2019.

SECTION 125. THE FOLLOWING ARE REPEALED: <u>675 IAC 30-1-3</u>; <u>675 IAC 30-2</u>; <u>675 IAC 30-3-1</u>; <u>675 IAC 30-3-2</u>; <u>675 IAC 30-3-4</u>; <u>675 IAC 30-3-6</u>; <u>675 IAC 30-3-8</u>; <u>675 IAC 30-3-14</u>; <u>675 IAC 30-3-16</u>; <u>675 IAC 30-3-2</u>; <u>675 IAC 30-3-25</u>; <u>675 IAC 30-4-7</u>; <u>675 IAC 30-4-8</u>; <u>675 IAC 30-4-9</u>; <u>675 IAC 30-4-12</u>; <u>675 IAC 30-4-21</u>; <u>675 IAC 30-4-22</u>; <u>675 IAC 30-4-24</u>; <u>675 IAC 30-4-28</u>; <u>675 IAC 30-4-37</u>; <u>675 IAC 30-4-48</u>; <u>675 IAC 30-4-48</u>; <u>675 IAC 30-6-3</u>; <u>675 IAC 30-9</u>.

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