ARTICLE 30. INDIANA BOILER AND PRESSURE VESSEL RULES

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

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

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

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

Sec. 1. (a) The following documents are hereby adopted by reference as if fully set out in this article:

(1) American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME B&PVC), 2019 edition, published by the American Society of Mechanical Engineers, Two Park Avenue, New York, New York 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) 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) National Board Inspection Code (NBIC) Parts 1, 2, 3, and 4, also known as the American National Standards Institute's (ANSI) NB-23 standard, 2019 edition, published by the National Board of Boiler and Pressure Vessel Inspectors (NBBI), 1055 Crupper Avenue, Columbus, Ohio 43229-1183.

(4) American Petroleum Institute (API) Standard 510 Pressure Vessel Inspection Code, Tenth Edition, May 2014, Addendum 1, May 2017 and Addendum 2, March 2018, published by the American Petroleum Institute, 200 Massachusetts Avenue NW, Suite 1100, Washington, D.C. 20001-5571.

(5) American Petroleum Institute API 579/ASME FFS-1 Fitness for Service Code, Second Edition, June 2016, Two Park Avenue, New York, New York 10016-5990.

(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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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

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

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 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, repair, and alteration of regulated boilers and unfired pressure vessels in Indiana.

(c) This article does not 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 the provisions in this section through 675 IAC 30-11-6 shall comply with the applicable provisions of the ASME B&PVC and the NBIC, as adopted in section 1 of this rule.

(e) 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 the ASME B&PVC construction standards, inspection requirements, and operating permit requirements.

(f) The following vessels are not regulated by this article:

(1) Boilers meeting the requirements of clauses (A), (B), and (C) as follows:

(A) Located in:

- (i) a Class 2 structure as defined in <u>IC 22-12-1-5</u>;
- (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 675 IAC 30-4-16 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 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 $(1 \frac{1}{2})$ 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.

(11) Unfired pressure vessels, other than nuclear vessels, where each of their chambers are operated entirely full of water, or other liquid that is not materially more hazardous than water, if the temperature of the vessel's contents does not exceed one hundred eighty (180) degrees Fahrenheit.

(12) Unfired pressure vessels used as part of a fire protection or suppression system regulated by another article of the commission's rules.

(13) Unfired pressure vessels located on vehicles operating under the rules of other state agencies and used for carrying passengers or freight.

(14) Unfired pressure vessels installed on the right-of-way of railroads and used directly in the operation of trains.

(15) Unfired pressure vessels containing liquefied petroleum gases and regulated by another article of the commission's rules.

(16) Unfired pressure vessels containing anhydrous ammonia that are used in transportation, distribution, or 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 a refinery, utility, or manufacturing or processing plant.

(17) Unfired pressure vessels with a nominal capacity of no more than eighty-five (85) gallons that are used for the temporary storage of chemical or nuclear waste.

(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.

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

(Fire Prevention and Building Safety Commission; 675 IAC 30-1-2; 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.: 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-1-2) to the Fire Prevention and Building Safety Commission (675 IAC 30-1-2) by P.L.249-2019, SECTION 15, effective July 1, 2019.

675 IAC 30-1-3 Classification; availability of rule (Repealed)

Sec. 3. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-1-4 Violations

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

Sec. 4. Any person violating any of the provisions of this article is subject to sanctions under the provisions of IC 22-12-7. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-1-5 Exemptions from inspection

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-1-5; IC 22-12-7; IC 22-13-2; IC 22-15-2-7; IC 22-15-6</u>

Sec. 5. (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 and operating permit requirements:

- (1) Vessels located on a farm and used solely for agricultural purposes.
- (2) Boilers meeting the requirements of clauses (A), (B), (C), and (D) as follows:
 - (A) Contain a volume less than one and one half $(1 \frac{1}{2})$ cubic feet.

(B) Operate entirely full of a liquid heat transfer fluid that will not vaporize at the operating temperature and atmospheric pressure.

- (C) Have a gross output rating not exceeding three hundred thousand (300,000) Btus per hour.
- (D) Are not located in a place of public assembly.
- (3) Unfired pressure vessels that:
 - (A) contain only water under pressure for domestic supply purposes, including 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 a Class 2 structure as defined in $\underline{\text{IC } 22-12-1-5}$ or a residential structure with less than seven (7) apartments.
- (4) Steam cleaner as defined in 675 IAC 30-4-49.

(b) Each of the following objects are covered under the scope of the permit for the system of which it is a part and does not require a separate operating permit; however, the object must meet all other requirements of $\underline{IC 22-15-6}$ and this article:

- (1) Expansion tanks located within a system where the boiler in that system is regulated 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 skid-mounted unit where said unit is regulated 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

Rule 2. Variances (Repealed)

(Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

Rule 3. Administration

675 IAC 30-3-1 Duties of director of the division (Re	epealed)
675 IAC 30-3-2 Registration of owner or user ins	pection agencies; applications; certificates of
authority (Repealed)	
675 IAC 30-3-3 Application for inspector's license	
675 IAC 30-3-4 Application fee for an inspector's lic	ense (Repealed)
675 IAC 30-3-4.1 Examination for inspector's license	
675 IAC 30-3-5 Issuance; renewal; sanction of licens	ses
675 IAC 30-3-6 Reciprocal license; waiver of examin	nation (Repealed)
675 IAC 30-3-7 Inspectors' conflict of interest	
675 IAC 30-3-8 Manufacturers' data reports (Repeale	ed)
675 IAC 30-3-9 Operating permits and inspection scl	hedules

INDIANA BOILER AND PRESSURE VESSEL RULES

Preparation for inspection; notice
Inspection reports
Notice of unsafe boilers and pressure vessels; corrective measures; suspension of operating permit
Notice of new, canceled, or suspended insurance policies
Fees for reports, inspections, and inspection certificates (Repealed)
Availability of operating permits
Validity of inspection certificate; expiration; suspension (Repealed)
Notice of violations; issuance of orders
Assignment of state registration numbers
Restamping
Condemned boilers and pressure vessels; stamping; penalties for use or sale
Incident reports
Used installations (Repealed)
Reinstallations
Nonstandard boilers and pressure vessels (Repealed)
Safety factors for regulated equipment (Repealed)
Factor of safety for regulated equipment

675 IAC 30-3-1 Duties of director of the division (Repealed)

Sec. 1. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-3-2 Registration of owner or user inspection agencies; applications; certificates of authority (Repealed)

Sec. 2. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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. 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:

(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.

(B) Hold an associate degree in mechanical technology plus two (2) years experience in design, construction, operation, or inspection of power boilers and unfired pressure vessels.

(C) Graduate from high school or the equivalent plus three (3) years experience in design, construction, operation, or inspection of power boilers and unfired pressure vessels.

(4) Pay the inspector licensing fee in 675 IAC 12-3-13.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-3-4 Application fee for an inspector's license (Repealed)

Sec. 4. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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 $\underline{\text{IC } 22-15-6-5}(b)(2)$, 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

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

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

Affected: <u>IC 22-12-7</u>; <u>IC 22-15-6</u>

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

(b) A boiler and pressure vessel inspector license expires on December 31 of the year of issuance.

(c) 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 675 IAC 12-3-13.

(d) 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 section 5(a) of this rule [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 division, and the commission under IC 22-15-6-5(d), may sanction a boiler and pressure vessel inspector under IC 22-12-7 if the inspector is found in violation of IC 22-15-6 or any rule of the commission. (*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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-3-6 Reciprocal license; waiver of examination (Repealed)

Sec. 6. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-3-7 Inspectors' conflict of interest

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

Sec. 7. Inspectors licensed by the state of Indiana shall not engage in any activity which constitutes a conflict of interest with their inspection function. (*Fire Prevention and Building Safety Commission; 675 IAC 30-3-7; 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 2-3-7) to the Fire Prevention and Building Safety Commission (675 IAC 30-3-7) by P.L.249-2019, SECTION 15, effective July 1, 2019.*

675 IAC 30-3-8 Manufacturers' data reports (Repealed)

Sec. 8. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-7; IC 22-15-6</u>

Sec. 9. (a) 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 expire one (1) year after issuance. Power boilers shall be inspected as follows:

(A) Externally every twelve (12) months while under pressure, which shall occur approximately six (6) months from the 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.

(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:

(1) For power boilers with rated steaming capacity of three hundred thousand (300,000) pounds per hour or more, 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 operating permit expiration date.
- (B) A report of of [sic] all external inspections required by subdivision (b)(1)(A) [subsection (b)(1)(A)].

(C) A letter from 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 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, 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.

Upon expiration of the extension, the operating permit and inspection schedule shall revert to the requirements of subsection (b)(1).

(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.

(d) The expiration date of the operating permits described in subsection (b) shall be extended for two (2) months, for unexpected issues, upon submitting notification to the division in any approved manner.

(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 $\underline{IC 22-15-6-5}$; 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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 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 Oct 19, 2007, 1:08 p.m.: 20071114-IR-680070389RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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) The first operating permit inspection of a boiler shall be reported on a form patterned after Form NB-5 set forth in Part 2 of the NBIC. Subsequent operating permit inspections of these objects shall be reported on a form patterned after Form NB-6 set forth in Part 2 of the NBIC.

(b) The first operating permit inspection of an unfired pressure vessel shall be reported on a form patterned after Form NB-5 in Part 2 of the NBIC. Subsequent operating permit inspections of these objects shall be reported on a form patterned after Form NB-7 in Part 2 of the NBIC.

(c) The inspection reports mentioned in subsections (a) and (b) shall be submitted to the division within thirty (30) days of the date of the inspection. The results of inspections shall be reported immediately to the division whenever a hazardous condition concerning a boiler or unfired pressure vessel is found to exist. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

Authority: <u>IC 22-13-2-8</u> Affected: IC 4-21.5-4; IC 22-12-7-6

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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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-7; IC 22-15-6</u>

Sec. 13. (a) Insurance inspection agencies shall notify the division within thirty (30) days of all boiler or unfired pressure vessel 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 inspector shall 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-3-14 Fees for reports, inspections, and inspection certificates (Repealed)

Sec. 14. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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. An operating permit for a boiler or unfired pressure vessel shall be readily available for review in a place convenient to the equipment. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-3-16 Validity of inspection certificate; expiration; suspension (Repealed)

Sec. 16. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-</u> <u>675200627FRA</u>, eff Jul 1, 2021)

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 4-21.5-3-6</u>; <u>IC 22-12-7</u>; <u>IC 22-15-6</u>

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 but the same is still deemed safe to continue operation 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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 registration number is assigned to a boiler or unfired pressure vessel as hereinafter provided in this article, the division will assign blocks of such state registration numbers to inspectors upon request. (*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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 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 division within thirty (30) days after the restamping is completed. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-7; IC 22-15-6</u>

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 division who shall declare it prohibited from further use or operation by issuing an order as set forth at IC 22-12-7.

(b) Any boiler or unfired pressure vessel declared prohibited from further use by the division shall be stamped by 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 IC 22-12-7. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 that serves to render a boiler or pressure vessel inoperative and results in personal injury or major property damage, the owner or user or their designee shall, within forty-eight (48) hours of the incident, notify the division and submit an initial report of the incident. In case of a serious incident such as an explosion or loss of life, notice shall be given within twenty-four (24) hours of the incident by telephone 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 protecting health and safety. The owner or user shall cause a detailed report of the incident to 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. (*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.: <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> filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

675 IAC 30-3-22 Used installations (Repealed)

Sec. 22. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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 when a boiler or unfired pressure vessel is 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 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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-3-24 Nonstandard boilers and pressure vessels (Repealed)

Sec. 24. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-</u> <u>675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-3-25 Safety factors for regulated equipment (Repealed)

Sec. 25. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-</u> <u>675200627FRA</u>, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

Rule 4. Definitions

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	<u>675 IAC 30-4-1</u>	Boiler and unfired pressure vessel terms; applicability
	<u>675 IAC 30-4-1.1</u>	"Alteration" defined
	675 IAC 30-4-2	"API-ASME" defined
	675 IAC 30-4-3	"API 510" defined
	675 IAC 30-4-4	"ASME B&PVC" defined
	675 IAC 30-4-5	"Boiler" defined
	675 IAC 30-4-6	"Btu" defined
	675 IAC 30-4-7	"Certificate inspection" defined (Repealed)
	675 IAC 30-4-8	"Chief inspector" defined (Repealed)
	675 IAC 30-4-9	"Commercial toy boiler" defined (Repealed)
	675 IAC 30-4-10	"Commission" defined
	675 IAC 30-4-11	"Commissioner" defined
	675 IAC 30-4-12	"Boiler or unfired pressure vessel prohibited from further use or operation" defined
		(Repealed)
	<u>675 IAC 30-4-13</u>	"Director" defined (Repealed)
	675 IAC 30-4-14	"Division" defined
	675 IAC 30-4-15	"Domestic water heater" defined
	<u>675 IAC 30-4-16</u>	"Exhibition traction engine boiler" defined
	<u>675 IAC 30-4-17</u>	"Existing installation" defined
	675 IAC 30-4-18	"External inspection" defined
	<u>675 IAC 30-4-18.1</u>	"Fired process heater" defined
	<u>675 IAC 30-4-18.2</u>	"Heater" defined
	675 IAC 30-4-18.3	"Heat recovery steam generator (HRSG boiler)" defined
	<u>675 IAC 30-4-18.4</u>	"Historical boiler" defined
	<u>675 IAC 30-4-19</u>	"Hot water heating boiler" defined
	<u>675 IAC 30-4-20</u>	"Hot water supply boiler" defined
	<u>675 IAC 30-4-20.1</u>	"Hydrostatic leak test" defined
	<u>675 IAC 30-4-21</u>	"Inspection agency" defined (Repealed)
	675 IAC 30-4-22	"Inspection certificate" defined (Repealed)

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675 IAC 30-4-23	"Inspector" defined
675 IAC 30-4-24	"Inspector commission" defined (Repealed)
675 IAC 30-4-25	"Inspector's license" defined
675 IAC 30-4-25.1	"Instant-on water heater" defined
675 IAC 30-4-26	"Internal inspection" defined
675 IAC 30-4-27	"Low pressure heating boiler" defined
675 IAC 30-4-27	"Major repair" defined (Repealed)
	"MAWP" defined
<u>675 IAC 30-4-28.1</u> 675 IAC 20-4-20	"Miniature boiler" defined
<u>675 IAC 30-4-29</u> (75 IAC 20 4 20	
<u>675 IAC 30-4-30</u> (75 IAC 20 4 20 1	"Model boiler" defined
<u>675 IAC 30-4-30.1</u>	"Modular boiler" defined
<u>675 IAC 30-4-31</u>	"National Board" defined
<u>675 IAC 30-4-31.1</u>	"National Board Commission" defined
<u>675 IAC 30-4-31.2</u>	"NBBI" defined
<u>675 IAC 30-4-32</u>	"NBIC" defined
<u>675 IAC 30-4-33</u>	"New installation" defined
<u>675 IAC 30-4-34</u>	"Nonstandard boiler" defined
<u>675 IAC 30-4-34.1</u>	"Nonstandard unfired pressure vessel" defined
<u>675 IAC 30-4-35</u>	"Operating permit" defined
<u>675 IAC 30-4-35.1</u>	"Operating permit inspection" defined
<u>675 IAC 30-4-36</u>	"Owner or user" defined
<u>675 IAC 30-4-37</u>	"Owner or user inspection agency" defined (Repealed)
675 IAC 30-4-37.1	"Person" defined
<u>675 IAC 30-4-38</u>	"Place of public assembly" defined
<u>675 IAC 30-4-38.1</u>	"Pool/spa heater" defined
<u>675 IAC 30-4-38.2</u>	"Portable boiler" defined
<u>675 IAC 30-4-39</u>	"Power boiler" defined
<u>675 IAC 30-4-40</u>	"Psi" defined
<u>675 IAC 30-4-41</u> (75 IAC 20 4 42)	"Psig" defined
<u>675 IAC 30-4-42</u> 675 IAC 30 4 42 1	"Reinstalled boiler or unfired pressure vessel" defined
<u>675 IAC 30-4-42.1</u>	"Repair" defined
<u>675 IAC 30-4-43</u> 675 IAC 20-4-44	"Rules board" defined (Repealed) "Secondhand boiler or unfired pressure vessel" defined
<u>675 IAC 30-4-44</u> 675 IAC 30-4-45	"Service water heater" defined
675 IAC 30-4-46	"Special inspector" defined (Repealed)
675 IAC 30-4-47	"Standard boiler or unfired pressure vessel" defined
675 IAC 30-4-48	"State inspector" defined (Repealed)
675 IAC 30-4-48.1	"State registration number" defined
675 IAC 30-4-49	"Steam cleaner" defined
675 IAC 30-4-49.1	"Steam kettle" defined
675 IAC 30-4-49.2	"Thermal fluid heater" defined
675 IAC 30-4-50	"Unfired pressure vessel" defined
675 IAC 30-4-50.1	"Vessel" defined
675 IAC 30-4-51	"Waste heat boiler" defined
675 IAC 30-4-52	"Water softener" defined
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675 IAC 30-4-1 Boiler and unfired pressure vessel terms; applicability Authority: <u>IC 22-13-2-8</u>

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u> Sec. 1. The definitions in this rule apply throughout this article. (*Fire Prevention and Building Safety Commission; 675 IAC* 30-4-1; 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 2-4-1) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-1) by P.L.249-2019, SECTION 15, effective July 1, 2019.

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; filed Apr 28, 2021, 11:03 a.m.:* 20210526-IR-675200627FRA, eff Jul 1, 2021)

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 675 IAC 30-1-1. (*Fire Prevention and Building Safety Commission; 675 IAC 30-4-2; 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

Sec. 3. "API 510" means the American Petroleum Institute Standard 510 – Pressure Vessel Inspection Code as set forth in 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

Sec. 4. "ASME B&PVC" means the American Society of Mechanical Engineers Boiler and Pressure Vessel Code as set forth in 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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-5 "Boiler" defined

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

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 for use external to itself by the direct application of 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 shall include, 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.

(Fire Prevention and Building Safety Commission; 675 IAC 30-4-5; 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-6 "Btu" defined

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

Sec. 6. "Btu" means British thermal units. (*Fire Prevention and Building Safety Commission; 675 IAC 30-4-6; 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 2-4-6) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-6) by P.L.249-2019, SECTION 15, effective July 1, 2019.

675 IAC 30-4-7 "Certificate inspection" defined (Repealed)

Sec. 7. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-8 "Chief inspector" defined (Repealed)

Sec. 8. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-9 "Commercial toy boiler" defined (Repealed)

Sec. 9. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-10 "Commission" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-2-1</u>; IC 22-15-6

Sec. 10. "Commission" means the fire prevention and building safety commission established in IC 22-12-2-1. (*Fire Prevention and Building Safety Commission; 675 IAC 30-4-10; 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 2-4-10) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-10) by P.L.249-2019, SECTION 15, effective July 1, 2019.*

675 IAC 30-4-11 "Commissioner" defined

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

Sec. 11. "Commissioner" means the state building commissioner. (*Fire Prevention and Building Safety Commission;* 675 IAC 30-4-11; 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 2-4-11) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-11) by P.L.249-2019, SECTION 15, effective July 1, 2019.

675 IAC 30-4-12 "Boiler or unfired pressure vessel prohibited from further use or operation" defined (Repealed)

Sec. 12. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-13 "Director" defined (Repealed)

Sec. 13. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-14 "Division" defined

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 10-19-7-1</u>; IC 22-15-6

Sec. 14. "Division" means the division of fire and building safety established in <u>IC 10-19-7-1</u>. (*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.: <u>20071010-IR-680070389RFA</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RFA</u>; readopted filed Sep 4, 2019, 2:20 p.m.: <u>20191002-IR-675190336RFA</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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 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 MAWP.

(4) Two hundred ten (210) degrees Fahrenheit 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-16 "Exhibition traction engine boiler" defined

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

Sec. 16. "Exhibition traction engine boiler" means a boiler that is an integral part of a traction engine, threshing machine, or similar piece of equipment used exclusively for exhibition purposes. (*Fire Prevention and Building Safety Commission; 675 IAC 30-4-16; 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 2-4-16) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-16) by P.L.249-2019, SECTION 15, effective July 1, 2019.*

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 any boiler or unfired pressure vessel installed and placed in operation before 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; 675 IAC 30-4-17; 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

INDIANA BOILER AND PRESSURE VESSEL RULES

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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

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

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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 water or other fluid is heated primarily for space heating purposes and does not exceed any of the following operational limits:

(1) One hundred sixty (160) psig MAWP.

(2) Two hundred fifty (250) degrees Fahrenheit 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

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

Sec. 20. "Hot water supply boiler" means a boiler completely filled with water, used primarily for heating an expendable (normally nonreturnable) supply of hot water for distribution in plumbing systems, for consumption in industrial processes, or for other comparable uses, and that does not exceed any of the following operational limits:

(1) one hundred sixty (160) psig MAWP.

(2) Two hundred fifty (250) degrees Fahrenheit 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

675 IAC 30-4-21 "Inspection agency" defined (Repealed)

Sec. 21. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-22 "Inspection certificate" defined (Repealed)

Sec. 22. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-</u> <u>675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-23 "Inspector" defined

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

Sec. 23. "Inspector" means any 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-4-24 "Inspector commission" defined (Repealed)

Sec. 24. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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 in <u>IC 22-15-6-5</u>. (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.: <u>20071010-IR-680070389RFA</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RFA</u>; readopted filed Sep 4, 2019, 2:20 p.m.: <u>20191002-IR-675190336RFA</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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

 Authority:
 IC 22-13-2-8

 Affected:
 IC 22-15-6-5

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; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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-*

 $\frac{680070389RFA}{20191002-IR-675190336RFA}; readopted filed Sep 5, 2013, 10:09 a.m.: \frac{20131009-IR-680130182RFA}{20191002-IR-675190336RFA}; filed Apr 28, 2021, 11:03 a.m.: \frac{20210526-IR-675200627FRA}{200627FRA}, eff Jul 1, 2021) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-26) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-26) by P.L.249-2019, SECTION 15, effective July 1, 2019.$

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

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

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

(1) Fifteen (15) psig MAWP for steam.

(2) One hundred sixty (160) psig MAWP and two hundred fifty (250) degrees Fahrenheit 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-4-28 "Major repair" defined (Repealed)

Sec. 28. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

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 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 heating surface.
- (4) One hundred (100) psig 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 $(1\frac{1}{2})$ square feet of grate area.

(3) One hundred (100) psig 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

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

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

Sec. 31. "National Board" means the National Board of Boiler and Pressure Vessel Inspectors. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-32 "NBIC" defined

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

Sec. 32. "NBIC" means the National Board Inspection Code as set forth in 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

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

Sec. 33. "New installation" means any boiler or unfired pressure vessel installed and placed in operation after July 1, 1953, which was the effective date of the Indiana Boiler and Pressure Vessel Law 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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

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

Sec. 34. "Nonstandard boiler" means a boiler that does not bear an API-ASME or ASME 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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 the permit required to operate a boiler or unfired pressure vessel as set forth in IC 22-15-6-2. (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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR- <u>675200627FRA</u>, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-1-18</u>; <u>IC 22-15-6</u>

Sec. 36. "Owner or user" means any person, as defined in IC 22-12-1-18, owning or operating any boiler or unfired pressure vessel within 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-37 "Owner or user inspection agency" defined (Repealed)

Sec. 37. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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 <u>IC 22-12-1-18</u>. (Fire Prevention and Building Safety Commission; 675 IAC 30-4-37.1; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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

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

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

(1) at which persons assemble for civic, educational, religious, social, or recreational purposes;

- (2) 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) 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.: <u>20191002-IR-675190336RFA</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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

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

Sec. 39. "Power boiler" means a boiler 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 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.: <u>20071010-IR-680070389RF4</u>; readopted filed Oct 19, 2007, 1:08 p.m.: <u>20071114-IR-680070389RF4</u>; readopted filed Sep 5, 2013, 10:09 a.m.: <u>20131009-IR-680130182RF4</u>; readopted filed Sep 4, 2019, 2:20 p.m.: <u>20191002-IR-675190336RF4</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FR4</u>, eff Jul 1, 2021) 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.*

675 IAC 30-4-40 "Psi" defined

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

Sec. 40. "Psi" means pounds per square inch. (Fire Prevention and Building Safety Commission; 675 IAC 30-4-40; 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 2-4-40) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-40) by P.L.249-2019, SECTION 15, effective July 1, 2019.

675 IAC 30-4-41 "Psig" defined

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

Sec. 41. "Psig" means pounds per square inch gage. (*Fire Prevention and Building Safety Commission;* 675 IAC 30-4-41; 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 2-4-41) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-41) by P.L.249-2019, SECTION 15, effective July 1, 2019.

675 IAC 30-4-42 "Reinstalled boiler or unfired pressure vessel" defined

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

Sec. 42. "Reinstalled boiler or unfired pressure vessel" means a boiler or unfired pressure vessel removed from its original setting and erected at the same location, or erected at a new location without change of ownership. (*Fire Prevention and Building Safety Commission; 675 IAC 30-4-42; 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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA) NOTE: Transferred from the Boiler and Pressure Vessel Rules Board (680 IAC 2-4-42) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-42) by P.L.249-2019, SECTION 15, effective July 1, 2019.*

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

675 IAC 30-4-43 "Rules board" defined (Repealed)

Sec. 43. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

675 IAC 30-4-44 "Secondhand boiler or unfired pressure vessel" defined

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

Sec. 44. "Secondhand boiler or unfired pressure vessel" means a boiler or unfired pressure vessel of which both the location and ownership have been changed. (*Fire Prevention and Building Safety Commission*; 675 IAC 30-4-44; 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 2-4-44) to the Fire Prevention and Building Safety Commission (675 IAC 30-4-44) by P.L.249-2019, SECTION 15, effective July 1, 2019.

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

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

Sec. 45. "Service water heater" means a water heater that exceeds any of the limits for domestic water heaters as defined in 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 MAWP.

(4) Two hundred ten degrees (210) Fahrenheit 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-46 "Special inspector" defined (Repealed)

Sec. 46. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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 that bears the ASME 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-4-48 "State inspector" defined (Repealed)

Sec. 48. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)*

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, from which water flashes into steam when released through a manually operated nozzle that does not exceed any of the following limits:

(1) Three-fourths $(\frac{3}{4})$ 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.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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

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

Sec. 50. "Unfired pressure vessel" means a closed vessel in which internal pressure is 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-4-50.1 "Vessel" defined

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

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021*)

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 that is intended to be operated under pressure 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 sections of 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021)

Rule 5. General Requirements

675 IAC 30-5-1	Inspections
675 IAC 30-5-2	Preparation for inspection
675 IAC 30-5-3	Improper preparation for inspection (Repealed)
675 IAC 30-5-4	Lap seam cracks
675 IAC 30-5-5	Hydrostatic leak tests; alternative tests
675 IAC 30-5-6	Safety appliances; removal or alteration
675 IAC 30-5-7	Low water fuel cut-off devices
675 IAC 30-5-8	Blow-off tanks; outlets and discharges
675 IAC 30-5-9	Location of discharge piping outlets
675 IAC 30-5-10	Pressure reducing valves; relief or safety valves; hand-controlled bypasses
675 IAC 30-5-11	Repairs or alterations to boilers and pressure vessels
675 IAC 30-5-12	State inspection fees
675 IAC 30-5-13	Masonry or structural supports
675 IAC 30-5-14	Service water heaters; exceptions; relief valves
675 IAC 30-5-15	Conditions not covered by this rule

675 IAC 30-5-1 Inspections

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-12-7; IC 22-15-6</u>

Sec. 1. (a) All boilers and unfired pressure vessels not exempted by 675 IAC 30-1-2 or 675 IAC 30-1-5 shall be inspected

at intervals as specified in 675 IAC 30-3-9.

(b) In making inspections of boilers and unfired pressure vessels, inspectors may use either:

(1) the 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 prepare the boiler or vessel for the proposed inspection at an agreed upon time established by the inspector and the owner or user.

(b) For internal inspection of boilers and unfired pressure vessels, the inspector shall specify the nature and extent of preparatory work expected to be completed prior to the inspector's arrival, which shall include, but is not limited to, the following, as applicable for the equipment design:

(1) Isolating the boiler or unfired pressure vessel from its source of pressure.

(2) Isolating and securing the fuel source.

(3) Draining liquid that is present.

(4) Venting and purging the boiler or unfired pressure vessel of toxic, explosive, or other harmful gases or vapors.

(5) 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.

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 a boiler or unfired pressure vessel is to be external only, no advance preparation is required 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-5-3 Improper preparation for inspection (Repealed)

Sec. 3. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-

675200627FRA, eff Jul 1, 2021)

675 IAC 30-5-4 Lap seam cracks

 Authority:
 IC 22-13-2-8

 Affected:
 IC 22-15-6

Sec. 4. The shell or drum of a boiler or unfired pressure vessel in which a lap seam crack is discovered along a longitudinal riveted joint shall be immediately discontinued from use. (*Fire Prevention and Building Safety Commission; 675 IAC 30-5-4; 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 2-5-4) to the Fire Prevention and Building Safety Commission (675 IAC 30-5-4) by P.L.249-2019, SECTION 15, effective July 1, 2019.*

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 leak test, when performed on a boiler or unfired pressure vessel of riveted or welded construction, except a locomotive boiler, shall not exceed the original hydrostatic test pressure. The pressure of a hydrostatic leak test performed on a locomotive boiler shall not exceed one and one-fourth (1 ¼) times the MAWP. During the hydrostatic 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 used to perform a hydrostatic leak test shall meet the requirements of the applicable construction or repair code; however, the maximum water temperature shall not exceed one hundred twenty (120) degrees Fahrenheit.

(b) If the inspector and the owner or user so agree, other examinations or tests in accordance with the ASME B&PVC or Part 3 of the NBIC may be substituted for the 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 remove, or alter, any safety appliance prescribed by this article while a boiler or unfired pressure vessel is in operation, except for the purpose of making emergency repairs.

(b) If a safety appliance is repaired during an outage of a boiler or unfired pressure vessel, it must be reinstalled in accordance with the provisions of this article.

(c) The resetting of a safety appliance at a new pressure shall be done only with the approval of an inspector.

(d) No person shall in any manner load a safety valve to maintain a working pressure in excess of the 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 located 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 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 gauge glass directly to a boiler, provided that such connections from the boiler are nonferrous tees or Ys not less than one-half $(\frac{1}{2})$ inch pipe size between the boiler and the water gauge glass. The water gauge 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 tank and associated piping shall meet 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.

(2) The vent pipe shall have a cross-sectional area at least four (4) times the cross-sectional area of the inlet pipe, 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 B&PVC.

(5) A manhole or an access opening shall be provided.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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>

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Sec. 9. The discharge of a safety valve, a blow-off pipe, or any other discharge piping outlet shall be adequately supported and located 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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 boiler or unfired pressure vessel on the low pressure side does not meet the pressure requirements for the 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 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. Such a bypass shall not be greater in capacity than the pressure reducing valve unless the boiler or unfired pressure vessel downstream therefrom is adequately protected by relief or safety valves or 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) 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 shall be consistent with the rules in the ASME B&PVC, or the rules for repairs contained in Part 3 of the NBIC, the API 510, or the code to which the item was originally constructed.

(b) Each boiler and unfired pressure vessel covered by this article must be repaired by an organization in possession of a valid "R" or "NR" Certificate of Authorization issued by the NBBI. The following are clarifications for repairs:

(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.

(c) Each boiler and unfired pressure vessel covered by this article shall only be altered in accordance with the requirements in Part 3 of the NBIC as set forth in 675 IAC 30-1-1.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-5-12 State inspection fees

Authority: <u>IC 22-12-6-6</u>; <u>IC 22-13-2-8</u> Affected: <u>IC 22-15-6</u>

Sec. 12. If performed by request, a fee for an inspection made by a state inspector may be charged in accordance with the 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 service water heater, as defined in 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 rule shall comply with the applicable provisions of the 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

675 IAC 30-6-1	Compliance with ASME B&PVC special designs
675 IAC 30-6-2	Inspection; assignment of state registration number
<u>675 IAC 30-6-3</u>	Access for inspection of drum heads (Repealed)

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-13-2-11; IC 22-15-6</u>

Sec. 1. (a) No boiler, except an existing installation of a boiler to be reinstalled or one exempted by 675 IAC 30-1-2, shall be installed in this state on or after July 1, 1953, unless it conforms with the edition of the ASME 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 report shall be registered with the NBBI.

(b) Each reinstalled or secondhand boiler shall be installed in accordance with the requirements of Part 1 of the NBIC, as referenced in 675 IAC 30-1-1.

(c) Where a boiler of special design does not comply with the adopted standards in 675 IAC 30-1-1, its construction must be approved in accordance with the variance procedure established in IC 22-13-2-11.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 of a boiler, it shall be inspected by an inspector. At the time of the first operating permit inspection, the inspector shall assign and attach a state registration number, preceded by the letters "IN". The letters and figures shall not be less than one-fourth $(\frac{1}{4})$ inch in height and shall be arranged as follows:

IN 123456

(b) The number assigned shall be one (1) from the series provided to the inspector under 675 IAC 30-3-18.

(c) The number shall not be concealed by lagging or paint and shall be 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.: 2007.*

<u>20191002-IR-675190336RFA</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

675 IAC 30-6-3 Access for inspection of drum heads (Repealed)

Sec. 3. (Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

Rule 7. New Installations of Unfired Pressure Vessels

675 IAC 30-7-1	Compliance with ASME code; special designs
675 IAC 30-7-2	Inspection; assignment of state registration number

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

Authority: <u>IC 22-13-2-8</u> Affected: <u>IC 22-13-2-11; IC 22-15-6</u>

Sec. 1. (a) No unfired pressure vessel, except an existing installation of an unfired pressure vessel to be reinstalled or one exempted by the provisions of 675 IAC 30-1-2, shall be installed in this state on or after July 1, 1953 unless it conforms with 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) Each reinstalled and secondhand unfired pressure vessel shall be installed in accordance with the requirements of Part 1 of the NBIC, as adopted in 675 IAC 30-1-1.

(c) Where an unfired pressure vessel of special design does not comply with the adopted standards in this article, its construction must be approved in accordance with the variance procedure established in $\underline{\text{IC } 22-13-2-11}$.

(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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 of the unfired pressure vessel, it shall be inspected by an inspector. At the time of the first operating permit inspection, the inspector shall assign and attach a state registration number, preceded by the letters "IN". The letters and figures shall not be less than one-fourth $(\frac{1}{4})$ inch in height and shall be arranged as follows:

IN 123456

(b) The number assigned shall be one (1) from the series provided to the inspector in accordance with 675 IAC 30-3-18.
(c) The number shall not be concealed by lagging or paint and shall be visible at all times. (*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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

INDIANA BOILER AND PRESSURE VESSEL RULES

Rule 8. Existing Installations of Power Boilers

8	
675 IAC 30-8-1	MAWP for standard boilers
675 IAC 30-8-2	MAWP for nonstandard boilers
675 IAC 30-8-3	Maximum working pressure for all boilers
675 IAC 30-8-4	MAWP for water tube boilers
675 IAC 30-8-5	Cast iron boilers; use as power boiler prohibited
<u>675 IAC 30-8-6</u>	Access for inspection of drum heads
675 IAC 30-8-7	Inspection; assignment of state registration number; alternative standards
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675 IAC 30-8-13	Blow-off piping; heat protection; fittings
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675 IAC 30-8-16	Conditions not covered by this rule

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 MAWP for a standard boiler shall be determined in accordance with the applicable provisions of the edition of the ASME B&PVC under which 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 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. 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 B&PVC (1971 edition). For tube hole ligaments, E shall be determined by the rules in Section I of the ASME B&PVC.
- $R = One-half(\frac{1}{2})$ 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

¼" t (11/16" rivet) 9/32" t (11/16" rivet) 5/16" t (¾" rivet) 11/32" t (¾" 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) ½" t (15/16" rivet) 9/16" 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 $(4\frac{1}{2})$ 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), 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 second and 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 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,*

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10:09 a.m.: 20131009-IR-680130182RFA; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

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

Sec. 4. The 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-8-5 Cast iron boilers; use as power boiler prohibited

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

Sec. 5. No cast iron boiler shall be used as a power boiler. (Fire Prevention and Building Safety Commission; 675 IAC 30-8-5; 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 2-8-5) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-5) by P.L.249-2019, SECTION 15, effective July 1, 2019.

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 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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 operating permit inspection, the inspector shall assign and attach a state registration number preceded by the letters "IND". The letters and figures shall not be less than one-fourth $(\frac{1}{4})$ inch in height and shall be arranged as follows:

IND 1234

(b) The number assigned shall be one (1) from the series provided to the inspector in accordance with 675 IAC 30-3-18.

(c) The number shall not be concealed by lagging or paint and shall be 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 B&PVC under which they were 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 30-8-7; 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

675 IAC 30-8-8 Feed supply and piping

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

Sec. 8. (a) All boilers shall have a feed supply which will permit the boiler to be fed at any time while the boilers are under pressure.

(b) A boiler having more than five hundred (500) square feet of water heating surface shall have at least two (2) means of feeding. One (1) of these means shall be an approved feed pump, an injector, or an inspirator. A source of feed directly from pressure mains may be considered one (1) of the means if sufficient pressure is available at all times to feed the boiler against a pressure six percent (6%) greater than the release pressure of the safety valve with the highest release setting.

(c) The feed water shall be introduced into the boiler in such manner that it will not be discharged close to riveted joints of shell or furnace sheets, or directly against surfaces exposed to gases at high temperature or direct radiation from the fire.

(d) The feed piping to the boiler shall be provided with a check valve near the boiler and a valve or cock between the check valve and the boiler. When two (2) or more boilers are fed from a common source, there shall also be a valve on the branch to each boiler between the check valve and source of supply. Whenever a globe valve is used on feed piping, the inlet shall be under the disk of the valve.

(e) In all cases where returns are fed back to the boiler by gravity, there shall be a check valve and stop valve on each return line, the stop valve to be placed between the boiler and the check valve, and both shall be located as close to the boiler as is practicable.

(f) When deaerating heaters are not employed, temperature of the feed water shall be no less than one hundred twenty degrees Fahrenheit (120°F). Where deaerating heaters are employed, the minimum feed water temperature shall be not less than two hundred fifteen degrees Fahrenheit (215°F). (*Fire Prevention and Building Safety Commission;* 675 IAC 30-8-8; 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 2-8-8) to the Fire Prevention and Building Safety Commission (675 IAC 30-8-8) by P.L.249-2019, SECTION 15, effective July 1, 2019.

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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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) 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) 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 $(\frac{3}{4})$ inch pipe size.

(b) Each boiler shall have three (3) or more 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, located on the same horizontal line and not less than two (2) feet apart.

(c) For all installations where the water gauge glass or glasses are more than thirty (30) feet from the boiler operating floor, water level indicating or recording 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

Sec. 11. (a) Each steam boiler shall have a steam gauge, with a dial range not less than one and one-half $(1\frac{1}{2})$ times the MAWP, that is connected to the steam space or to the steam connection to the water column. The steam gauge shall be connected to a siphon or equivalent device of sufficient capacity to keep the gauge tube filled with water, and so arranged that the gauge cannot be shut off from the boiler except by a cock placed near the 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 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 provisions for free blowing.

(c) Each boiler shall be provided with a one-fourth (¼) inch nipple and globe valve connected to the steam space for the exclusive purpose of attaching a test gauge when the boiler is in service so that the accuracy of the boiler steam 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-8-12 Stop valves; drainage

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

Sec. 12. (a) 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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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) 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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

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

Sec. 14. (a) 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 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 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 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 shall be checked by one (1) of the following methods and, if found to be insufficient, additional valves shall be provided:

(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 B&PVC.

(2) By determining the maximum evaporative capacity by measuring the feed water.

When either of these methods 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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. 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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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. Any condition not specifically covered by this rule shall be treated as new installations 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

Rule 9. Existing Installations of Miniature Boilers (Repealed)

(Repealed by Fire Prevention and Building Safety Commission; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021)

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

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10. Existing instantation (filled ing Doners (prior to oury 1, 1955)
<u>675 IAC 30-10-1</u>	MAWP for standard boilers
675 IAC 30-10-2	MAWP for nonstandard riveted boilers
675 IAC 30-10-3	MAWP for nonstandard welded boilers
<u>675 IAC 30-10-4</u>	MAWP for nonstandard cast iron boilers
<u>675 IAC 30-10-5</u>	Feed water connections; stop and check valves
675 IAC 30-10-6	Return pumps; water level control
<u>675 IAC 30-10-7</u>	Water gauge glasses; location
<u>675 IAC 30-10-8</u>	Steam gauges for low pressure steam heating boilers; connections; dial range; stops
<u>675 IAC 30-10-9</u>	Pressure or altitude gauges for hot water heating boilers; connections; dial range; stops
675 IAC 30-10-10	Thermometers for hot water heating boilers; location and connection
675 IAC 30-10-11	Stop valves and check valves
675 IAC 30-10-12	Safety valves for low pressure steam heating boilers; dimensions and capacity
675 IAC 30-10-13	Relief valves for hot water heating or supply boilers; settings; dimensions; relief
	capacity
675 IAC 30-10-14	Installation of safety and relief valves
675 IAC 30-10-15	Repair or replacement of fittings or appliances
675 IAC 30-10-16	Inspection; assigning state registration number

675 IAC 30-10-1 MAWP for standard boilers

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

Sec. 1. The MAWP of a heating boiler built in accordance with the ASME 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 MAWP for the shell of a nonstandard heating riveted boiler shall be determined in accordance with 675 IAC 30-8 covering existing installations of power boilers, except that in no case shall the 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 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.: <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> filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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

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

Sec. 5. Feed water connections shall be independent of any water 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.: <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>;*

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675 IAC 30-10-6 Return pumps; water level control

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

Sec. 6. Each condensate return tank where practicable shall be provided with an automatic water level control set to maintain the water level within safe limits. (*Fire Prevention and Building Safety Commission; 675 IAC 30-10-6; 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 2-10-6) to the Fire Prevention and Building Safety Commission (675 IAC 30-10-6) by P.L.249-2019, SECTION 15, effective July 1, 2019.

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 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 gauge shall be raised until the lowest visible part of the 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 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 gauge tube filled with water and so arranged that the gauge cannot be shut off from the boiler except by a cock with a tee or lever handle, placed in the pipe near the 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 gauge shall be graduated to not less than thirty (30) psig. The 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-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; or

(2) smaller than one-half $\binom{1}{2}$ 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 gauge, effective stops shall be set at the limits of the 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.: <u>20191002-IR-675190336RFA</u>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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 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 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 gauge shall be graduated to not less than one and one-half $(1\frac{1}{2})$ times the MAWP. The 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 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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

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

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 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 that has a diameter three-fourths $(\frac{3}{4})$ inch or larger shall have a substantial device 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 $(\frac{3}{4})$ inch and shall have a substantial device 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 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. (*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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 MAWP of the boiler and so arranged that they cannot be reset to relieve at a pressure higher than the MAWP of the boiler. The capacity of water relief valves that have not been officially rated in accordance with the ASME B&PVC shall not be taken into consideration in determining the required relieving capacity.

(b) Each relief value shall have a substantial device 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 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 shall be used for any part.

(d) No relief valve shall be smaller than three-fourths $(\frac{3}{4})$ inch nor larger than four and one-half $(\frac{4}{2})$ 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 $(\frac{1}{4})$ 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; readopted filed Sep 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 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 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 $(4\frac{1}{2})$ 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 valve shall be directed to a safe 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 B&PVC or the NBIC. (*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-*

<u>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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.

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 operating permit inspection, the inspector shall assign and attach a state registration number preceded by the letters "IND". The letters and figures shall not be less than one-fourth $(\frac{1}{4})$ 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 that shall have the state registration number stamped thereon.

(c) The number assigned shall be one (1) from the series provided to the inspector in accordance with 675 IAC 30-3-18.
(d) The number shall not be concealed by lagging or paint and shall be 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 4, 2019, 2:20 p.m.: 20191002-IR-675190336RFA; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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

675 IAC 30-11-1	MAWP for standard unfired pressure vessels
<u>675 IAC 30-11-2</u>	MAWP for nonstandard unfired pressure vessels
<u>675 IAC 30-11-3</u>	Safety factor
<u>675 IAC 30-11-4</u>	Safety appliances
<u>675 IAC 30-11-5</u>	Inspection; assignment of state registration number
<u>675 IAC 30-11-6</u>	Repair or replacement of fittings or appliances

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 MAWP for a standard unfired pressure vessel shall be determined in accordance with the edition of the ASME B&PVC or API-ASME code under which 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

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 MAWP for a nonstandard unfired pressure vessel, for which data is available evidencing it has been so designed and constructed as to be substantially equivalent to a standard unfired pressure vessel except for the stamping, shall be determined on the same basis as for a standard unfired pressure 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 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 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. The equation shall be:

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

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

- TS = Ultimate tensile strength of shell material in pounds 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. 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 seamless shells	E = 100%
For riveted joints	E = calculated joint efficiency
For fusion single lap welds	E = 40%
For fusion double lap welds	E = 60%
For fusion single butt welds	E = 50%
For fusion double butt welds	E = 70%
For forge welds	E = 70%
For brazed steel joints	E = 80%
For brazed copper joints	E = 90%

- 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 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 vessel such as considered in this subsection shall be determined by the applicable formulas in the ASME B&PVC or API-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 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.

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 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 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 Division 1 of the ASME B&PVC shall apply.

(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 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.: <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>; filed Apr 28, 2021, 11:03 a.m.: <u>20210526-IR-675200627FRA</u>, eff Jul 1, 2021) 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.*

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. For high alloy steel the maximum allowable stress value shall be indicated in the applicable table of maximum allowable stress values provided in the applicable provisions of the ASME 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.*

675 IAC 30-11-4 Safety appliances

 Authority:
 IC 22-13-2-8

 Affected:
 IC 22-15-6

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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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 operating permit inspection, the inspector shall assign and attach a state registration number preceded by the letters "IND". The letters and figures shall not be less than one-fourth $(\frac{1}{4})$ 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, which shall have the state registration number stamped thereon.

(c) The number assigned shall be one (1) from the series provided to the inspector in accordance with this 675 IAC 30-3-18.

(d) The number shall not be concealed by lagging or paint and shall be 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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>

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 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; filed Apr 28, 2021, 11:03 a.m.: 20210526-IR-675200627FRA, eff Jul 1, 2021) 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.

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