

SKILLED TRADES REGULATION ACT (EXCERPT)
Act 407 of 2016

ARTICLE 9

BOILER INSPECTORS, INSTALLERS, REPAIRERS, AND OPERATORS AND STATIONARY
ENGINEERS

339.5901 Definitions; "experience" defined.

Sec. 901. As used in this article:

(a) "Antique steam boiler" means a boiler that is no longer used in production applications and is used to demonstrate the historical significance of steam boilers in American history.

(b) "Approved apprenticeship program" means a training program for boiler operators or stationary engineers that is certified by or meets the standards of the Office of Apprenticeship in the United States Department of Labor and is approved by the board.

(c) "Associated auxiliaries" means equipment that is required in the operation of a boiler that includes, but is not limited to, pumps, regulators, feedwater heaters, superheaters, de-superheaters, economizers, air preheaters, draft fans, combustion and pollution control equipment, and prime movers.

(d) "Board" means the board of boiler rules described in section 905.

(e) "Boiler" means a closed vessel in which water is heated, steam is generated, or steam is superheated, or a combination of those actions occurs, under pressure or vacuum by the application of heat from combustible fuels, electricity, or nuclear energy. Boiler does not include facilities of an integral part of a continuous processing unit but does include a fired unit for heating or vaporizing liquids other than water, if the unit is separate from a processing system and is complete within itself.

(f) "Boiler for agricultural purposes" means a portable boiler used in a field or similar open area for the sole purpose of operating farm equipment or farm machinery.

(g) "Boiler operator" or "stationary engineer" means an individual who is engaged in the operation of boilers and associated auxiliaries.

(h) "Certificate inspection" means an inspection that is conducted for purposes of preparing a report described in section 945. The certificate inspection shall be an internal inspection if construction allows; otherwise the certificate inspection shall be as complete an inspection as possible.

(i) "External inspection" means an inspection that does not involve examination of the internal surfaces of the pressure parts of the boiler.

(j) "Heating surface" means the heating surface determined by the boiler manufacturer and recorded in the manufacturer's data report or by rules established by the board for a boiler if the manufacturer's data report is not available or the boiler is not stamped with its heating surface.

(k) "High pressure, high temperature water boiler" means a water heating boiler operating at pressure that exceeds 160 p.s.i.g. or temperatures that exceed 250 degrees Fahrenheit.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5903 Additional definitions.

Sec. 903. (1) As used in this article:

(a) "Low pressure boiler" means a steam boiler operated at pressures that do not exceed 15 p.s.i.g., or a hot water heating boiler operated at pressures that do not exceed 160 p.s.i.g. or temperatures that do not exceed 250 degrees Fahrenheit.

(b) "P.s.i.g." means pounds per square inch gauge.

(c) "Power boiler" means a closed vessel in which steam or other vapor is generated at a pressure of more than 15 p.s.i.g. by the direct application of heat.

(d) "Process boiler" means a boiler that is operated at a pressure or temperature from which more than 10% of the boiler's capacity is used for direct steam humidification or direct process work.

(e) "Qualified technical education program" means an educational program that is approved by the board and that has a minimum of 350 contact hours in classroom hands-on training, field training, or supervised plant visits for high pressure boiler operators. The board may establish lesser standards for an educational program for low pressure operator training or other entry-level training positions only.

(f) "Qualified training program" means any of the following:

(i) An in-house training program approved by the board and offered to boiler operators and stationary engineers by an employer.

(ii) An in-house training program implemented or developed by a utility and offered to boiler operators and stationary engineers by an employer as a result of negotiations between an employer and its employees.

(iii) A boiler training program offered by a branch of the armed forces.

(g) "Secondhand boiler" means a boiler that has changed ownership and location after initial use.

(2) As used in this article and for purposes of any rules promulgated under this article, in connection with any requirements for a license to inspect, install, or repair boilers or for registration as a boiler operator or stationary engineer in 1 or more of the classifications described in section 933, "experience" includes any relevant experience acquired while serving in the armed forces by an individual who was separated from that service if all of the following are met:

(a) The applicant provides to the department a form DD214, a form DD215, or any other form that is satisfactory to the department that demonstrates that he or she was separated from that service, with an honorable character of service or under honorable conditions (general) character of service.

(b) The applicant submits with his or her application for licensure or registration an affidavit or letter signed by a commanding officer, supervisor, or military superior with direct knowledge of the applicant's service that describes his or her experience designing, constructing, manufacturing, installing, inspecting, operating, repairing, or maintaining boilers and associated auxiliaries while serving in the armed forces.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5905 Board of boiler rules; appointment and qualifications of members; quorum.

Sec. 905. (1) The board of boiler rules created in section 3 of former 1965 PA 290 shall continue in existence and is designated as the board for purposes of this article.

(2) The board shall consist of the director or the director's designee, who is a permanent member, and 13 individuals appointed by the governor. All of the following apply to the appointed members of the board:

(a) Except for the representative of the general public, an appointed member must have substantial experience in the design, erection, fabrication, installation, operation, repair, or inspection of boilers.

(b) The appointed members of the board shall include all of the following:

(i) One member who represents the general public.

(ii) Two members who represent owners and users of boilers in this state.

(iii) One member who represents owners and users of power boilers that operate at 1,000 p.s.i.g. or more.

(iv) Two members who represent organized labor in this state that engage in the erection, fabrication, installation, operation, or repair of boilers.

(v) One representative who represents water tube boiler manufacturers that do business in this state.

(vi) One member who represents fire tube boiler manufacturers that do business in this state.

(vii) One member who represents a boiler insurance company that is licensed to do business in this state.

(viii) One member who represents the mechanical contractors in this state that have experience in the installation, piping, or operation of boilers.

(ix) One member who represents boiler repair contractors in this state that are engaged in the business of repairing boilers by welding and riveting.

(x) One member who represents consulting engineers in this state who have boiler experience.

(xi) One member who represents antique steam boiler owners and operators.

(3) Seven members of the board constitute a quorum for the transaction of business. An approval, decision, or ruling of the board is not effective unless supported by a majority of the members present.

History: 2016, Act 407, Eff. Apr. 4, 2017.

Compiler's note: For transfer of authority, powers, duties, functions, and responsibilities of board of boiler rules to department of licensing and regulatory affairs, see E.R.O. No. 2017-1, compiled at MCL 339.3102.

For transfer of the board of boiler rules to the department of licensing and regulatory affairs by type III transfer, and the abolishment of the board, see E.R.O. No. 2024-2, compiled at MCL 16.735.

339.5907 Promulgation of rules; boiler of special design or construction; use of title.

Sec. 907. (1) The department, in consultation with the board, shall promulgate rules for the safe construction, installation, inspection, alteration, servicing, operation, and repair of boilers in this state. For purposes of this subsection, the department by rule may adopt or amend all or any part of an existing published codification or national standards and any amendments and interpretations of the codification or standards.

(2) A departure from the requirements of this section is permitted in an unusual situation involving a boiler of special design or construction if the board is satisfied that a proposed facility will provide a degree of safety commensurate with the intent of this article.

(3) If the department receives an application and the appropriate fee, the board may without examination register an applicant for the use of a title described in section 931 if the applicant is a boiler operator or stationary engineer who is licensed or registered as a boiler operator or stationary engineer in another state or

country or in a municipality whose requirements for licensure or registration are, at a minimum, substantially equivalent to the requirements of this state for registration, as determined by the board, and that other state or country or that municipality extends the same privileges through reciprocity to a boiler operator or stationary engineer who is registered in this state.

History: 2016, Act 407, Eff. Apr. 4, 2017;—Am. 2020, Act 89, Eff. Sept. 14, 2020.

339.5909 State boiler inspection fund; requirements.

Sec. 909. The state boiler inspection fund created under former 1965 PA 290 shall continue as a restricted fund in the state treasury. Beginning on the effective date of this act, all of the following apply to the state boiler inspection fund:

(a) The state treasurer is the custodian of the fund, may invest the surplus of the fund, and shall credit earnings from those investments to the fund.

(b) The state treasurer shall notify the director and the legislature of interest credited and the balance of the fund as of September 30 of each year.

(c) The director shall supervise and administer the fund and is the administrator of the fund for auditing purposes.

(d) Fees received by the department and money collected under this article shall be deposited in the state boiler inspection fund and shall be appropriated by the legislature for the operations of the boiler division and indirect overhead expenses in the department.

(e) Money in the fund at the end of each fiscal year shall remain in the fund and shall not lapse to the general fund.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5911 Nonconforming boilers; special installation and operation permit.

Sec. 911. A boiler that does not conform to the rules and regulations formulated by the board that governs new construction and installation shall not be installed and operated in this state after July 1, 1966, unless the boiler is of special design or construction, is not covered by the rules and regulations, and is not in any way inconsistent with those rules and regulations, in which case the board in its discretion may grant a special installation and operation permit for that boiler.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5913 Maximum allowable pressure; determination; computation; use, sale, or reinstallation of existing boiler.

Sec. 913. (1) The maximum allowable pressure of a boiler that carries the American Society of Mechanical Engineers' code symbol shall be determined by the applicable sections of the code under which it was constructed and stamped.

(2) The maximum allowable pressure of a boiler that does not carry the American Society of Mechanical Engineers' code symbol may be computed in accordance with the inspection code of the National Board of Boiler and Pressure Vessel Inspectors.

(3) This article shall not be construed in a manner that prevents the use, sale, or reinstallation of an existing boiler, if the boiler is made to conform to the rules and regulations of the board that governs existing installations and is found on inspection to be in a safe condition.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5915 Article inapplicable to certain boilers.

Sec. 915. This article does not apply to any of the following:

(a) Boilers under federal control.

(b) Boilers used in the power plants of self-propelled vehicles designed primarily for the transportation of individuals or property on a highway, except vehicles used exclusively on stationary rails or tracks.

(c) Boilers used solely for agricultural purposes.

(d) Steam or vapor boilers that carry a pressure of not more than 15 p.s.i.g. and are located in a private residence or in an apartment building with a capacity of fewer than 6 families.

(e) Hot water boilers operated at a pressure that does not exceed 160 p.s.i.g. or a temperature that does not exceed 250 degrees Fahrenheit and are located in a private residence or in an apartment building with a capacity of fewer than 6 families.

(f) Miniature steam or marine engines used as a hobby.

(g) Boilers used on farms for mint processing purposes.

(h) Subject to section 919, miniature hobby locomotives that operate on narrow gauge tracks that are less

than 24 inches in width.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5917 Antique steam boiler; compliance with rules; inspection; certificate of inspection.

Sec. 917. An antique steam boiler shall comply with the rules promulgated by the board and shall be inspected once every 3 years. An owner of an antique steam boiler may request an inspection more often than every 3 years. An antique steam boiler used for commercial purposes shall be inspected annually. The department shall issue a certificate of inspection if the antique steam boiler is in compliance with the applicable rules.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5919 Miniature hobby locomotive; inspection; report; fee; inspection and certification by club; "public display or use" defined.

Sec. 919. (1) The department shall inspect annually a miniature hobby locomotive that is operating in a public display or use. The inspection shall be conducted by a deputy inspector or special inspector or by a miniature hobby locomotive club in the manner described in subsection (3). The inspector shall file a copy of the inspection report with the chief inspector and provide a copy of the inspection report to the owner of the miniature hobby locomotive.

(2) The fee for an inspection under subsection (1) that is conducted by a deputy or special inspector is \$15.00. If the owner demonstrates that the miniature hobby locomotive boiler complies with the applicable rules governing miniature hobby locomotives, the department shall issue a certificate of inspection to that owner for the locomotive.

(3) A miniature hobby locomotive club may apply to the board for approval to inspect and certify boilers used in miniature hobby locomotives and the board shall grant that approval if the board determines that the club complies with and applies the inspection and certification standards established in the rules. After approval and authorization by the board, the miniature hobby locomotive club may inspect boilers and certify to the board that a miniature hobby locomotive complies with the standards contained in the rules.

(4) As used in this section, "public display or use" means display to or use by the general public and not by the owner or the owner's family.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5921 Chief inspector; appointment; qualifications; powers.

Sec. 921. (1) Subject to civil service rules, the director shall appoint a chief inspector for purposes of subsection (2). The department may only appoint an individual who meets all of the following as the chief inspector:

(a) Is a resident of this state.

(b) Has at least 10 years of experience in the inspection, construction, maintenance, repair, or operation of high pressure boilers as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector.

(c) Has passed the chief inspector examination under section 927 or meets either of the following:

(i) Holds a license or a certificate of competency as an inspector of boilers for a state that has a standard of examination substantially equal to the standard of this state, as determined by the board.

(ii) Holds a license as an inspector of boilers issued by the National Board of Boiler and Pressure Vessel Inspectors.

(2) If authorized by the director, the chief inspector appointed under subsection (1) may do any of the following:

(a) Cause the prosecution of all violators of this article.

(b) Issue, revoke for cause, or suspend inspection certificates under section 945.

(c) Enforce the laws of the state that govern the use of boilers to which this article applies.

(d) Keep a complete record of the type, dimensions, maximum allowable pressure, age, location, and date of the last recorded inspection of all boilers to which this article applies.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5923 Deputy inspector; employment; qualifications.

Sec. 923. Subject to civil service rules, the director shall employ deputy inspectors who are responsible to the chief inspector. The department may only appoint an individual who meets all of the following as a deputy inspector:

(a) At the time of appointment, has at least 5 years of experience in the inspection, construction, maintenance, repair, or operation of high pressure boilers as a mechanical engineer, steam operating engineer,

boilermaker, or boiler inspector.

(b) Has passed the deputy inspector examination under section 927 or meets either of the following:

(i) Holds a license or a certificate of competency as an inspector of boilers for a state that has a standard of examination substantially equal to the standard of this state, as determined by the board.

(ii) Holds a license as an inspector of boilers issued by the National Board of Boiler and Pressure Vessel Inspectors.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5925 Special inspector; request; qualifications; application for license; fee; license renewal; salary or expenses from state prohibited; continuance of license; condition; inspection; exemption from fee.

Sec. 925. (1) The director shall issue a license as a special inspector under this section to an individual who meets the requirements of subsection (2) if the director receives a request from any of the following:

(a) A person that is authorized to insure against loss from explosion of boilers in this state.

(b) A city that has an authorized boiler inspection department.

(c) A person that operates boilers in this state, for which the owner or user maintains a regularly established inspection service that is under the supervision of 1 or more registered professional engineers who are regularly employed by the owner or user.

(2) The department shall not issue a license as a special inspector to an individual under subsection (1) unless he or she meets all of the following:

(a) Has passed the special inspector examination under section 927 or meets either of the following:

(i) Holds a license or a certificate of competency as an inspector of boilers for a state that has a standard of examination substantially equal to the standard of this state, as determined by the board.

(ii) Holds a license as an inspector of boilers issued by the National Board of Boiler and Pressure Vessel Inspectors.

(b) Is employed full-time by the insurer, city, or person described in subsection (1)(a) to (c) and his or her duties include making inspections of boilers that are, as applicable, insured by the insurer; used in the city and subject to inspection by the boiler inspection department; or used, or to be used, by the person that operates boilers in this state and not for resale.

(c) Any other applicable requirements of this section.

(3) A person or city described in subsection (1) shall apply for a license as a special inspector of boilers by filing, at least 30 days before the date of the special inspector examination under section 927, an application with the department and including with the application the appropriate fee established by the department. Payment of the fee entitles the individual who will hold the special inspector license to take the special inspector examination under section 927, twice if necessary, and if successful in passing either examination, to issuance of a license. An additional fee must accompany each subsequent application. A license issued to a special inspector may be renewed annually by submitting a renewal application and the applicable fee.

(4) A special inspector shall not receive a salary or any expenses from this state. The continuance of a special inspector's license is conditioned on the inspector continuing in the employ of an insurer, city, or person described in subsection (1)(a) to (c) and on the inspector maintaining the standards imposed under this article.

(5) A special inspector shall inspect all boilers insured, operated, or under the jurisdiction of his or her employer and, when inspected, the owner and user of a boiler is exempt from the payment to the department of the inspection fee established by the department under article 4.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5927 Examination for chief, deputy, or special inspectors, boiler operators, and stationary engineers.

Sec. 927. (1) All of the following apply to an examination for chief, deputy, or special inspectors, boiler operators, and stationary engineers:

(a) The examination shall be a written examination.

(b) The board shall administer the examination and ensure that at least 2 members of the board are present at all times during the examination.

(c) The examination shall only include questions that will aid in determining the fitness and competency of the applicant for the intended service, and may be the questions prepared by the National Board of Boiler and Pressure Vessel Inspectors.

(d) The board may adopt any examination it determines appropriate and may delegate any administrative functions relating to the conduct of the examination.

(2) If an individual fails to pass the examination described in this section, he or she may appeal to the board for another examination and the board shall give that examination within 90 days.

(3) The record of an individual's examination under this article is only accessible to the individual and his or her employer.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5929 License not required for employee; application of article 8; exemption.

Sec. 929. (1) An individual in the employ of a licensee is not required to obtain a license.

(2) A person that is licensed under article 8 in the classification of hydronic heating and cooling and process piping may install, repair, alter, and remove a residential boiler that is installed in a residence and exempt from this article under section 915 without obtaining a license.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5931 Operation of boiler and auxiliaries without registration; use of terms or titles; registration requirements.

Sec. 931. (1) An individual may operate a boiler and associated auxiliaries without obtaining a registration under this article.

(2) An individual or his or her employer shall not use the terms "registered boiler operator", "certified boiler operator", "registered stationary engineer", "certified stationary engineer", "low pressure registered boiler operator", "low pressure certified boiler operator", "high pressure registered boiler operator", "high pressure certified boiler operator", "third-class registered stationary engineer", "third-class certified stationary engineer", "second-class registered stationary engineer", "second-class certified stationary engineer", "first-class registered stationary engineer", "first-class certified stationary engineer", or any other name, style, or description that indicates that the individual is registered unless the individual holds a registration under this article.

(3) An individual who participates in an approved apprenticeship program, a qualified technical training program, or a qualified training program may use the title "apprentice certified boiler operator" or "apprentice certified stationary engineer".

(4) An individual who is registered under this article shall only use 1 of the titles described in subsection (2) or the abbreviation "R.B.O.", "C.B.O.", "R.S.E.", or "C.S.E.".

(5) An individual who is applying for a registration under this article must be at least 18 years old and meet the requirements under article 2.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5933 Classification of boiler operator and stationary engineer registrations.

Sec. 933. For purposes of this article, boiler operator and stationary engineer registrations are classified as follows:

(a) Low pressure boiler operators, who operate low pressure boiler plants that have an aggregate of not more than 4,000 square feet of boiler heating surface.

(b) High pressure boiler operators, who operate boiler plants that have an aggregate of not more than 4,000 square feet of boiler heating surface or not more than 10 steam engine-turbine horsepower.

(c) Third-class stationary engineers, who operate boiler plants that have an aggregate of not more than 7,500 square feet of boiler heating surface or not more than 100 steam engine-turbine horsepower.

(d) Second-class stationary engineers, who operate boiler plants that have an aggregate of not more than 20,000 square feet of boiler heating surface or not more than 200 steam engine-turbine horsepower.

(e) First-class stationary engineers, who operate boiler plants that have an aggregate of 20,000 square feet or more of boiler heating surface or 200 steam engine-turbine horsepower or more.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5935 Qualified technical education programs; course content; rules.

Sec. 935. (1) The department by rule shall designate the course content for qualified technical education programs for the various categories and classifications of registration of boiler operators and stationary engineers under this article.

(2) The rules described in subsection (1) shall provide that the course content of qualified technical education programs for entry-level registrants include at least all of the following subject matter areas:

(a) Basic functions, construction, and operation of all types of boilers.

(b) The function of boiler appliances, accessories, and associated auxiliaries.

(c) Materials used in boilers and the effect of temperature extremes on those materials.

- (d) The fuels used in boilers and fundamentals of combustion.
 - (e) Basic electricity.
 - (f) Plant operation and boiler maintenance.
 - (g) Instrumentation and controls.
 - (h) Fundamental mathematics and principles of the metric system.
 - (i) General safety procedures.
 - (j) Recognition of dangerous operation conditions.
- (3) The department shall provide that the course content for categories and classifications of registrants under this article, other than entry-level registrants, includes subject matter similar to those described in subsection (2) in the degree of depth and difficulty appropriate for the category and class.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5937 Registration; requirements; qualifications.

Sec. 937. (1) The director shall not issue a registration for a title described in section 931(2) unless the applicant meets the requirements under this section that are applicable to the classification of registration for which the applicant is seeking registration, as described in this section.

(2) An applicant for a low pressure boiler operator registration shall have at least 1 year of experience operating or maintaining low or high pressure boilers, steam prime movers, or associated auxiliaries.

(3) An applicant for a high pressure boiler operator registration shall have 1 or more of the following:

- (a) At least 2 years of experience in the operation of a high pressure boiler.
- (b) A low pressure boiler operator's registration and at least 1 year of experience in the operation of a low pressure boiler.
- (c) At least 1 year of either a qualified training program, a qualified technical education program, or an approved apprenticeship program.

(4) An applicant for a third-class stationary engineer registration shall meet 1 or more of the following requirements:

(a) Is registered as a high pressure boiler operator and has at least 1 year of experience in the operation of a high pressure boiler.

(b) Is registered as a low pressure boiler operator, has at least 1 year of experience in the operation of a low pressure boiler, and has at least 1 year of maintenance experience on high pressure boilers and associated auxiliaries.

(c) Is registered as a high pressure boiler operator and has at least 1 year of boiler maintenance experience or at least 1 year as an apprentice in an approved training program in a high pressure boiler plant that has an aggregate heating surface of more than 4,000 square feet.

(d) Has at least 3 years of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 4,000 square feet.

(e) Has at least 1 year of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 4,000 square feet along with sufficient experience operating steam prime movers in excess of 10 horsepower for a combined total of at least 3 years of experience.

(f) Has an associate degree in energy technology or a related field, as determined by the board, with a power engineering option from a 2-year college whose program is approved by the board and employment or cooperative education experience of at least 360 hours as a power engineer, boiler operator, or stationary engineer in a steam electric generation plant or a high pressure steam heating or process plant.

(5) An applicant for a second-class stationary engineer registration shall meet 1 or more of the following requirements:

(a) Is registered as a third-class stationary engineer and has at least 1 year of experience as a third-class stationary engineer.

(b) Has a bachelor's degree in engineering, engineering technology, heating/power technology, or energy technology from a college or university whose program is approved by the board and employment experience as an engineer in the engineering or research division of a steam electric power generating plant for at least 1 year.

(c) Has at least 4 years of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 7,500 square feet.

(d) Has at least 1 year of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 7,500 square feet along with sufficient experience operating steam prime movers in excess of 100 horsepower for a combined total of at least 4 years of experience.

(e) Has at least 1 year of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 7,500 square feet along with sufficient experience operating boilers in

a high pressure boiler plant that have an aggregate heating surface of more than 4,000 square feet for a combined total of at least 4 years of experience.

(6) An applicant for a first-class stationary engineer registration shall meet 1 or more of the following requirements:

(a) Is registered as a second-class stationary engineer and has at least 2 years of experience as a second-class stationary engineer.

(b) Has at least 6 years of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 20,000 square feet.

(c) Has at least 2 years of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 20,000 square feet along with sufficient experience operating steam prime movers in excess of 200 horsepower for a combined total of at least 6 years of experience.

(d) Has at least 2 years of experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 20,000 square feet along with sufficient experience in the operation of boilers in a high pressure boiler plant that have an aggregate heating surface of more than 7,500 square feet of heating surface for a combined total of at least 6 years of experience.

(e) Completes a 4-year approved apprenticeship program or a 4-year qualified training program.

(f) Completes a 4-year program with a bachelor's degree from a college or university in engineering, engineering technology, heating/power technology, or energy technology whose program is approved by the board and which includes a hands-on power option from a 2-year community college program or the equivalent, as determined by the board, and not less than 1 year of employment, internship, or cooperative education experience in a steam electric generation plant or high pressure steam heating process plant.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5938 Lost or destroyed license or registration; reissuance; fee.

Sec. 938. If a license or registration issued under this article is lost or destroyed, the department shall issue a new license or registration, without examination, if a fee of \$5.00 is paid and an application for a new license or registration is submitted, accompanied by a written statement made by the licensee or registrant that the license or registration was lost or destroyed.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5939 Installation or alteration of boiler; permit required.

Sec. 939. A person shall not install or alter a boiler without first obtaining a permit to install or alter the boiler from the boiler division of the department. All of the following apply for purposes of the permit requirement under this section:

(a) A person is not eligible for a permit if the person is not licensed under this article.

(b) An individual shall not perform work for which a permit is required unless he or she is licensed under this article, or he or she performs the work under the immediate supervision of an individual who is licensed under this article.

(c) A person shall obtain a permit by submitting an application to the department and including with the application a permit fee in an amount established by the department under article 4. A permit fee is not required for a boiler that is exempt from inspection under section 915.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5941 Repair of boiler; permit required; exception.

Sec. 941. A person shall not repair a boiler without first obtaining a permit to repair the boiler from the boiler division of the department, unless the repair has been authorized by a licensed inspector pending issuance of the permit, or the repair is emergency maintenance performed by qualified welders regularly employed by a person that utilizes properly qualified welding procedures to weld on boilers owned and operated by the person. All of the following apply for purposes of the permit to repair requirement under this section:

(a) A person is not eligible for a permit if the person is not licensed to repair boilers under this article.

(b) An individual shall not perform work for which a permit is required unless he or she is licensed to repair boilers under this article, or he or she performs the work under the immediate supervision of an individual who is licensed to repair boilers under this article.

(c) A person shall obtain a permit by submitting an application to the department and including with the application a permit fee in an amount established by the department under article 4. However, a person is not required to pay a permit fee if the person utilizes properly qualified welding procedures and regularly employs qualified welders, registered with the boiler division of the department, to weld on boilers owned and

operated by the person.

History: 2016, Act 407, Eff. Apr. 4, 2017.

339.5943 New or used boiler; use in this state; inspected; requirements.

Sec. 943. A boiler used or proposed for use in this state shall be thoroughly inspected as to the boiler's construction, installation, and condition. All of the following apply for purposes of this inspection requirement:

(a) A power boiler, process boiler, or high pressure high temperature water boiler shall receive a certificate inspection annually and shall be externally inspected annually, while under pressure, within 6 months from the date of the certificate inspection.

(b) A low pressure steam or vapor heating boiler shall receive a certificate inspection every 2 years. A hot water heating boiler or hot water supply boiler shall receive a certificate inspection every 3 years.

(c) A grace period of 2 months beyond the periods described in subdivisions (a) and (b) may elapse between certificate inspections.

(d) On a case-by-case basis, as provided in rules promulgated by the department, the board may permit longer periods of up to 36 months between certificate inspections described in subdivisions (a) and (b).

(e) The chief inspector, a deputy inspector, or a special inspector shall perform the inspection of a boiler.

(f) If a hydrostatic test is considered necessary by the inspector, the owner or user of the boiler shall perform that test.

(g) A boiler, other than a cast iron sectional boiler, that is to be installed in this state shall be inspected during construction, as required by the applicable rules of the board, by an inspector who is licensed to inspect boilers in this state. If the boiler was constructed outside of the state, the boiler shall have been inspected by an inspector who holds a license as an inspector of boilers for a state that has a standard of examination substantially equal to that of this state or a license issued by the National Board of Boiler and Pressure Vessel Inspectors.

History: 2016, Act 407, Eff. Apr. 4, 2017;—Am. 2020, Act 89, Eff. Sept. 14, 2020.

339.5945 Inspection report; filing; form; fee; issuance, contents, validity, posting, and suspension of inspection certificate.

Sec. 945. (1) Within 30 days following a boiler certificate inspection required under this article, the chief inspector, a deputy inspector, or the person that employs a special inspector who performed the inspection shall file a report of the inspection with the chief inspector, on a form approved by the board. A form may be 1 of the forms recommended by the National Board of Boiler and Pressure Vessel Inspectors. A report of an external inspection is not required unless the external inspection discloses that a boiler is in a dangerous condition.

(2) If a report filed under subsection (1) indicates that a boiler complies with the rules of the board, the owner or user of the boiler shall pay a fee, in an amount established by the department under article 4, directly to the department and the department shall issue to that owner or user an inspection certificate that states the date of inspection and specifies the maximum pressure under which the owner or user may operate the boiler. All of the following apply to an inspection certificate issued under this section:

(a) An inspection certificate is valid for not more than 12 months for a power boiler, except that the certificate is valid during a 2-month grace period under section 943(c) or during an extension approved by the board under section 943(d). The grace period provided under section 943(c) only applies to a 12-month certificate and does not apply to extensions approved by the board under section 943(d) beyond the 12-month certificate.

(b) An inspection certificate is valid for not more than 24 months for a low pressure steam or vapor heating boiler and 36 months for a hot water heating boiler or hot water supply boiler, except that the certificate is valid during a grace period under section 943.

(c) An owner or user of a boiler shall post an inspection certificate under glass in the room in which the boiler is located. If the boiler is not located within the building, the owner or user shall post the certificate in a location that is convenient to the boiler that was inspected or in a place that is accessible to interested parties.

(3) An inspection certificate issued for an insured boiler by a special inspector is not valid after the boiler for which the certificate was issued ceases to be insured by a company authorized by this state to carry the insurance, if the insurance was terminated because of an unsafe condition or a violation of a rule of the board.

(4) The chief inspector may suspend an inspection certificate if, in his or her opinion, the boiler for which the certificate was issued cannot be operated without harm to the public safety, or if the boiler is found not to comply with the rules promulgated under this article. A suspension of an inspection certificate shall continue in effect until the boiler conforms to the rules of the board and the inspection certificate is reinstated.

History: 2016, Act 407, Eff. Apr. 4, 2017;—Am. 2020, Act 89, Eff. Sept. 14, 2020.

339.5946 Operation of boiler; valid inspection certificate required; pressure restrictions; violation; penalties.

Sec. 946. (1) A person shall not operate under pressure a boiler that is subject to the inspection requirements provided in this article without a valid inspection certificate.

(2) A person shall not cause a boiler that is subject to the inspection requirements provided in this article to be operated at a pressure that exceeds the maximum operating pressure specified on the boiler's inspection certificate.

(3) In addition to any penalties or remedies under article 6, a person that violates this section is guilty of a misdemeanor punishable by a fine of not more than \$500.00, or imprisonment for not more than 60 days, or both. Each day a boiler is operated in violation of this section is a separate offense.

History: Add. 2020, Act 89, Eff. Sept. 14, 2020.

339.5947 Applicability of article; failure to comply; revocation; audit.

Sec. 947. (1) This article does not apply to or in any city that has a population of 600,000 or more according to the most recent decennial census.

(2) Subject to subsection (3), the requirement to obtain a license or permit under this article to repair a boiler or replace a boiler with a similar unit does not apply to a public utility or industrial plant that repairs and maintains its own boilers in accordance with all of the following:

(a) The boiler, the boiler's external piping, and any nonboiler external piping is owned and operated by the utility or plant.

(b) The utility or plant has in effect a quality program that includes and is governed by a quality manual.

(c) The quality program described in subdivision (b), at a minimum, addresses the necessary subjects relative to the scope of work to be performed, including, but not limited to, repair or replacement of boilers, boiler external piping, and nonboiler external piping.

(d) The content of the quality manual required under subdivision (b) includes all of the following:

(i) A title page that lists the name and complete address of the utility or plant.

(ii) A table of contents page listing the contents of the manual by subject.

(iii) A scope of work statement that clearly indicates the scope of work governed by the quality program.

(iv) A statement of authority reflecting a corporate resolution or policy that recognizes the obligation of the utility or plant to comply with this act at all times and includes the name of the individual who is responsible for and has authority over the scope of work governed by the quality program.

(v) Provisions for making, and issuing revisions to, the quality manual to ensure that the quality program is current with accepted practices and procedures as they are practiced within the utility or plant.

(vi) The method used by the utility or plant to ensure that only acceptable materials, including, but not limited to, acceptable welding materials, are ordered, verified, and identified in storage.

(vii) The method used by the utility or plant for documenting repairs in sufficient detail, including, but not limited to, documentation of both of the following:

(A) The prior acceptance by an inspector who is licensed to inspect boilers in this state of the method to be used for a repair of a boiler or a boiler's external piping.

(B) The individual responsible for notifying the inspector described in this subparagraph of the repair work to be performed on a boiler or a boiler's external piping and for keeping the inspector apprised of the progress of that work.

(viii) A description of the controls used by the utility or plant to ensure that only qualified welding procedures, and only welders qualified to use those procedures, are used for repairs.

(ix) A description of the controls used by the utility or plant for nondestructive examination and heat treatment procedures.

(x) Identification of the methods of examination and testing required by the utility or plant upon the completion of a repair.

(xi) The name of the individual responsible for acceptance of a completed repair.

(xii) Provisions allowing for inspector access to areas where repair work is being performed.

(xiii) The name of the individual responsible for preparing, signing, and presenting forms commonly known as record of welded forms to inspectors and sending those forms to the boiler division of the department.

(xiv) A system for the correction of nonconformities.

(xv) A sample form for each form referenced in the quality manual.

(e) The utility or plant keeps a maintenance record, subject to audit by state inspectors, for each boiler. The

maintenance record must contain an adequate description of each abnormal event concerning the boiler, and any modification, repair, hydro test, internal or external inspection, or off-normal operation of the boiler.

(f) The utility or plant contracts with an approved third-party inspection and insurance company for repair work performed on a boiler or a boiler's external piping.

(g) All welders working on boilers or piping under the quality program are employees of the utility or plant.

(h) All welding, heat treatment, nondestructive examination, and testing procedures are qualified in accordance with the applicable code of the American Society of Mechanical Engineers, as determined by the department.

(i) The utility or plant consistently maintains documentation between audits of nonboiler external piping repairs or replacements.

(j) Third-party employees or contractors do not work under the quality program established by the utility or plant as it relates to the installation or repair of boilers.

(k) The utility or plant notifies the boiler division of the department before the utility or plant replaces a boiler.

(l) The utility or plant prepares and files with the boiler division of the department an appropriate record of a welded repair form, signed by an inspector who is licensed to inspect boilers in this state, not more than 180 days after the completion of a welded repair.

(3) A public utility or industrial plant is not exempt under subsection (2) unless the board approves that exemption. Upon board approval of the exemption, the department shall grant the utility or plant an exemption from the licensing and permit requirements of this article for repairs to boilers and boiler piping or the installation of a boiler replacement.

(4) Failure of a public utility or industrial plant to comply with any of the provisions of this section as applicable to that utility or plant is just cause for revocation of the exemption status granted under subsection (3).

(5) To ensure continued compliance with this article and the board's requirements, the chief of the boiler division of the department shall cause an audit of the exemption status granted under subsection (3) to be conducted not less than once every 3 years.

History: 2016, Act 407, Eff. Apr. 4, 2017;—Am. 2020, Act 89, Eff. Sept. 14, 2020.