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SENATE BILL NO. 346

AMENDMENT IN THE NATURE OF A SUBSTITUTE

(Proposed by the Senate Committee on General Laws and Technology
on January 22, 2020)

(Patron Prior to Substitute—Senator Bell)

A BILL to amend the Code of Virginia by adding in Chapter 11 of Title 54.1 an article numbered 7, consisting of sections numbered 54.1-1149 through 54.1-1156, relating to contractors, on-site superintendents; boiler and pressure vessel operator license.

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Chapter 11 of Title 54.1 an article numbered 7, consisting of sections numbered 54.1-1149 through 54.1-1156, as follows:

Article 7.

Onsite Superintendent Boiler Operators.

§ 54.1-1149. Definitions.

As used in this article, unless the context requires a different meaning:

"Accredited" means accredited by an accrediting body recognized by the U.S. Department of Education.

"Boiler" means a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure or vacuum for use externally to itself by the direct application of heat. "Boiler" includes fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves.

"Boiler operator" means an individual who would normally be the senior operational and maintenance person at the site of the boiler who would be expected to react to changing operational and maintenance situations.

"Heating plant" means a heating system containing a low-pressure steam or hot water boiler used to generate energy for use in heating buildings, potable water, or processing.

"High-pressure boiler" means a steam boiler where the safety valves are set to relieve at a pressure of more than 15 pounds per square inch.

"Horsepower rating of a boiler" means the largest rating determined in accordance with each of the following: (i) by dividing the square feet of boiler heating surface by 10; (ii) the manufacturer's rated output in horsepower; or (iii) where the manufacturer's rated output is expressed in terms other than horsepower, such rating converted into horsepower by the use of one of the factors as defined in this article.

"Hot water heating boiler" means any hot water boiler operated at pressures not exceeding 160 psi or temperatures not exceeding 250°F.

"Low-pressure boiler" means a steam boiler in which the safety valves are set to relieve at a pressure of 15 pounds per square inch or less and hot water heating boilers.

"Multifamily dwelling unit" means the same as that term is defined in § 55.1-1200.

"Pressure vessel" means any vessel (i) the pressure of which is obtained from an external source or by an internal or external application of heat and (ii) that is an auxiliary to a boiler plant.

"One boiler horsepower" means (i) the evaporation of 34.5 pounds of water per hour from and at 212°F; (ii) 33,475 British Thermal Units (B.T.U.) per hour; (iii) 140 square feet of steam radiation; (iv) 224 square feet of water radiation at 150°F; or (v) 10 kilowatts per hour electrical input to boiler.

"Steam plant" means a system containing a high-pressure boiler to generate energy for use in heating, power generation, or processing operations.

§ 54.1-1150. License required.

A. Any boiler operator responsible for maintaining safe boiler, unfired pressure vessel, and water heater operations in a multifamily dwelling unit shall be licensed as a boiler operator by the Board pursuant to the provisions of this article. Onsite superintendents licensed in the maintenance of safe boiler, unfired pressure vessel, and water heater operations shall not be required to hold any other professional or occupational license or certification; however, nothing in this subsection shall prohibit an individual from holding more than one professional or occupational license or certification.

B. Any individual desiring to be licensed as a boiler operator shall file a written application on a form prescribed by the Board. The application shall be accompanied by a fee set by the Board pursuant to § 54.1-201. The application shall contain, at a minimum, the applicant's name, place of employment, and business address and information on the knowledge, skills, abilities, and education or training of the applicant.

C. Nothing in this article shall be construed to prevent a person who is not licensed as a boiler operator under this article from performing maintenance or other repairs that are not related to boilers,

unfired pressure vessels, or water heater operations.

§ 54.1-1151. Issuance of License; examination; expiration.

A. Boiler operators licensed under this article shall be duly licensed in the proper class. The Board shall issue a license to practice as a boiler operator in the appropriate class in the Commonwealth to any onsite superintendent who has submitted satisfactory evidence that he has successfully:

1. Completed the educational requirements as required by the Board, which shall at a minimum include such requirements as the Board determines will establish minimum competency on the part of the applicant;

2. Completed the experience requirements as required by the Board; and

3. Passed an examination offered or approved by the Board.

B. The Board shall provide for the examination of applicants for boiler operator licensure no less than 12 times per year. Such examination shall include questions, diagrams, and practical tests of sufficient scope to demonstrate that the applicant has the necessary qualifications, experience, and knowledge of the basic principles involved in operation, care, and maintenance to operate safely the boiler and auxiliary pressure vessels of the class for which an application for licensure has been made. Specific competencies tested by the examination shall include (i) principles of boiler design, (ii) general operation practices, (iii) effects of water treatment, (iv) inspection requirements, and (v) emergency shutdown procedures.

C. The Board may permit an applicant to sit for a written examination at a lower class than that for which the applicant has applied if it is determined that an applicant lacks either the experience or knowledge required for the class for which the applicant applied.

D. Applicants shall be notified in writing by the Board of the results of their application within 30 days following the date of the examination.

E. Applicants who fail to pass the required examination may not apply for reexamination until 90 days after the date of the last examination.

F. An applicant who holds a valid certificate or license from any state or local government outside the Commonwealth may be licensed without examination upon the presentation of the following to the Board: (i) a valid certificate or license from that authority and (ii) the certification or licensure requirements of that authority, provided that the authority's requirements for certification or licensure are equal to or greater than those established under this article.

A. Licenses issued under this article shall expire three years from the last day of the month in which they were issued as indicated on the license.

§ 54.1-1152. Class 1 and Class 2 boiler operator licenses; requirements.

A. A Class 1 boiler operator shall be permitted to take charge of and operate or maintain any steam plant. The training and experience requirements for a Class 1 boiler operator are two years' experience as an operator of a high-pressure boiler beyond that experience which is required for a Class 2 operator; however, substitution of a degree in mechanical engineering from an accredited college, university, or school of technology, or successful completion of a Board-approved boiler operator apprenticeship program or a U.S. military training course, may be permitted for one year of the required experience.

B. A Class 2 Boiler Operator shall be permitted to take charge of and operate or maintain (i) a high-pressure steam plant where the total horsepower rating of the boiler is not in excess of 500 boiler horsepower, or a combination of high-pressure boilers and heating boilers and auxiliary pressure vessels; (ii) a heating plant having low-pressure boilers with a pump return with no limitation on total capacity; or (iii) a heating plant having hot water heating boilers, with no limitation on total capacity. The training and experience requirements for a Class 2 boiler operator shall be (a) at least two years' experience as a boiler operator or an assistant boiler operator, fireman, or oiler, in a high-pressure steam plant of more than 75 boiler horsepower or (b) four years of such experience in a plant of not less than 50 boiler horsepower. Substitution of a degree in mechanical engineering from an accredited college, university, or school of technology, or successful completion of any Board-approved boiler operator apprenticeship program or a U.S. military training course, may be permitted for one year of the required experience.

§ 54.1-1153. Exemptions.

A. Exempt from licensure are operators of:

1. Boilers and pressure vessels on boats or vessels operated under the regulations of the Marine Vessel Inspections Division, U.S. Coast Guard;

2. Steam-driven vehicles used solely for traction or show purposes;

3. Hot water heating boilers having total boiler horsepower not exceeding 100 boiler horsepower;

4. Low-pressure steam boilers having gravity or trap returns; and

5. Nuclear plant facilities under the control of the Nuclear Regulatory Commission.

B. Notwithstanding exemptions listed in subsection A, no provision of this section shall be construed as authorizing or permitting operation of a boiler without a valid and unexpired license, where a local

ordinance requiring a similar certification has been adopted.

§ 54.1-1154. Renewal of licensure; continuing education.

A. As a condition of renewal or reinstatement of licensure, a superintendent shall be required to satisfactorily complete three hours of continuing education relating to boiler operation from a provider approved by the Board.

B. The Board may establish in regulations additional requirements for continuing education as a prerequisite to renewal of any license issued under this article. In addition, the Board may require continuing education for any individual who is found to be in violation of the statutes or regulations governing the practice of licensed tradesmen or certificate holders issued under this article.

§ 54.1-1155. Revocation or lapse of licensure.

The Board may revoke a boiler operator license for either of the following:

1. Any misrepresentation in obtaining or renewing the license; or
2. Negligence or incompetence in the practice of the profession.

§ 54.1-1156. Penalties.

A \$1,000 civil fine may be assessed to the owner or employer if a violation of this code section is confirmed.