HOUSE BILL No. 5751

September 9, 2014, Introduced by Reps. Jacobsen, Pagel, Graves, Lyons, Rutledge, Smiley, Phelps, Durhal, Brunner, Cavanagh, Cochran, Bumstead, Kowall, Lauwers, Daley, Jenkins, Cotter, Rendon, Haveman, O'Brien, Leonard, Denby, Rogers, Outman, Muxlow, Yonker, Johnson, Farrington, Poleski, Zorn, MacGregor, Franz and LaFontaine and referred to the Committee on Military and Veterans Affairs.

A bill to amend 1965 PA 290, entitled "Boiler act of 1965," by amending sections 2 and 13d (MCL 408.752 and 408.763d), as amended by 2013 PA 167.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

Sec. 2. (1) As used in this act:

- (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 United States department of labor

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- 1 bureau of apprenticeship training and is approved by the board.
- 2 (c) "Armed forces" means that term as defined in section 2 of
- 3 the veteran right to employment services act, 1994 PA 39, MCL
- **4** 35.1092.
- 5 (d) "Associated auxiliaries" means equipment that is required
- 6 in the operation of a boiler that includes, but is not limited to,
- 7 pumps, regulators, feedwater heaters, superheaters, de-
- 8 superheaters, economizers, air preheaters, draft fans, combustion
- 9 and pollution control equipment, and prime movers.
- 10 (e) "Board" means the board of boiler rules created in section
- **11** 3.
- 12 (f) "Boiler" means a closed vessel in which water is heated,
- 13 steam is generated, or steam is superheated, or a combination of
- 14 those actions occur, under pressure or vacuum by the application of
- 15 heat from combustible fuels, electricity, or nuclear energy. Boiler
- 16 does not include facilities of an integral part of a continuous
- 17 processing unit but does include a fired unit for heating or
- 18 vaporizing liquids other than water, if the unit is separate from a
- 19 processing system and is complete within itself.
- 20 (g) "Boiler for agricultural purposes" means a portable boiler
- 21 used in a field or similar open area for the sole purpose of
- 22 operating farm equipment or farm machinery.
- 23 (h) "Boiler operator" or "stationary engineer" means an
- 24 individual who is engaged in the operation of boilers and
- 25 associated auxiliaries.
- 26 (i) "Certificate inspection" means an inspection that is
- 27 conducted for purposes of preparing a report described in section

- 1 20. The certificate inspection shall be an internal inspection if
- 2 construction allows; otherwise the certificate inspection shall be
- 3 as complete an inspection as possible.
- 4 (j) "Department" means the department of licensing and
- 5 regulatory affairs.
- **6** (k) "Director" means the director of the department or a
- 7 representative designated by the director.
- (l) "External inspection" means an inspection that does not
- 9 involve examination of the internal surfaces of the pressure parts
- 10 of the boiler.
- 11 (m) "Heating surface" means the heating surface determined by
- 12 the boiler manufacturer and recorded in the manufacturer's data
- 13 report or by rules established by the board for a boiler if the
- 14 manufacturer's data report is not available or the boiler is not
- 15 stamped with its heating surface.
- 16 (n) "High pressure, high temperature water boiler" means a
- 17 water heating boiler operating at pressure that exceeds 160
- 18 p.s.i.g. or temperatures that exceed 250 degrees Fahrenheit.
- 19 (o) "Low pressure boiler" means a steam boiler operated at
- 20 pressures that do not exceed 15 p.s.i.g., or a hot water heating
- 21 boiler operated at pressures that do not exceed 160 p.s.i.g. or
- 22 temperatures that do not exceed 250 degrees Fahrenheit.
- (p) "P.S.I.G." means pounds per square inch gauge.
- 24 (q) "Power boiler" means a closed vessel in which steam or
- 25 other vapor is generated at a pressure of more than 15 p.s.i.g. by
- 26 the direct application of heat.
- (r) "Process boiler" means a boiler that is operated at a

- 1 pressure or temperature from which more than 10% of the boiler's
- 2 capacity is used for direct steam humidification or direct process
- 3 work.
- 4 (s) "Qualified technical education program" means an
- 5 educational program that is approved by the board and that has a
- 6 minimum of 350 contact hours in classroom hands-on training, field
- 7 training, or supervised plant visits for high pressure boiler
- 8 operators. The board may establish lesser standards for an
- 9 educational program for low pressure operator training or other
- 10 entry level training positions only.
- 11 (t) "Qualified training program" means any of the following:
- (i) An in-house training program approved by the board and
- 13 offered to boiler operators and stationary engineers by an
- 14 employer.
- 15 (ii) An in-house training program implemented or developed by a
- 16 utility and offered to boiler operators and stationary engineers by
- 17 an employer as a result of negotiations between an employer and its
- 18 employees.
- 19 (iii) A training program offered to active duty boiler operators
- 20 and stationary engineers by a branch of the armed forces.
- (u) "Rule" means a rule promulgated under the administrative
- 22 procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.
- (v) "Secondhand boiler" means a boiler that has changed
- 24 ownership and location after initial use.
- 25 (2) AS USED IN THIS ACT AND FOR PURPOSES OF ANY RULES
- 26 PROMULGATED UNDER THIS ACT, IN CONNECTION WITH ANY REQUIREMENTS FOR
- 27 A LICENSE TO INSPECT, INSTALL, OR REPAIR BOILERS OR FOR

- 1 REGISTRATION AS A BOILER OPERATOR OR STATIONARY ENGINEER IN 1 OR
- 2 MORE OF THE CLASSIFICATIONS DESCRIBED IN SECTION 13B, "EXPERIENCE"
- 3 INCLUDES ANY RELEVANT EXPERIENCE ACQUIRED WHILE SERVING IN THE
- 4 ARMED FORCES BY AN INDIVIDUAL WHO WAS SEPARATED FROM THAT SERVICE
- 5 IF ALL OF THE FOLLOWING ARE MET:
- 6 (A) THE APPLICANT PROVIDES TO THE DEPARTMENT A FORM DD214, A
- 7 FORM DD215, OR ANY OTHER FORM THAT IS SATISFACTORY TO THE
- 8 DEPARTMENT THAT DEMONSTRATES THAT HE OR SHE WAS SEPARATED FROM THAT
- 9 SERVICE, WITH AN HONORABLE CHARACTER OF SERVICE OR UNDER HONORABLE
- 10 CONDITIONS (GENERAL) CHARACTER OF SERVICE.
- 11 (B) THE APPLICANT SUBMITS WITH HIS OR HER APPLICATION FOR
- 12 LICENSURE OR REGISTRATION AN AFFIDAVIT OR LETTER SIGNED BY A
- 13 COMMANDING OFFICER, SUPERVISOR, OR MILITARY SUPERIOR WITH DIRECT
- 14 KNOWLEDGE OF THE APPLICANT'S SERVICE THAT DESCRIBES HIS OR HER
- 15 EXPERIENCE DESIGNING, CONSTRUCTING, MANUFACTURING, INSTALLING,
- 16 INSPECTING, OPERATING, REPAIRING, OR MAINTAINING BOILERS AND
- 17 ASSOCIATED AUXILIARIES WHILE SERVING IN THE ARMED FORCES.
- 18 Sec. 13d. (1) The director shall not issue a registration for
- 19 a title described in section 13a(2) unless the applicant meets the
- 20 requirements for the classification under subsections (2) to (6).
- 21 (2) An applicant for a low pressure boiler operator
- 22 registration shall have at least 1 year of experience operating or
- 23 maintaining low or high pressure boilers, steam prime movers, or
- 24 associated auxiliaries.
- 25 (3) An applicant for a high pressure boiler operator
- 26 registration shall have 1 or more of the following:
- 27 (a) At least 2 years of experience in the operation of a high

- 1 pressure boiler.
- 2 (b) A low pressure boiler operator's registration and at least
- 3 1 year of experience in the operation of a low pressure boiler.
- 4 (c) At least 1 year of either a qualified training program, a
- 5 qualified technical education program, or an approved
- 6 apprenticeship program.
- 7 (4) An applicant for a third-class stationary engineer
- 8 registration shall meet 1 or more of the following requirements:
- 9 (a) Is registered as a high pressure boiler operator and have
- 10 at least 1 year of experience in the operation of a high pressure
- 11 boiler.
- 12 (b) Is registered as a low pressure boiler operator, has at
- 13 least 1 year of experience in the operation of a low pressure
- 14 boiler, and has at least 1 year of maintenance experience on high
- 15 pressure boilers and associated auxiliaries.
- 16 (c) Is registered as a high pressure boiler operator and has
- 17 at least 1 year of boiler maintenance experience or at least 1 year
- 18 as an apprentice in an approved training program in a high pressure
- 19 boiler plant that has an aggregate heating surface of more than
- **20** 4,000 square feet.
- 21 (d) Have at least 3 years of experience in the operation of
- 22 boilers in a high pressure boiler plant that have an aggregate
- 23 heating surface of more than 4,000 square feet.
- 24 (e) Have at least 1 year of experience in the operation of
- 25 boilers in a high pressure boiler plant that have an aggregate
- 26 heating surface of more than 4,000 square feet along with
- 27 sufficient experience operating steam prime movers in excess of 10

- 1 horsepower for a combined total of at least 3 years of experience.
- 2 (f) Have an associate degree in energy technology or a related
- 3 field, as determined by the board, with a power engineering option
- 4 from a 2-year college whose program is approved by the board and
- 5 employment or cooperative education experience of at least 360
- 6 hours as a power engineer, boiler operator, or stationary engineer
- 7 in a steam electric generation plant or a high pressure steam
- 8 heating or process plant.
- 9 (5) An applicant for a second-class stationary engineer
- 10 registration shall meet 1 or more of the following requirements:
- 11 (a) Is registered as a third-class stationary engineer and has
- 12 at least 1 year of experience as a third-class stationary engineer.
- 13 (b) Have a bachelor's degree in engineering, engineering
- 14 technology, heating/power technology, or energy technology from a
- 15 college or university whose program is approved by the board and
- 16 employment experience as an engineer in the engineering or research
- 17 division of a steam electric power generating plant for at least 1
- 18 year.
- 19 (c) Have at least 4 years of experience in the operation of
- 20 boilers in a high pressure boiler plant that have an aggregate
- 21 heating surface of more than 7,500 square feet.
- 22 (d) Have at least 1 year of experience in the operation of
- 23 boilers in a high pressure boiler plant that have an aggregate
- 24 heating surface of more than 7,500 square feet along with
- 25 sufficient experience operating steam prime movers in excess of 100
- 26 horsepower for a combined total of at least 4 years of experience.
- (e) Have at least 1 year of experience in the operation of

- 1 boilers in a high pressure boiler plant that have an aggregate
- 2 heating surface of more than 7,500 square feet along with
- 3 sufficient experience operating boilers in a high pressure boiler
- 4 plant that have an aggregate heating surface of more than 4,000
- 5 square feet for a combined total of at least 4 years of experience.
- 6 (6) An applicant for a first-class stationary engineer
- 7 registration shall meet 1 or more of the following requirements:
- 8 (a) Is registered as a second-class stationary engineer and
- 9 has at least 2 years of experience as a second-class stationary
- 10 engineer.
- 11 (b) Have at least 6 years of experience in the operation of
- 12 boilers in a high pressure boiler plant that have an aggregate
- 13 heating surface of more than 20,000 square feet.
- 14 (c) Have at least 2 years of experience in the operation of
- 15 boilers in a high pressure boiler plant that have an aggregate
- 16 heating surface of more than 20,000 square feet along with
- 17 sufficient experience operating steam prime movers in excess of 200
- 18 horsepower for a combined total of at least 6 years of experience.
- 19 (d) Have at least 2 years of experience in the operation of
- 20 boilers in a high pressure boiler plant that have an aggregate
- 21 heating surface of more than 20,000 square feet along with
- 22 sufficient experience in the operation of boilers in a high
- 23 pressure boiler plant that have an aggregate heating surface of
- 24 more than 7,500 square feet of heating surface for a combined total
- 25 of at least 6 years of experience.
- (e) Complete a 4-year approved apprenticeship program or a 4-
- 27 year qualified training program.

(f) Complete a 4-year program with a bachelor's degree from a 1 2 college or university in engineering, engineering technology, heating/power technology, or energy technology whose program is 3 4 approved by the board and which includes a hands-on power option 5 from a 2-year community college program or the equivalent, as determined by the board, and not less than 1 year of employment, 6 7 internship, or cooperative education experience in a steam electric generation plant or high pressure steam heating process plant. 8 (7) As used in this section, "experience" includes experience 9 acquired while serving in the armed forces by an individual who was 10 11 separated from that service, and provides to the department a form 12 DD214, form DD215, or any other form that is satisfactory to the 13 department that demonstrates that he or she was separated from that 14 service, with an honorable character of service or under honorable 15 conditions (general) character of service. (8) An individual described in subsection (7) shall submit 16 17 with his or her application for registration an affidavit or letter signed by a commanding officer, supervisor, or military superior 18 19 with direct knowledge of the applicant's service that describes his 20 or her experience as a boiler operator or stationary engineer in 1 21 or more of the classifications described in section 13b.