

**SENATE SUBSTITUTE FOR
HOUSE BILL NO. 4134**

A bill to amend 1965 PA 290, entitled
"Boiler act of 1965,"
by amending sections 2, 4, and 13d (MCL 408.752, 408.754, and
408.763d), sections 2 and 13d as amended by 2013 PA 167 and section
4 as amended by 2008 PA 159.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

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

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

5 (b) "Approved apprenticeship program" means a training program
6 for boiler operators or stationary engineers that is certified by
7 or meets the standards of the United States ~~department of labor~~
8 ~~bureau of apprenticeship training~~ **DEPARTMENT OF LABOR, BUREAU OF**
9 **APPRENTICESHIP TRAINING** and is approved by the board.

1 (c) "Armed forces" means that term as defined in section 2 of
2 the veteran right to employment services act, 1994 PA 39, MCL
3 35.1092.

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

9 (e) "Board" means the board of boiler rules created in section
10 3.

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

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

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

25 (i) "Certificate inspection" means an inspection that is
26 conducted for purposes of preparing a report described in section
27 20. The certificate inspection shall be an internal inspection if

1 construction allows; otherwise the certificate inspection shall be
2 as complete an inspection as possible.

3 (j) "Department" means the department of licensing and
4 regulatory affairs.

5 (k) "Director" means the director of the department or a
6 representative designated by the director.

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

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

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

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

22 (p) "P.S.I.G." means pounds per square inch gauge.

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

26 (r) "Process boiler" means a boiler that is operated at a
27 pressure or temperature from which more than 10% of the boiler's

1 capacity is used for direct steam humidification or direct process
2 work.

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

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

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

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

18 (iii) A training program offered to active duty boiler
19 operators and stationary engineers by a branch of the armed forces.

20 (u) "Rule" means a rule promulgated under the administrative
21 procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.

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

24 **(2) AS USED IN THIS ACT AND FOR PURPOSES OF ANY RULES**
25 **PROMULGATED UNDER THIS ACT, IN CONNECTION WITH ANY REQUIREMENTS FOR**
26 **A LICENSE TO INSPECT, INSTALL, OR REPAIR BOILERS OR FOR**
27 **REGISTRATION AS A BOILER OPERATOR OR STATIONARY ENGINEER IN 1 OR**

1 MORE OF THE CLASSIFICATIONS DESCRIBED IN SECTION 13B, "EXPERIENCE"
2 INCLUDES ANY RELEVANT EXPERIENCE ACQUIRED WHILE SERVING IN THE
3 ARMED FORCES BY AN INDIVIDUAL WHO WAS SEPARATED FROM THAT SERVICE
4 IF ALL OF THE FOLLOWING ARE MET:

5 (A) THE APPLICANT PROVIDES TO THE DEPARTMENT A FORM DD214, A
6 FORM DD215, OR ANY OTHER FORM THAT IS SATISFACTORY TO THE
7 DEPARTMENT THAT DEMONSTRATES THAT HE OR SHE WAS SEPARATED FROM THAT
8 SERVICE, WITH AN HONORABLE CHARACTER OF SERVICE OR UNDER HONORABLE
9 CONDITIONS (GENERAL) CHARACTER OF SERVICE.

10 (B) THE APPLICANT SUBMITS WITH HIS OR HER APPLICATION FOR
11 LICENSURE OR REGISTRATION AN AFFIDAVIT OR LETTER SIGNED BY A
12 COMMANDING OFFICER, SUPERVISOR, OR MILITARY SUPERIOR WITH DIRECT
13 KNOWLEDGE OF THE APPLICANT'S SERVICE THAT DESCRIBES HIS OR HER
14 EXPERIENCE DESIGNING, CONSTRUCTING, MANUFACTURING, INSTALLING,
15 INSPECTING, OPERATING, REPAIRING, OR MAINTAINING BOILERS AND
16 ASSOCIATED AUXILIARIES WHILE SERVING IN THE ARMED FORCES.

17 Sec. 4. (1) The department shall promulgate rules for the safe
18 construction, installation, inspection, ALTERATION, SERVICING,
19 operation, and repair of boilers in the state. FOR PURPOSES OF THIS
20 SUBSECTION, THE DEPARTMENT BY RULE MAY ADOPT AN EXISTING PUBLISHED
21 CODIFICATION OR NATIONAL STANDARDS AND ANY AMENDMENTS AND
22 INTERPRETATIONS OF THE CODIFICATION OR STANDARDS.

23 ~~—— (2) The rules promulgated for new construction shall be based~~
24 ~~upon and follow the generally accepted nationwide engineering~~
25 ~~standards, formulae, and practices established and pertaining to~~
26 ~~boiler construction and safety. The department, by rule, may adopt~~
27 ~~an existing published codification, known as the boiler and~~

~~pressure vessel code of the American society of mechanical engineers, with the amendments and interpretations.~~

~~— (3) The department shall promulgate rules for the safe inspection and maintenance of boilers that were in use in the state before July 1, 1966. The rules promulgated shall be based upon and follow the generally accepted nationwide engineering standards and may be based upon an existing published codification known as the inspection code of the national board of boiler and pressure vessel inspectors.~~

(2) ~~(4)~~ 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 act.

(3) ~~(5)~~ ~~Upon~~ **WHEN IT RECEIVES** payment of a fee as ~~prescribed~~ ~~by~~ **UNDER** section 4a, and without examination, the board may register an applicant for the use of a title described in section 13a ~~who~~ **IF THE APPLICANT** is a boiler operator or stationary engineer licensed or registered as a boiler operator or stationary engineer in another state, municipality, or country 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** if that other state, municipality, or country extends the same privileges through reciprocity to a boiler operator or stationary engineer registered in this state.

Sec. 13d. (1) The director shall not issue a registration for

1 a title described in section 13a(2) unless the applicant meets the
2 requirements for the classification under subsections (2) to (6).

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

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

9 (a) At least 2 years of experience in the operation of a high
10 pressure boiler.

11 (b) A low pressure boiler operator's registration and at least
12 1 year of experience in the operation of a low pressure boiler.

13 (c) At least 1 year of either a qualified training program, a
14 qualified technical education program, or an approved
15 apprenticeship program.

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

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

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

25 (c) Is registered as a high pressure boiler operator and has
26 at least 1 year of boiler maintenance experience or at least 1 year
27 as an apprentice in an approved training program in a high pressure

1 boiler plant that has an aggregate heating surface of more than
2 4,000 square feet.

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

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

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

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

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

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

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

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

9 (e) Have at least 1 year of experience in the operation of
10 boilers in a high pressure boiler plant that have an aggregate
11 heating surface of more than 7,500 square feet along with
12 sufficient experience operating boilers in a high pressure boiler
13 plant that have an aggregate heating surface of more than 4,000
14 square feet for a combined total of at least 4 years of experience.

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

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

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

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

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

8 (e) Complete a 4-year approved apprenticeship program or a 4-
9 year qualified training program.

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

18 ~~—— (7) As used in this section, "experience" includes experience~~
19 ~~acquired while serving in the armed forces by an individual who was~~
20 ~~separated from that service, and provides to the department a form~~
21 ~~DD214, form DD215, or any other form that is satisfactory to the~~
22 ~~department that demonstrates that he or she was separated from that~~
23 ~~service, with an honorable character of service or under honorable~~
24 ~~conditions (general) character of service.~~

25 ~~—— (8) An individual described in subsection (7) shall submit~~
26 ~~with his or her application for registration an affidavit or letter~~
27 ~~signed by a commanding officer, supervisor, or military superior~~

1 ~~with direct knowledge of the applicant's service that describes his~~
2 ~~or her experience as a boiler operator or stationary engineer in 1~~
3 ~~or more of the classifications described in section 13b.~~

4 Enacting section 1. This amendatory act takes effect 90 days
5 after the date it is enacted into law.