

SUBSTITUTE FOR
HOUSE BILL NO. 6125

(As amended June 29, 2006)

[A bill to amend 1965 PA 290, entitled
"Boiler act of 1965,"
by amending the title and sections 2, 4, 4a, 7, 12, 14, and 24 (MCL
408.752, 408.754, 408.754a, 408.757, 408.762, 408.764, and 408.774),
section 2 as amended by 2004 PA 103, sections 4 and 7 as amended by 1980
PA 274, and section 4a as amended by 2004 PA 265, and by adding sections
13a, 13b, 13c, and 13d.]

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1
2
3
4
5
6

TITLE

An act to regulate the ~~use~~ **OPERATION**, construction,
installation, and repair of **CERTAIN** boilers; to create a board of
boiler rules; to prescribe uniform rules and regulations for
CERTAIN boilers; to provide for the licensing of **CERTAIN** boiler
inspectors, installers, and repairers **AND REGISTRATION OF CERTAIN**

1 **BOILER OPERATORS AND STATIONARY ENGINEERS; TO PROVIDE FOR POWERS**
2 **AND DUTIES FOR CERTAIN STATE AGENCIES AND OFFICERS;** to provide fees
3 for **REGISTRATIONS**, licenses, permits, inspections, and
4 certificates; to provide penalties **AND REMEDIES** for the violation
5 of this act; and to repeal ~~certain~~ acts and parts of acts.

6 Sec. 2. As used in this act:

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

10 (B) **"APPROVED APPRENTICESHIP PROGRAM" MEANS A TRAINING PROGRAM**
11 **FOR BOILER OPERATORS OR STATIONARY ENGINEERS CERTIFIED BY OR**
12 **MEETING THE STANDARDS OF THE UNITED STATES DEPARTMENT OF LABOR**
13 **BUREAU OF APPRENTICESHIP TRAINING AND APPROVED BY THE BOARD.**

14 (C) **"ASSOCIATED AUXILIARIES" MEANS EQUIPMENT THAT IS REQUIRED**
15 **IN THE OPERATION OF A BOILER THAT INCLUDES, BUT IS NOT LIMITED TO,**
16 **PUMPS, REGULATORS, FEEDWATER HEATERS, SUPERHEATERS, DE-**
17 **SUPERHEATERS, ECONOMIZERS, AIR PREHEATERS, DRAFT FANS, COMBUSTION**
18 **AND POLLUTION CONTROL EQUIPMENT, AND PRIME MOVERS.**

19 (D) ~~(b)~~ "Board" means the board of boiler rules created in
20 section 3.

21 (E) ~~(e)~~ "Boiler" means a closed vessel in which water is
22 heated, steam is generated, steam is superheated, or a combination
23 thereof, under pressure or vacuum by the application of heat from
24 combustible fuels, electricity, or nuclear energy. Boiler does not
25 include facilities of an integral part of a continuous processing
26 unit but does include a fired unit for heating or vaporizing
27 liquids other than water, if the unit is separate from a processing

1 system and is complete within itself.

2 (F) ~~(d)~~ "Boiler for agricultural purposes" means a portable
3 boiler used in a field or similar open area for the sole purpose of
4 operating farm equipment or farm machinery.

5 (G) "BOILER OPERATOR" OR "STATIONARY ENGINEER" MEANS A PERSON
6 ENGAGED IN THE OPERATION OF BOILERS AND ASSOCIATED AUXILIARIES.

7 (H) ~~(e)~~ "Certificate inspection" means an inspection, the
8 report of which is used by the chief inspector to decide whether a
9 certificate, as provided by section ~~19~~ 20, shall be issued. The
10 certificate inspection shall be an internal inspection if
11 construction allows; otherwise the certificate inspection shall be
12 as complete an inspection as possible.

13 (I) ~~(f)~~ "Director" means the director of **THE DEPARTMENT OF**
14 labor and economic growth or a representative designated by the
15 director.

16 (J) ~~(g)~~ "External inspection" means an inspection ~~which~~
17 **THAT** does not involve examination of the internal surfaces of the
18 pressure parts of the boiler.

19 (K) ~~(h)~~ "Heating surface" means the heating surface
20 determined by the boiler manufacturer and recorded in the
21 manufacturer's data report or by rules established by the board for
22 a boiler if the manufacturer's data report is not available or the
23 boiler is not stamped with its heating surface.

24 (L) ~~(i)~~ "High pressure, high temperature water boiler" means
25 a water heating boiler operating at pressure exceeding 160 p.s.i.g.
26 or temperatures exceeding 250 degrees Fahrenheit.

27 (M) ~~(j)~~ "Low pressure boiler" means a steam boiler operated

1 at pressures not exceeding 15 p.s.i.g., or a hot water heating
2 boiler operated at pressures not exceeding 160 p.s.i.g. or
3 temperatures not exceeding 250 degrees Fahrenheit.

4 (N) ~~(k)~~ "P.S.I.G." means pounds per square inch gauge.

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

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

12 (Q) "QUALIFIED TECHNICAL EDUCATION PROGRAM" MEANS AN
13 EDUCATIONAL PROGRAM APPROVED BY THE BOARD THAT HAS A MINIMUM OF 350
14 CONTACT HOURS IN CLASSROOM HANDS-ON TRAINING, FIELD TRAINING, OR
15 SUPERVISED PLANT VISITS FOR HIGH PRESSURE BOILER OPERATORS. THE
16 BOARD MAY ESTABLISH LESSER STANDARDS FOR AN EDUCATIONAL PROGRAM FOR
17 LOW PRESSURE OPERATOR TRAINING OR OTHER ENTRY LEVEL TRAINING
18 POSITIONS ONLY.

19 (R) "QUALIFIED TRAINING PROGRAM" MEANS AN IN-HOUSE TRAINING
20 PROGRAM APPROVED BY THE BOARD AND OFFERED TO BOILER OPERATORS AND
21 STATIONARY ENGINEERS BY A UTILITY AS A RESULT OF NEGOTIATIONS
22 BETWEEN A UTILITY AND ITS EMPLOYEES.

23 (S) "RULE" MEANS A RULE PROMULGATED PURSUANT TO THE
24 ADMINISTRATIVE PROCEDURES ACT OF 1969, 1969 PA 306, MCL 24.201 TO
25 24.328.

26 (T) ~~(n)~~ "Secondhand boiler" means a boiler ~~which~~ THAT has
27 changed ownership and location after initial use.

1 Sec. 4. (1) The ~~board~~ **DEPARTMENT OF LABOR AND ECONOMIC**
 2 **GROWTH** shall ~~formulate definitions and~~ **PROMULGATE** rules for the
 3 safe construction, installation, inspection, **OPERATION**, and repair
 4 of boilers in the state.

5 (2) The ~~definitions and~~ rules ~~formulated~~ **PROMULGATED** for
 6 new construction shall be based upon and follow the generally
 7 accepted nationwide engineering standards, formulae, and practices
 8 established and pertaining to boiler construction and safety. The
 9 board, by ~~resolution~~ **RULE**, may adopt an existing published
 10 codification, known as the boiler and pressure vessel code of the
 11 American society of mechanical engineers, with the amendments and
 12 interpretations.

13 (3) The ~~board~~ **DEPARTMENT OF LABOR AND ECONOMIC GROWTH** shall
 14 ~~formulate~~ **PROMULGATE** rules for the safe inspection and maintenance
 15 of boilers ~~, which~~ **THAT** were in use in the state before July 1,
 16 1966. The rules ~~formulated~~ **PROMULGATED** shall be based upon and
 17 follow the generally accepted nationwide engineering standards and
 18 may be based upon an existing published codification ~~,~~ known as
 19 the inspection code of the national board of boiler and pressure
 20 vessel inspectors.

21 ~~———— (4) The rules formulated by the board shall be promulgated~~
 22 ~~pursuant to Act No. 306 of the Public Acts of 1969, as amended,~~
 23 ~~being sections 24.201 to 24.315 of the Michigan Compiled Laws.~~

24 **(4)** ~~—(5)~~ A departure from the requirements of this section
 25 shall be **IS** permitted in an unusual situation involving a boiler
 26 of special design or construction ~~,~~ if the board is satisfied
 27 that a proposed facility will provide a degree of safety

1 commensurate with the intent of this act.

2 (5) UPON PAYMENT OF A \$30.00 FEE AND WITHOUT EXAMINATION, THE
3 BOARD MAY REGISTER AN APPLICANT FOR THE USE OF A TITLE DESCRIBED IN
4 SECTION 13A WHO IS A BOILER OPERATOR OR STATIONARY ENGINEER
5 LICENSED OR REGISTERED AS A BOILER OPERATOR OR STATIONARY ENGINEER
6 IN ANOTHER STATE, MUNICIPALITY, OR COUNTRY WHOSE REQUIREMENTS FOR
7 LICENSURE OR REGISTRATION ARE, AT A MINIMUM, SUBSTANTIALLY
8 EQUIVALENT TO THE REQUIREMENTS OF THIS STATE FOR REGISTRATION AS
9 DETERMINED BY THE BOARD, IF THAT OTHER STATE, MUNICIPALITY, OR
10 COUNTRY EXTENDS THE SAME PRIVILEGES THROUGH RECIPROCITY TO A BOILER
11 OPERATOR OR STATIONARY ENGINEER REGISTERED IN THIS STATE.

12 Sec. 4a. (1) ~~The board~~ SUBJECT TO SECTIONS 4(5) AND 13A(6),
13 THE DEPARTMENT OF LABOR AND ECONOMIC GROWTH, with the advice of the
14 ~~director~~ BOARD, shall promulgate rules ~~pursuant to the~~
15 ~~administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to~~
16 ~~24.328,~~ to establish the fee schedules for licenses, permits,
17 certificates, **REGISTRATIONS**, and inspections. The fees shall
18 reflect the actual costs and expenses for the department of labor
19 and economic growth in issuing licenses, permits, **REGISTRATIONS**,
20 and certificates and in conducting inspections.

21 (2) ~~Beginning the effective date of the amendatory act that~~
22 ~~added subsection (3), the~~ **THE** department of labor and economic
23 growth shall issue an initial or renewal license to install or
24 repair a boiler or a permit for the installation or repair of a
25 boiler not later than 90 days after the applicant files a completed
26 application. Receipt of the application is considered the date the
27 application is received by any agency or department of the state of

1 Michigan. If the application is considered incomplete by the
2 department of labor and economic growth, the department of labor
3 and economic growth shall notify the applicant in writing, or make
4 the information electronically available, within 30 days after
5 receipt of the incomplete application, describing the deficiency
6 and requesting the additional information. The 90-day period is
7 tolled upon notification by the department of labor and economic
8 growth of a deficiency until the date the requested information is
9 received by the department of labor and economic growth. The
10 determination of the completeness of an application does not
11 operate as an approval of the application for the license or permit
12 and does not confer eligibility of an applicant determined
13 otherwise ineligible for issuance of a license or permit.

14 (3) If the department of labor and economic growth fails to
15 issue or deny a license or permit within the time required by this
16 section, the department of labor and economic growth shall return
17 the license or permit fee and shall reduce the license or permit
18 fee for the applicant's next renewal application, if any, by 15%.
19 The failure to issue a license or permit within the time required
20 under this subsection does not allow the department to otherwise
21 delay the processing of the application, and that application, upon
22 completion, shall be placed in sequence with other completed
23 applications received at that same time. The department of labor
24 and economic growth shall not discriminate against an applicant in
25 the processing of the application based upon the fact that the
26 license or permit fee was refunded or discounted under this
27 subsection.

1 (4) Beginning October 1, 2005, the director shall submit a
2 report by December 1 of each year to the standing committees and
3 appropriations subcommittees of the senate and house of
4 representatives concerned with occupational issues. The director
5 shall include all of the following information in the report
6 concerning the preceding fiscal year:

7 (a) The number of initial and renewal applications the
8 department **OF LABOR AND ECONOMIC GROWTH** received and completed
9 within the 90-day time period described in subsection (2).

10 (b) The number of applications denied.

11 (c) The number of applicants not issued a license within the
12 90-day time period and the amount of money returned to licensees
13 and registrants under subsection (3).

14 (5) To accomplish the objectives of this section and this act,
15 a state boiler inspection fund is created **AS A RESTRICTED FUND** in
16 the state treasury. The state treasurer is the custodian of the
17 fund and may invest the surplus of the fund. Earnings from those
18 investments shall be credited to the fund. The state treasurer
19 shall notify the director and the ~~Legislature~~ **LEGISLATURE** of
20 interest credited and the balance of the fund as of September 30 of
21 each year. The director shall supervise and administer the fund.
22 Fees received by the department of labor and economic growth and
23 money collected under this act shall be deposited in the state
24 boiler inspection fund and shall be appropriated by the
25 ~~Legislature~~ **LEGISLATURE** for the operations of the boiler division
26 and indirect overhead expenses in the department of labor and
27 economic growth. Funds that are unexpended at the end of each

House Bill No. 6125 (H-1) as amended June 27, 2006 (1 of 2)
 1 fiscal year shall not lapse to the general fund and shall be
 2 returned to the state boiler inspection fund.

3 (6) As used in this section, "completed application" means an
 4 application complete on its face and submitted with any applicable
 5 licensing or ~~permit~~ **REGISTRATION** fees as well as any other
 6 information, records, approval, security, or similar item required
 7 by law or rule from a local unit of government, a federal agency,
 8 or a private entity but not from another department or agency of
 9 the state of Michigan.

[Sec. 7. This act shall 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 persons or property upon a
 highway, except vehicles used exclusively upon stationary rails or
 tracks.

(c) Boilers used solely for agricultural purposes.

(d) Steam or vapor boilers carrying a pressure of not more than 15
 p.s.i.g., which are located in a private residence or in an apartment
 building with a capacity of less than 6 families. ~~except that installers
 and repairers of such boilers shall be licensed as provided in section
 13.~~

(e) Hot water boilers operated at a pressure not exceeding 160
 p.s.i.g. or a temperature not exceeding 250 degrees Fahrenheit that are
 located in a private residence or in an apartment building with a
 capacity of less than 6 families. ~~except that installers and repairers
 of such boilers shall be licensed as provided in section 13.]~~

10 Sec. 12. ~~Examination~~ **THE EXAMINATION** for chief, deputy, or
 11 special inspectors shall be ~~in writing and~~ **WRITTEN. THE**
 12 **EXAMINATION FOR CERTIFIED BOILER OPERATORS SHALL BE EITHER WRITTEN**
 13 **OR ORAL. THE EXAMINATION FOR CERTIFIED STATIONARY ENGINEERS SHALL**
 14 **BE BOTH WRITTEN AND ORAL. THE EXAMINATIONS** shall be ~~held~~
 15 **ADMINISTERED** by the board, ~~with at least~~ **AND NOT LESS THAN 2**
 16 members of the board **SHALL BE** present at all times during ~~the~~ **AN**
 17 examination. ~~Such examination~~ **EXAMINATIONS** shall be confined to
 18 questions ~~, the answers to which~~ **THAT** will aid in determining the
 19 fitness and competency of the applicant for the intended service,
 20 and may be those prepared by the national board of boiler and
 21 pressure vessel inspectors. **THE BOARD MAY ADOPT ANY EXAMINATION IT**
 H06381'06 (H-1)

House Bill No. 6125 (H-1) as amended June 27, 2006 (2 of 2)

22 DETERMINES APPROPRIATE AND MAY DELEGATE ANY ADMINISTRATIVE
23 FUNCTIONS RELATING TO THE CONDUCT OF THE EXAMINATION. If an
24 applicant for ~~an inspector's~~ A license fails to pass the
25 examination, ~~he~~ THE APPLICANT may appeal to the board for another
26 examination which shall be given by the board within 90 days. The
27 record of an applicant's examination shall be accessible to the

1 applicant and ~~his~~ THE APPLICANT'S employer.

2 SEC. 13A. (1) AN INDIVIDUAL MAY OPERATE A BOILER AND
3 ASSOCIATED AUXILIARIES WITHOUT OBTAINING A REGISTRATION UNDER THIS
4 ACT.

5 (2) AN INDIVIDUAL OR BUSINESS ENTITY SHALL NOT USE THE TERMS
6 "CERTIFIED BOILER OPERATOR", "CERTIFIED STATIONARY ENGINEER", "LOW
7 PRESSURE CERTIFIED BOILER OPERATOR", "HIGH PRESSURE CERTIFIED
8 BOILER OPERATOR", "THIRD-CLASS CERTIFIED STATIONARY ENGINEER",
9 "SECOND-CLASS CERTIFIED STATIONARY ENGINEER", "FIRST-CLASS
10 CERTIFIED STATIONARY ENGINEER", OR ANY OTHER NAME, STYLE, OR
11 DESCRIPTION THAT INDICATES THAT THE INDIVIDUAL OR AN INDIVIDUAL
12 EMPLOYED BY THE BUSINESS ENTITY IS REGISTERED UNDER THIS ACT EXCEPT
13 UNDER EITHER OF THE FOLLOWING CIRCUMSTANCES:

14 (A) THE INDIVIDUAL HAS BEEN ISSUED A REGISTRATION UNDER THIS
15 ACT.

16 (B) THE INDIVIDUAL IS EXEMPT FROM THIS ACT UNDER SECTION 23.

17 (3) THE INDIVIDUAL PARTICIPATING IN AN APPROVED APPRENTICESHIP
18 PROGRAM, A QUALIFIED TECHNICAL TRAINING PROGRAM, OR A QUALIFIED
19 TRAINING PROGRAM MAY USE THE TITLE "APPRENTICE CERTIFIED BOILER
20 OPERATOR" OR "APPRENTICE CERTIFIED STATIONARY ENGINEER".

21 (4) AN INDIVIDUAL REGISTERED UNDER THIS ACT SHALL ONLY USE 1
22 OF THE TITLES DESCRIBED IN SUBSECTION (2) OR THE ABBREVIATION
23 "C.B.O." OR "C.S.E.". THE BOARD MAY CONDUCT AN EXAMINATION DESIGNED
24 TO ESTABLISH THE COMPETENCY OF APPLICANTS FOR REGISTRATION AND MAY
25 CHARGE AN EXAMINATION FEE.

26 (5) A PERSON APPLYING FOR A REGISTRATION UNDER THIS ACT SHALL
27 BE NOT LESS THAN 18 YEARS OF AGE, SHALL POSSESS THE PHYSICAL AND

1 MENTAL CAPACITIES TO PERFORM HIS OR HER DUTIES IN A COMPETENT AND
2 SAFE MANNER, AND SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION
3 13D. AN APPLICANT SHALL USE A FORM PROVIDED BY THE DIRECTOR.

4 (6) THE DIRECTOR SHALL ISSUE A REGISTRATION UPON
5 RECOMMENDATION OF THE BOARD AND UPON THE APPLICANT'S PAYMENT OF A
6 TESTING FEE OF \$10.00 AND A REGISTRATION FEE OF \$20.00 OR A FEE
7 PRESCRIBED PURSUANT TO SECTION 4A, WHICHEVER IS HIGHER, FOR EACH
8 APPLICATION. A REGISTRATION SHALL BE RENEWED ANNUALLY UPON PAYMENT
9 OF A FEE OF \$20.00 OR A FEE PRESCRIBED PURSUANT TO SECTION 4A,
10 WHICHEVER IS HIGHER.

11 (7) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE
12 AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD SHALL RECOMMEND
13 FOR REGISTRATION WITHOUT EXAMINATION AN APPLICANT WHO SUBMITS
14 EVIDENCE SATISFACTORY TO THE BOARD OF 1 OR MORE OF THE FOLLOWING:

15 (A) THE APPLICANT HAS HAD NOT LESS THAN 5 YEARS OF EXPERIENCE
16 WITHIN THE 7 YEARS IMMEDIATELY PRECEDING THE EFFECTIVE DATE OF THE
17 AMENDATORY ACT THAT ADDED THIS SECTION IN THE CLASS OR CATEGORY OF
18 BOILER OPERATOR OR STATIONARY ENGINEER FOR WHICH THE APPLICANT IS
19 APPLYING.

20 (B) THE APPLICANT POSSESSES A LICENSE AS A BOILER OPERATOR OR
21 STATIONARY ENGINEER FROM THE CITIES OF DETROIT OR DEARBORN IN A
22 CLASS FOR WHICH THE APPLICANT IS APPLYING.

23 (C) THE APPLICANT HAS SUCCESSFULLY COMPLETED A 4-YEAR APPROVED
24 APPRENTICESHIP PROGRAM, A QUALIFIED TECHNICAL EDUCATION PROGRAM, OR
25 A 4-YEAR QUALIFIED TRAINING PROGRAM.

26 SEC. 13B. CERTIFIED BOILER OPERATOR AND CERTIFIED STATIONARY
27 ENGINEER REGISTRATIONS ARE CLASSIFIED AS FOLLOWS:

1 (A) LOW PRESSURE CERTIFIED BOILER OPERATOR, WHO OPERATES LOW
2 PRESSURE BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 4,000
3 SQUARE FEET OF BOILER HEATING SURFACE.

4 (B) HIGH PRESSURE CERTIFIED BOILER OPERATOR, WHO OPERATES
5 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 4,000 SQUARE
6 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 10 STEAM ENGINE-
7 TURBINE HORSEPOWER.

8 (C) THIRD-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES
9 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 7,500 SQUARE
10 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 100 STEAM ENGINE-
11 TURBINE HORSEPOWER.

12 (D) SECOND-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES
13 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 20,000 SQUARE
14 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 200 STEAM ENGINE-
15 TURBINE HORSEPOWER.

16 (E) FIRST-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES
17 BOILER PLANTS HAVING AN AGGREGATE OF 20,000 SQUARE FEET OR MORE OF
18 BOILER HEATING SURFACE OR 200 STEAM ENGINE-TURBINE HORSEPOWER OR
19 MORE.

20 SEC. 13C. (1) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE
21 OF THE AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD SHALL
22 PROMULGATE RULES DESIGNATING THE COURSE CONTENT FOR QUALIFIED
23 TECHNICAL EDUCATION PROGRAMS FOR THE VARIOUS CATEGORIES AND CLASSES
24 OF REGISTRATION OF BOILER OPERATORS AND STATIONARY ENGINEERS.

25 (2) THE RULES DESCRIBED IN SUBSECTION (1) SHALL PROVIDE THAT
26 THE COURSE CONTENT OF QUALIFIED TECHNICAL EDUCATION PROGRAMS FOR
27 ENTRY LEVEL REGISTRANTS INCLUDE AT LEAST ALL OF THE FOLLOWING

1 SUBJECT MATTER AREAS:

2 (A) BASIC FUNCTIONS, CONSTRUCTION, AND OPERATION OF ALL TYPES
3 OF BOILERS.

4 (B) THE FUNCTION OF BOILER APPLIANCES, ACCESSORIES, AND
5 ASSOCIATED AUXILIARIES.

6 (C) MATERIALS USED IN BOILERS AND THE EFFECT OF TEMPERATURE
7 EXTREMES ON THOSE MATERIALS.

8 (D) THE FUELS USED IN BOILERS AND FUNDAMENTALS OF COMBUSTION.

9 (E) BASIC ELECTRICITY.

10 (F) PLANT OPERATION AND BOILER MAINTENANCE.

11 (G) INSTRUMENTATION AND CONTROLS.

12 (H) FUNDAMENTAL MATHEMATICS AND PRINCIPLES OF THE METRIC
13 SYSTEM.

14 (I) GENERAL SAFETY PROCEDURES.

15 (J) RECOGNITION OF DANGEROUS OPERATION CONDITIONS.

16 (3) THE BOARD SHALL PROVIDE THAT THE COURSE CONTENT FOR
17 CATEGORIES AND CLASSES OTHER THAN ENTRY LEVEL REGISTRANTS INCLUDES
18 SUBJECT MATTER SIMILAR TO THOSE DESCRIBED IN SUBSECTION (2) IN THE
19 DEGREE OF DEPTH AND DIFFICULTY APPROPRIATE FOR THE CATEGORY AND
20 CLASS.

21 SEC. 13D. (1) THE DIRECTOR SHALL NOT ISSUE A REGISTRATION FOR
22 A TITLE DESCRIBED IN SECTION 13A(2) UNLESS THE APPLICANT MEETS THE
23 REQUIREMENTS FOR THE CLASSIFICATION AS PRESCRIBED IN SUBSECTIONS
24 (2) TO (6).

25 (2) AN APPLICANT FOR A LOW PRESSURE CERTIFIED BOILER OPERATOR
26 REGISTRATION SHALL HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE
27 OPERATING OR MAINTAINING LOW OR HIGH PRESSURE BOILERS, STEAM PRIME

1 MOVERS, OR ASSOCIATED AUXILIARIES.

2 (3) AN APPLICANT FOR A HIGH PRESSURE CERTIFIED BOILER OPERATOR
3 REGISTRATION SHALL HAVE 1 OR MORE OF THE FOLLOWING:

4 (A) NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION OF A
5 HIGH PRESSURE BOILER.

6 (B) A LOW PRESSURE CERTIFIED BOILER OPERATOR'S REGISTRATION
7 AND NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A LOW
8 PRESSURE BOILER.

9 (C) NOT LESS THAN 1 YEAR OF EITHER A QUALIFIED TRAINING
10 PROGRAM, A QUALIFIED TECHNICAL EDUCATION PROGRAM, OR AN APPROVED
11 APPRENTICESHIP PROGRAM.

12 (4) AN APPLICANT FOR A THIRD-CLASS CERTIFIED STATIONARY
13 ENGINEER REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING
14 REQUIREMENTS:

15 (A) BE REGISTERED AS A HIGH PRESSURE CERTIFIED BOILER OPERATOR
16 AND HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A
17 HIGH PRESSURE BOILER.

18 (B) BE REGISTERED AS A LOW PRESSURE CERTIFIED BOILER OPERATOR,
19 HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A LOW
20 PRESSURE BOILER, AND HAVE NOT LESS THAN 1 YEAR OF MAINTENANCE
21 EXPERIENCE ON HIGH PRESSURE BOILERS AND ASSOCIATED AUXILIARIES.

22 (C) BE REGISTERED AS A HIGH PRESSURE CERTIFIED BOILER OPERATOR
23 AND HAVE NOT LESS THAN 1 YEAR OF BOILER MAINTENANCE EXPERIENCE OR
24 NOT LESS THAN 1 YEAR AS AN APPRENTICE IN AN APPROVED TRAINING
25 PROGRAM IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE HEATING
26 SURFACE OF MORE THAN 4,000 SQUARE FEET.

27 (D) HAVE NOT LESS THAN 3 YEARS OF EXPERIENCE IN THE OPERATION

1 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
2 HEATING SURFACE OF MORE THAN 4,000 SQUARE FEET.

3 (E) HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION
4 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
5 HEATING SURFACE OF MORE THAN 4,000 SQUARE FEET ALONG WITH
6 SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 10
7 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 3 YEARS OF
8 EXPERIENCE.

9 (F) HAVE AN ASSOCIATE DEGREE IN ENERGY TECHNOLOGY OR A RELATED
10 FIELD AS DETERMINED BY THE BOARD WITH A POWER ENGINEERING OPTION
11 FROM A 2-YEAR COLLEGE WHOSE PROGRAM IS APPROVED BY THE BOARD AND
12 EMPLOYMENT OR COOPERATIVE EDUCATION EXPERIENCE OF NOT LESS THAN 360
13 HOURS AS A POWER ENGINEER, BOILER OPERATOR, OR STATIONARY ENGINEER
14 IN A STEAM ELECTRIC GENERATION PLANT OR A HIGH PRESSURE STEAM
15 HEATING OR PROCESS PLANT.

16 (5) AN APPLICANT FOR A SECOND-CLASS CERTIFIED STATIONARY
17 ENGINEER REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING
18 REQUIREMENTS:

19 (A) BE REGISTERED AS A THIRD-CLASS CERTIFIED STATIONARY
20 ENGINEER AND HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE AS A THIRD-
21 CLASS CERTIFIED 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 NOT LESS
27 THAN 1 YEAR.

1 (C) HAVE NOT LESS THAN 4 YEARS OF EXPERIENCE IN THE OPERATION
2 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
3 HEATING SURFACE OF MORE THAN 7,500 SQUARE FEET.

4 (D) HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION
5 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING 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 NOT LESS THAN 4 YEARS OF
9 EXPERIENCE.

10 (E) HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION
11 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
12 HEATING SURFACE OF MORE THAN 7,500 SQUARE FEET ALONG WITH
13 SUFFICIENT EXPERIENCE OPERATING BOILERS IN A HIGH PRESSURE BOILER
14 PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE THAN 4,000 SQUARE
15 FEET FOR A COMBINED TOTAL OF NOT LESS THAN 4 YEARS OF EXPERIENCE.

16 (6) AN APPLICANT FOR A FIRST-CLASS CERTIFIED STATIONARY
17 ENGINEER REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING
18 REQUIREMENTS:

19 (A) BE REGISTERED AS A SECOND-CLASS CERTIFIED STATIONARY
20 ENGINEER AND HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE AS A SECOND-
21 CLASS STATIONARY ENGINEER.

22 (B) HAVE NOT LESS THAN 6 YEARS OF EXPERIENCE IN THE OPERATION
23 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
24 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET.

25 (C) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION
26 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
27 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH

1 SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 200
2 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 6 YEARS OF
3 EXPERIENCE.

4 (D) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION
5 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
6 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
7 SUFFICIENT EXPERIENCE IN THE OPERATION OF BOILERS IN A HIGH
8 PRESSURE BOILER PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE
9 THAN 7,500 SQUARE FEET OF HEATING SURFACE FOR A COMBINED TOTAL OF
10 NOT LESS THAN 6 YEARS OF EXPERIENCE.

11 (E) COMPLETE A 4-YEAR APPROVED APPRENTICESHIP PROGRAM OR A 4-
12 YEAR QUALIFIED TRAINING PROGRAM.

13 (F) COMPLETE A 4-YEAR PROGRAM WITH A BACHELOR'S DEGREE FROM A
14 COLLEGE OR UNIVERSITY IN ENGINEERING, ENGINEERING TECHNOLOGY,
15 HEATING/POWER TECHNOLOGY, OR ENERGY TECHNOLOGY WHOSE PROGRAM IS
16 APPROVED BY THE BOARD AND WHICH INCLUDES A HANDS-ON POWER OPTION
17 FROM A 2-YEAR COMMUNITY COLLEGE PROGRAM OR THE EQUIVALENT, AS
18 DETERMINED BY THE BOARD, AND NOT LESS THAN 1 YEAR OF EMPLOYMENT,
19 INTERNSHIP, OR COOPERATIVE EDUCATION EXPERIENCE IN A STEAM ELECTRIC
20 GENERATION PLANT OR HIGH PRESSURE STEAM HEATING PROCESS PLANT.

21 Sec. 14. (1) ~~An inspector's, repairer's, or installer's~~ THE
22 CHIEF INSPECTOR MAY SUSPEND THE license may be suspended by the
23 ~~chief inspector for~~ OF AN INSPECTOR, REPAIRER, OR INSTALLER OR THE
24 REGISTRATION OF A CERTIFIED BOILER OPERATOR OR CERTIFIED STATIONARY
25 ENGINEER DUE TO the incompetence of the ~~holder thereof or for~~
26 ~~wilful~~ REGISTRANT OR LICENSEE OR DUE TO WILLFUL falsification of
27 ~~any~~ A matter or statement contained in ~~his~~ THAT REGISTRANT'S OR

1 LICENSEE'S application or in a report of ~~any~~ inspection made by
2 ~~him~~ **THE REGISTRANT OR LICENSEE**. Written notice of the suspension
3 shall be given by the chief inspector within ~~not more than~~ 10
4 days **AFTER THE SUSPENSION** to the **REGISTRANT OR** licensee, ~~his~~ **THE**
5 **REGISTRANT'S OR LICENSEE'S** employer, and the board. A person whose
6 **REGISTRATION OR** license has been suspended may appeal to the board
7 as provided in section 22 and be present in person and be
8 represented by counsel at the hearing of the appeal.

9 (2) If the board has reason to believe that a **REGISTRANT OR**
10 licensee is no longer qualified to hold his **OR HER REGISTRATION OR**
11 license, the board, upon not less than 10 days' written notice to
12 the **REGISTRANT OR** licensee and ~~his~~ **THE REGISTRANT'S OR LICENSEE'S**
13 employer, shall hold ~~a~~ **AN ADMINISTRATIVE** hearing at which the
14 **REGISTRANT OR** licensee and his **OR HER** employer shall have an
15 opportunity to be heard. If, as a result of the hearing, the board
16 finds that the **REGISTRANT OR** licensee is no longer qualified to
17 hold his **OR HER REGISTRATION OR** license, the board shall recommend
18 to the ~~commissioner~~ **DIRECTOR** that the **REGISTRATION OR** license be
19 revoked, and the ~~commissioner~~ **DIRECTOR** shall ~~thereupon~~
20 **IMMEDIATELY** revoke ~~such~~ **THE REGISTRATION OR** license. ~~forthwith.~~

21 (3) A person whose **REGISTRATION OR** license has been suspended
22 may apply, after 90 days from the date of the suspension, for
23 reinstatement of the **REGISTRATION OR** license.

24 Sec. 24. (1) ~~It shall be unlawful for any~~ **AN INDIVIDUAL, OR**
25 **OTHER** person, ~~firm, partnership, or corporation to~~ **SHALL NOT**
26 operate ~~in this state~~ a boiler without a valid inspection
27 certificate. The operation of a boiler without ~~such~~ **A VALID**

1 inspection certificate ~~—~~ or at a pressure exceeding that
2 specified in ~~such~~ **THE** inspection certificate ~~—~~ is a misdemeanor
3 on the part of the owner, user, or operator ~~thereof and shall be~~
4 punishable by ~~a fine not exceeding \$500.00, or imprisonment not~~
5 ~~to exceed~~ **FOR NOT MORE THAN** 60 days, or **BY A FINE OF NOT MORE THAN**
6 **\$500.00, OR** both. Each day of the unlawful operation is a separate
7 offense.

8 (2) **A PERSON OR BUSINESS ENTITY USING A TITLE DESCRIBED IN**
9 **SECTION 13A(2) WITHOUT A REGISTRATION ISSUED UNDER THIS ACT OR**
10 **WITHOUT AN EXEMPTION FROM REGISTRATION UNDER THIS ACT IS GUILTY OF**
11 **A MISDEMEANOR PUNISHABLE BY IMPRISONMENT FOR NOT MORE THAN 60 DAYS,**
12 **A FINE OF NOT MORE THAN \$500.00, OR BOTH.**