

HOUSE BILL No. 4326

February 13, 1997, Introduced by Reps. LaForge, Mans, Willard, Gubow, Leland, Anthony and Callahan and referred to the Committee on Regulatory Affairs.

A bill to amend 1965 PA 290, entitled "Boiler act of 1965," by amending the title and sections 2, 4, 4a, 12, 14, and 24 (MCL 408.752, 408.754, 408.754a, 408.762, 408.764, and 408.774), sections 2 and 4a as amended by 1986 PA 277 and section 4 as amended by 1980 PA 274, and by adding sections 13a, 13b, 13c, and 13d.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1

TITLE

2

An act to regulate the ~~use~~ OPERATION, construction,

3

installation, and repair of CERTAIN boilers; to create a board of

4

boiler rules; to prescribe uniform rules and regulations for

5

CERTAIN boilers; to provide for the licensing of CERTAIN boiler

6

inspectors, installers, and repairers AND REGISTRATION OF CERTAIN

7

BOILER OPERATORS AND STATIONARY ENGINEERS; TO PROVIDE FOR CERTAIN

00852'97

LBO

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

6 Sec. 2. As used in this act:

7 (a) "Boiler" means a closed vessel in which water is heated,
8 steam is generated, steam is superheated, or a combination there-
9 of, under pressure or vacuum by the application of heat from com-
10 bustible fuels, electricity, or nuclear energy. Boiler does not
11 include facilities of an integral part of a continuous processing
12 unit but does include a fired unit for heating or vaporizing liq-
13 uids other than water, if the unit is separate from a processing
14 system and is complete within itself.

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

18 (c) "High pressure, high temperature water boiler" means a
19 water heating boiler operating at pressure exceeding 160
20 p.s.i.g. or temperatures exceeding 250 degrees Fahrenheit.

21 (d) "Low pressure boiler" means a steam boiler operated at
22 pressures not exceeding 15 p.s.i.g., or a hot water heating
23 boiler operated at pressures not exceeding 160 p.s.i.g. or tem-
24 peratures not exceeding 250 degrees Fahrenheit.

25 (e) "Certificate inspection" means an inspection, the report
26 of which is used by the chief inspector to decide whether a
27 certificate, as provided by section 19, shall be issued. The

1 certificate inspection shall be an internal inspection if
2 construction allows. ~~otherwise~~ OTHERWISE, the certificate
3 inspection shall be as complete an inspection as possible.

4 (f) "External inspection" means an inspection which does not
5 involve examination of the internal surfaces of the pressure
6 parts of the boiler.

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

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

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

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

20 (k) "Director" means the director of labor or a representa-
21 tive designated by the director.

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

23 (M) "BOILER OPERATOR" OR "STATIONARY ENGINEER" MEANS A
24 PERSON ENGAGED IN THE OPERATION OF BOILERS AND ASSOCIATED
25 AUXILIARIES.

26 (N) "APPROVED APPRENTICESHIP PROGRAM" MEANS A TRAINING
27 PROGRAM FOR BOILER OPERATORS OR STATIONARY ENGINEERS CERTIFIED BY

1 OR MEETING THE STANDARDS OF THE UNITED STATES DEPARTMENT OF LABOR
2 BUREAU OF APPRENTICESHIP TRAINING AND APPROVED BY THE BOARD.

3 (O) "ASSOCIATED AUXILIARIES" MEANS EQUIPMENT WHICH IS
4 REQUIRED IN THE OPERATION OF A BOILER WHICH INCLUDES, BUT IS NOT
5 LIMITED TO, PUMPS, REGULATORS, FEEDWATER HEATERS, SUPERHEATERS,
6 DE-SUPERHEATERS, ECONOMIZERS, AIR PREHEATERS, DRAFT FANS, COMBUS-
7 TION AND POLLUTION CONTROL EQUIPMENT, AND PRIME MOVERS.

8 (P) "QUALIFIED TRAINING PROGRAM" MEANS AN IN-HOUSE TRAINING
9 PROGRAM APPROVED BY THE BOARD AND OFFERED TO BOILER OPERATORS AND
10 STATIONARY ENGINEERS BY A UTILITY AS A RESULT OF NEGOTIATIONS
11 BETWEEN A UTILITY AND ITS EMPLOYEES.

12 (Q) "QUALIFIED TECHNICAL EDUCATION PROGRAM" MEANS AN EDUCA-
13 TIONAL PROGRAM APPROVED BY THE BOARD WHICH 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
17 FOR LOW PRESSURE OPERATOR TRAINING OR OTHER ENTRY LEVEL TRAINING
18 POSITIONS ONLY.

19 Sec. 4. (1) The board shall formulate definitions and rules
20 for the safe construction, installation, inspection, OPERATION,
21 and repair of boilers in the state.

22 (2) The definitions and rules formulated for new construc-
23 tion shall be based upon and follow the generally accepted
24 nationwide engineering standards, formulae, and practices estab-
25 lished and pertaining to boiler construction and safety. The
26 board, by ~~resolution~~ RULE, may adopt an existing published
27 codification, known as the boiler and pressure vessel code of the

1 American society of mechanical engineers, with the amendments and
2 interpretations.

3 (3) The board shall formulate rules for the safe inspection
4 and maintenance of boilers ~~—,~~ which were in use in the state
5 before July 1, 1966. The rules formulated shall be based upon
6 and follow the generally accepted nationwide engineering stan-
7 dards and may be based upon an existing published codification
8 ~~—,~~ known as the inspection code of the national board of boiler
9 and pressure vessel inspectors.

10 (4) The rules formulated by the board shall be promulgated
11 pursuant to THE ADMINISTRATIVE PROCEDURES ACT OF 1969, ~~Act~~
12 ~~No. 306 of the Public Acts of 1969, as amended, being~~
13 ~~sections 24.201 to 24.315 of the Michigan Compiled Laws~~ 1969 PA
14 306, MCL 24.201 TO 24.328.

15 (5) A departure from the requirements of this section shall
16 be permitted in an unusual situation involving a boiler of spe-
17 cial design or construction, if the board is satisfied that a
18 proposed facility will provide a degree of safety commensurate
19 with the intent of this act.

20 (6) UPON PAYMENT OF A \$30.00 FEE AND WITHOUT EXAMINATION,
21 THE BOARD MAY REGISTER AN APPLICANT FOR THE USE OF A TITLE
22 DESCRIBED IN SECTION 13A WHO IS A BOILER OPERATOR OR STATIONARY
23 ENGINEER LICENSED OR REGISTERED AS A BOILER OPERATOR OR STATION-
24 ARY ENGINEER IN ANOTHER STATE, MUNICIPALITY, OR COUNTRY WHOSE
25 REQUIREMENTS FOR LICENSURE OR REGISTRATION ARE, AT A MINIMUM,
26 SUBSTANTIALLY EQUIVALENT TO THE REQUIREMENTS OF THIS STATE FOR
27 REGISTRATION AS DETERMINED BY THE BOARD, IF THAT OTHER STATE,

1 MUNICIPALITY, OR COUNTRY EXTENDS THE SAME PRIVILEGES OF
2 RECIPROCITY TO A BOILER OPERATOR OR STATIONARY ENGINEER REGIS-
3 TERED IN THIS STATE.

4 Sec. 4a. (1) ~~The~~ SUBJECT TO SECTIONS 4(6) AND 13A(6), THE
5 board, with the advice of the director, shall promulgate rules
6 pursuant to ~~The~~ THE administrative procedures act of 1969, ~~Act~~
7 ~~No. 306 of the Public Acts of 1969, as amended, being sections~~
8 ~~24.201 to 24.328 of the Michigan Compiled Laws,~~ 1969 PA 306, MCL
9 24.201 TO 24.328, licenses, REGISTRATIONS, permits, certificates,
10 and inspections. The fees shall reflect the actual costs and
11 expenses for the department of labor in issuing licenses,
12 REGISTRATIONS, permits, and certificates and in conducting
13 inspections.

14 (2) To accomplish the objectives of this section and this
15 act, a state boiler inspection fund is created IN THE STATE
16 TREASURY. The state treasurer shall be the custodian of the fund
17 and may invest the surplus of the fund in investments as in the
18 state treasurer's judgment are in the best interest of the fund.
19 Earnings from those investments shall be credited to the fund.
20 The state treasurer shall notify the director and the
21 ~~Legislature~~ LEGISLATURE of interest credited and the balance of
22 the fund as of September 30 of each year. The director shall
23 supervise and administer the fund. Fees received by the depart-
24 ment of labor and money collected under this act shall be depos-
25 ited in the state boiler inspection fund and shall be appropri-
26 ated by the ~~Legislature~~ LEGISLATURE for the operations of the
27 boiler division and THE indirect overhead expenses in the

1 department of labor. Funds that are unexpended at the end of
2 each fiscal year shall be returned to the state boiler inspection
3 fund.

4 Sec. 12. ~~Examination~~ THE EXAMINATION for chief, deputy,
5 or special inspectors shall be ~~in writing and~~ WRITTEN. THE
6 EXAMINATION FOR CERTIFIED BOILER OPERATORS SHALL BE EITHER WRIT-
7 TEN OR ORAL. THE EXAMINATION FOR CERTIFIED STATIONARY ENGINEERS
8 SHALL BE BOTH WRITTEN AND ORAL. THE EXAMINATIONS shall be ~~held~~
9 ADMINISTERED by the board, ~~with at least~~ AND NOT LESS THAN 2
10 members of the board SHALL BE present at all times during ~~the~~
11 AN examination. ~~Such examination~~ EXAMINATIONS shall be con-
12 fined to questions ~~, the answers to which~~ THAT will aid in
13 determining the fitness and competency of the applicant for the
14 intended service, and may be those prepared by the national board
15 of boiler and pressure vessel inspectors. THE BOARD MAY ADOPT
16 ANY EXAMINATION IT DETERMINES APPROPRIATE AND MAY DELEGATE ANY
17 ADMINISTRATIVE FUNCTIONS RELATING TO THE CONDUCT OF THE
18 EXAMINATION. If an applicant for ~~an inspector's~~ A license fails
19 to pass the examination, ~~he~~ THE APPLICANT may appeal to the
20 board for another examination which shall be given by the board
21 within 90 days. The record of an applicant's examination shall
22 be accessible to the applicant and ~~his~~ THE APPLICANT'S
23 employer.

24 SEC. 13A. (1) AN INDIVIDUAL MAY OPERATE A BOILER AND ASSO-
25 CIATED AUXILIARIES WITHOUT BEING REGISTERED UNDER THIS ACT.

26 (2) AN INDIVIDUAL OR BUSINESS ENTITY SHALL NOT USE THE TERMS
27 "CERTIFIED BOILER OPERATOR", "CERTIFIED STATIONARY ENGINEER",

1 "LOW PRESSURE CERTIFIED BOILER OPERATOR", "HIGH PRESSURE
2 CERTIFIED BOILER OPERATOR", "THIRD-CLASS CERTIFIED STATIONARY
3 ENGINEER", "SECOND-CLASS CERTIFIED STATIONARY ENGINEER",
4 "FIRST-CLASS CERTIFIED STATIONARY ENGINEER", OR ANY OTHER NAME,
5 STYLE, OR DESCRIPTION WHICH DENOTES THAT THE INDIVIDUAL OR AN
6 INDIVIDUAL EMPLOYED BY THE BUSINESS ENTITY IS REGISTERED UNDER
7 THIS ACT EXCEPT UNDER EITHER OF THE FOLLOWING CIRCUMSTANCES:

8 (A) THE INDIVIDUAL HAS BEEN ISSUED A REGISTRATION UNDER THIS
9 ACT.

10 (B) THE INDIVIDUAL IS EXEMPT UNDER SECTION 23 OF THIS ACT.

11 (3) THE INDIVIDUAL PARTICIPATING IN AN APPROVED APPRENTICE-
12 SHIP PROGRAM, A QUALIFIED TECHNICAL TRAINING PROGRAM, OR A QUALI-
13 FIED TRAINING PROGRAM MAY USE THE TITLE "APPRENTICE CERTIFIED
14 BOILER OPERATOR" OR "APPRENTICE CERTIFIED STATIONARY ENGINEER".

15 (4) AN INDIVIDUAL REGISTERED UNDER THIS ACT SHALL ONLY USE 1
16 OF THE TITLES DESCRIBED IN SUBSECTION (2) OR THE ABBREVIATION
17 "C.B.O." OR "C.S.E.". THE BOARD MAY CONDUCT AN EXAMINATION
18 DESIGNED TO ESTABLISH THE COMPETENCY OF APPLICANTS FOR REGISTRA-
19 TION AND MAY CHARGE AN EXAMINATION FEE.

20 (5) A PERSON APPLYING FOR A REGISTRATION UNDER THIS ACT
21 SHALL BE NOT LESS THAN 18 YEARS OF AGE, SHALL POSSESS THE PHYSI-
22 CAL AND MENTAL CAPACITIES TO PERFORM HIS OR HER DUTIES IN A COM-
23 PETENT AND SAFE MANNER, AND SHALL MEET THE APPLICABLE REQUIRE-
24 MENTS OF SECTION 13D. AN APPLICANT SHALL USE A FORM PROVIDED BY
25 THE DIRECTOR.

26 (6) THE DIRECTOR SHALL ISSUE A REGISTRATION UPON
27 RECOMMENDATION OF THE BOARD AND UPON THE APPLICANT'S PAYMENT OF A

1 TESTING FEE OF \$10.00 AND A REGISTRATION FEE OF \$20.00 OR A FEE
2 PRESCRIBED PURSUANT TO SECTION 4A, WHICHEVER IS HIGHER, FOR EACH
3 APPLICATION. A REGISTRATION SHALL BE RENEWED ANNUALLY UPON PAY-
4 MENT OF A FEE OF \$20.00 OR A FEE PRESCRIBED PURSUANT TO
5 SECTION 4A, WHICHEVER IS HIGHER.

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

11 (A) THE APPLICANT HAS HAD NOT LESS THAN 5 YEARS OF
12 EXPERIENCE IN THE CLASS OR CATEGORY OF BOILER OPERATOR OR STA-
13 TIONARY ENGINEER FOR WHICH THE APPLICANT IS APPLYING.

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

17 (C) THE APPLICANT HAS SUCCESSFULLY COMPLETED A 4-YEAR
18 APPROVED APPRENTICESHIP PROGRAM, A QUALIFIED TECHNICAL EDUCATION
19 PROGRAM, OR A 4-YEAR QUALIFIED TRAINING PROGRAM.

20 SEC. 13B. CERTIFIED BOILER OPERATOR AND CERTIFIED STATION-
21 ARY ENGINEER REGISTRATIONS ARE CLASSIFIED AS FOLLOWS:

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

25 (B) HIGH PRESSURE CERTIFIED BOILER OPERATOR, WHO OPERATES
26 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 4,000 SQUARE

1 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 10 STEAM

2 ENGINE-TURBINE HORSEPOWER.

3 (C) THIRD-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES

4 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 7,500 SQUARE

5 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 100 STEAM

6 ENGINE-TURBINE HORSEPOWER.

7 (D) SECOND-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES

8 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 20,000 SQUARE

9 FEET OF BOILER HEATING SURFACE OR NOT MORE THAN 200 STEAM

10 ENGINE-TURBINE HORSEPOWER.

11 (E) FIRST-CLASS CERTIFIED STATIONARY ENGINEER, WHO OPERATES

12 BOILER PLANTS HAVING AN AGGREGATE OF 20,000 SQUARE FEET OR MORE

13 OF BOILER HEATING SURFACE OR 200 STEAM ENGINE-TURBINE HORSEPOWER

14 OR MORE.

15 SEC. 13C. (1) NOT LATER THAN 180 DAYS AFTER THE EFFECTIVE

16 DATE OF THE AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD

17 SHALL PROMULGATE RULES DESIGNATING THE COURSE CONTENT FOR QUALI-

18 FIED TECHNICAL EDUCATION PROGRAMS FOR THE VARIOUS CATEGORIES AND

19 CLASSES OF REGISTRATION OF BOILER OPERATORS AND STATIONARY

20 ENGINEERS.

21 (2) THE RULES DESCRIBED IN SUBSECTION (1) SHALL PROVIDE THAT

22 THE COURSE CONTENT OF QUALIFIED TECHNICAL EDUCATION PROGRAMS FOR

23 ENTRY LEVEL REGISTRANTS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL

24 OF THE FOLLOWING SUBJECT MATTER AREAS:

25 (A) BASIC FUNCTIONS, CONSTRUCTION, AND OPERATION OF ALL

26 TYPES OF BOILERS.

1 (B) THE FUNCTION OF BOILER APPLIANCES, ACCESSORIES, AND
2 ASSOCIATED AUXILIARIES.

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

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

7 (E) BASIC ELECTRICITY.

8 (F) PLANT OPERATION AND BOILER MAINTENANCE.

9 (G) INSTRUMENTATION AND CONTROLS.

10 (H) FUNDAMENTAL MATHEMATICS AND PRINCIPLES OF THE METRIC
11 SYSTEM.

12 (I) GENERAL SAFETY PROCEDURES.

13 (J) RECOGNITION OF DANGEROUS OPERATION CONDITIONS.

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

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

23 (2) AN APPLICANT FOR A LOW PRESSURE CERTIFIED BOILER OPERA-
24 TOR REGISTRATION SHALL HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE
25 OPERATING OR MAINTAINING LOW OR HIGH PRESSURE BOILERS, STEAM
26 PRIME MOVERS, OR ASSOCIATED AUXILIARIES.

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

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

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

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

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

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

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

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

1 (D) HAVE NOT LESS THAN 3 YEARS OF EXPERIENCE IN THE
2 OPERATION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN
3 AGGREGATE HEATING SURFACE OF MORE THAN 4,000 SQUARE FEET.

4 (E) 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 4,000 SQUARE FEET ALONG WITH SUFFI-
7 CIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 10
8 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 3 YEARS OF
9 EXPERIENCE.

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

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

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

23 (B) HAVE A BACHELOR'S DEGREE IN ENGINEERING, ENGINEERING
24 TECHNOLOGY, HEATING/POWER TECHNOLOGY, OR ENERGY TECHNOLOGY FROM A
25 COLLEGE OR UNIVERSITY WHOSE PROGRAM IS APPROVED BY THE BOARD AND
26 EMPLOYMENT EXPERIENCE AS AN ENGINEER IN THE ENGINEERING OR

1 RESEARCH DIVISION OF A STEAM ELECTRIC POWER GENERATING PLANT FOR
2 NOT LESS THAN 1 YEAR.

3 (C) HAVE NOT LESS THAN 4 YEARS OF EXPERIENCE IN THE OPERA-
4 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGRE-
5 GATE HEATING SURFACE OF MORE THAN 7,500 SQUARE FEET.

6 (D) HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION
7 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
8 HEATING SURFACE OF MORE THAN 7,500 SQUARE FEET ALONG WITH SUFFI-
9 CIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 100
10 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 4 YEARS OF
11 EXPERIENCE.

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

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

22 (A) BE REGISTERED AS A SECOND-CLASS CERTIFIED STATIONARY
23 ENGINEER AND HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE AS A
24 SECOND-CLASS STATIONARY ENGINEER.

25 (B) HAVE NOT LESS THAN 6 YEARS OF EXPERIENCE IN THE OPERA-
26 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN
27 AGGREGATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET.

1 (C) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE
2 OPERATION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN
3 AGGREGATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG
4 WITH SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS
5 OF 200 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 6 YEARS
6 OF EXPERIENCE.

7 (D) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERA-
8 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGRE-
9 GATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
10 SUFFICIENT EXPERIENCE IN THE OPERATION OF BOILERS IN A HIGH PRES-
11 SURE BOILER PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE
12 THAN 7,500 SQUARE FEET OF HEATING SURFACE FOR A COMBINED TOTAL OF
13 NOT LESS THAN 6 YEARS OF EXPERIENCE.

14 (E) COMPLETE A 4-YEAR APPROVED APPRENTICESHIP PROGRAM OR A
15 4-YEAR QUALIFIED TRAINING PROGRAM.

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

25 Sec. 14. (1) ~~An inspector's, repairer's, or installer's~~
26 THE CHIEF INSPECTOR MAY SUSPEND THE license ~~may be suspended by~~
27 ~~the chief inspector for~~ OF AN INSPECTOR, REPAIRER, OR INSTALLER

1 OR THE REGISTRATION OF A CERTIFIED BOILER OPERATOR OR CERTIFIED
2 STATIONARY ENGINEER DUE TO the incompetence of the ~~holder~~
3 ~~thereof or for wilful~~ REGISTRANT OR LICENSEE OR DUE TO WILLFUL
4 falsification of ~~any~~ A matter or statement contained in ~~his~~
5 THAT REGISTRANT'S OR LICENSEE'S application or in a report of
6 ~~any~~ inspection made by ~~him~~ THE REGISTRANT OR LICENSEE.
7 Written notice of the suspension shall be given by the chief
8 inspector within ~~not more than~~ 10 days AFTER THE SUSPENSION to
9 the REGISTRANT OR licensee, ~~his~~ THE REGISTRANT'S OR LICENSEE'S
10 employer, and the board. A person whose REGISTRATION OR license
11 has been suspended may appeal to the board as provided in
12 section 22 and be present in person and be represented by counsel
13 at the hearing of the appeal.

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

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

4 Sec. 24. (1) ~~It shall be unlawful for any~~ A person, firm,
5 partnership, or corporation ~~to~~ SHALL NOT operate ~~in this~~
6 ~~state~~ a boiler without a valid inspection certificate. The
7 operation of a boiler without ~~such~~ A VALID inspection certifi-
8 cate ~~,~~ or at a pressure exceeding that specified in ~~such~~ THE
9 inspection certificate ~~,~~ is a misdemeanor on the part of the
10 owner, user, or operator ~~thereof and shall be~~ punishable by ~~a~~
11 ~~fine not exceeding \$500.00, or~~ imprisonment ~~not to exceed~~ FOR
12 NOT MORE THAN 60 days, or BY A FINE OF NOT MORE THAN \$500.00, OR
13 both. Each day of the unlawful operation is a separate offense.

14 (2) A PERSON OR BUSINESS ENTITY USING A TITLE DESCRIBED IN
15 SECTION 13A(2) WITHOUT BEING REGISTERED UNDER THIS ACT OR WITHOUT
16 BEING EXEMPT FROM REGISTRATION UNDER THIS ACT IS GUILTY OF A MIS-
17 DEMEANOR PUNISHABLE BY IMPRISONMENT FOR NOT MORE THAN 60 DAYS, A
18 FINE OF NOT MORE THAN \$500.00, OR BOTH.