



SENATE BILL No. 370

March 2, 1995, Introduced by Senator YOUNG and referred to the Committee on Economic Development, International Trade and Regulatory Affairs.

A bill to amend the title and sections 2, 4, 4a, 12, 14, and 24 of Act No. 290 of the Public Acts of 1965, entitled "Boiler act of 1965," sections 2 and 4a as amended by Act No. 277 of the Public Acts of 1986 and section 4 as amended by Act No. 274 of the Public Acts of 1980, being sections 408.752, 408.754, 408.754a, 408.762, 408.764, and 408.774 of the Michigan Compiled Laws; and to add sections 13a, 13b, 13c, and 13d.

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

1 Section 1. The title and sections 2, 4, 4a, 12, 14, and 24
2 of Act No. 290 of the Public Acts of 1965, sections 2 and 4a as
3 amended by Act No. 277 of the Public Acts of 1986 and section 4
4 as amended by Act No. 274 of the Public Acts of 1980, being
5 sections 408.752, 408.754, 408.754a, 408.762, 408.764, and

1 408.774 of the Michigan Compiled Laws, are amended and
2 sections 13a, 13b, 13c, and 13d are added to read as follows:

3 TITLE

4 An act to regulate the ~~use~~ OPERATION, construction,
5 installation, and repair of CERTAIN boilers; to create a board of
6 boiler rules; to prescribe uniform rules and regulations for
7 CERTAIN boilers; to provide for the licensing of CERTAIN boiler
8 inspectors, installers, and repairers AND REGISTRATION OF CERTAIN
9 BOILER OPERATORS AND STATIONARY ENGINEERS; TO PROVIDE FOR CERTAIN
10 POWERS AND DUTIES FOR CERTAIN STATE AGENCIES AND OFFICERS; to
11 provide CERTAIN fees for REGISTRATIONS, licenses, permits,
12 inspections, and certificates; to provide penalties AND REMEDIES
13 for the violation of this act; and to repeal certain acts and
14 parts of acts.

15 Sec. 2. As used in this act:

16 (a) "Boiler" means a closed vessel in which water is heated,
17 steam is generated, steam is superheated, or a combination there-
18 of, under pressure or vacuum by the application of heat from com-
19 bustible fuels, electricity, or nuclear energy. Boiler does not
20 include facilities of an integral part of a continuous processing
21 unit but does include a fired unit for heating or vaporizing liq-
22 uids other than water, if the unit is separate from a processing
23 system and is complete within itself.

24 (b) "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.
26 by the direct application of heat.

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

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

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

14 (f) "External inspection" means an inspection which does not
15 involve examination of the internal surfaces of the pressure
16 parts of the boiler.

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

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

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

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

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

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

7 (M) "BOILER OPERATOR" OR "STATIONARY ENGINEER" MEANS A
8 PERSON ENGAGED IN THE OPERATION OF BOILERS AND ASSOCIATED
9 AUXILIARIES.

10 (N) "APPROVED APPRENTICESHIP PROGRAM" MEANS A TRAINING PRO-
11 GRAM 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 (O) "ASSOCIATED AUXILIARIES" MEANS EQUIPMENT WHICH IS
15 REQUIRED IN THE OPERATION OF A BOILER WHICH INCLUDES, BUT IS NOT
16 LIMITED TO, PUMPS, REGULATORS, FEEDWATER HEATERS, SUPERHEATERS,
17 DE-SUPERHEATERS, ECONOMIZERS, AIR PREHEATERS, DRAFT FANS, COMBUS-
18 TION AND POLLUTION CONTROL EQUIPMENT, AND PRIME MOVERS.

19 (P) "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 (Q) "QUALIFIED TECHNICAL EDUCATION PROGRAM" MEANS AN EDUCA-
24 TIONAL PROGRAM APPROVED BY THE BOARD WHICH HAS A MINIMUM OF 350
25 CONTACT HOURS IN CLASSROOM HANDS-ON TRAINING, FIELD TRAINING, OR
26 SUPERVISED PLANT VISITS FOR HIGH PRESSURE BOILER OPERATORS. THE
27 BOARD MAY ESTABLISH LESSER STANDARDS FOR AN EDUCATIONAL PROGRAM

1 FOR LOW PRESSURE OPERATOR TRAINING OR OTHER ENTRY LEVEL TRAINING
2 POSITIONS ONLY.

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

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

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

21 (4) The rules formulated by the board shall be promulgated
22 pursuant to THE ADMINISTRATIVE PROCEDURES ACT OF 1969, Act
23 No. 306 of the Public Acts of 1969, as amended, being
24 sections 24.201 to ~~24.315~~ 24.328 of the Michigan Compiled
25 Laws.

26 (5) A departure from the requirements of this section shall
27 be permitted in an unusual situation involving a boiler of

1 special design or construction, if the board is satisfied that a
2 proposed facility will provide a degree of safety commensurate
3 with the intent of this act.

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

15 Sec. 4a. (1) ~~The~~ SUBJECT TO SECTIONS 4(6) AND 13A, THE
16 board, with the advice of the director, shall promulgate rules
17 pursuant to ~~The~~ THE administrative procedures act of 1969, Act
18 No. 306 of the Public Acts of 1969, as amended, being sections
19 24.201 to 24.328 of the Michigan Compiled Laws, to establish the
20 fee schedules for licenses, REGISTRATIONS, permits, certificates,
21 and inspections. The fees shall reflect the actual costs and
22 expenses for the department of labor in issuing licenses,
23 REGISTRATIONS, permits, and certificates and in conducting
24 inspections.

25 (2) To accomplish the objectives of this section and this
26 act, a state boiler inspection fund is created IN THE STATE
27 TREASURY. The state treasurer shall be the custodian of the fund

1 and may invest the surplus of the fund in investments as in the
2 state treasurer's judgment are in the best interest of the fund.
3 Earnings from those investments shall be credited to the fund.
4 The state treasurer shall notify the director and the
5 ~~Legislature~~ LEGISLATURE of interest credited and the balance of
6 the fund as of September 30 of each year. The director shall
7 supervise and administer the fund. Fees received by the depart-
8 ment of labor and money collected under this act shall be depos-
9 ited in the state boiler inspection fund and shall be appropri-
10 ated by the ~~Legislature~~ LEGISLATURE for the operations of the
11 boiler division and THE indirect overhead expenses in the depart-
12 ment of labor. Funds that are unexpended at the end of each
13 fiscal year shall be returned to the state boiler inspection
14 fund.

15 Sec. 12. ~~Examination~~ THE EXAMINATION for chief, deputy,
16 or special inspectors shall be ~~in writing and~~ WRITTEN. THE
17 EXAMINATION FOR CERTIFIED BOILER OPERATORS SHALL BE EITHER WRIT-
18 TEN OR ORAL. THE EXAMINATION FOR CERTIFIED STATIONARY ENGINEERS
19 SHALL BE BOTH WRITTEN AND ORAL. THE EXAMINATIONS shall be ~~held~~
20 ADMINISTERED by the board, ~~with at least~~ AND NOT LESS THAN 2
21 members of the board SHALL BE present at all times during ~~the~~
22 AN examination. ~~Such examination~~ EXAMINATIONS shall be con-
23 fined to questions ~~, the answers to which~~ THAT will aid in
24 determining the fitness and competency of the applicant for the
25 intended service, and may be those prepared by the national board
26 of boiler and pressure vessel inspectors. THE BOARD MAY ADOPT
27 ANY EXAMINATION IT DETERMINES APPROPRIATE AND MAY DELEGATE ANY

1 ADMINISTRATIVE FUNCTIONS RELATING TO THE CONDUCT OF THE
2 EXAMINATION. If an applicant for ~~an inspector's~~ A license fails
3 to pass the examination, ~~he~~ THE APPLICANT may appeal to the
4 board for another examination which shall be given by the board
5 within 90 days. The record of an applicant's examination shall
6 be accessible to the applicant and ~~his~~ THE APPLICANT'S
7 employer.

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

10 (2) AN INDIVIDUAL OR BUSINESS ENTITY SHALL NOT USE THE TERMS
11 "CERTIFIED BOILER OPERATOR", "CERTIFIED STATIONARY ENGINEER",
12 "LOW PRESSURE CERTIFIED BOILER OPERATOR", "HIGH PRESSURE CERTI-
13 FIED BOILER OPERATOR", "THIRD-CLASS CERTIFIED STATIONARY
14 ENGINEER", "SECOND-CLASS CERTIFIED STATIONARY ENGINEER",
15 "FIRST-CLASS CERTIFIED STATIONARY ENGINEER", OR ANY OTHER NAME,
16 STYLE, OR DESCRIPTION WHICH DENOTES THAT THE INDIVIDUAL OR AN
17 INDIVIDUAL EMPLOYED BY THE BUSINESS ENTITY IS REGISTERED UNDER
18 THIS ACT EXCEPT UNDER EITHER OF THE FOLLOWING CIRCUMSTANCES:

19 (A) THE INDIVIDUAL HAS BEEN ISSUED A REGISTRATION UNDER THIS
20 ACT.

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

22 (3) THE INDIVIDUAL PARTICIPATING IN AN APPROVED APPRENTICE-
23 SHIP PROGRAM, A QUALIFIED TECHNICAL TRAINING PROGRAM, OR A QUALI-
24 FIED TRAINING PROGRAM MAY USE THE TITLE "APPRENTICE CERTIFIED
25 BOILER OPERATOR" OR "APPRENTICE CERTIFIED STATIONARY ENGINEER".

26 (4) AN INDIVIDUAL REGISTERED UNDER THIS ACT SHALL ONLY USE 1
27 OF THE TITLES DESCRIBED IN SUBSECTION (2) OR THE ABBREVIATION

1 "C.B.O." OR "C.S.E.". THE BOARD MAY CONDUCT AN EXAMINATION
2 DESIGNED TO ESTABLISH THE COMPETENCY OF APPLICANTS FOR REGISTRA-
3 TION AND MAY CHARGE AN EXAMINATION FEE.

4 (5) A PERSON APPLYING FOR A REGISTRATION UNDER THIS ACT
5 SHALL BE NOT LESS THAN 18 YEARS OF AGE, SHALL POSSESS THE PHYSI-
6 CAL AND MENTAL CAPACITIES TO PERFORM HIS OR HER DUTIES IN A COM-
7 PETENT AND SAFE MANNER, AND SHALL MEET THE APPLICABLE REQUIRE-
8 MENTS OF SECTION 13D. AN APPLICANT SHALL USE A FORM PROVIDED BY
9 THE DIRECTOR. IN ANY CLASS OF REGISTRATION, THE APPLICANT, UPON
10 REQUEST OF THE BOARD, SHALL MAKE AVAILABLE WRITTEN DOCUMENTATION
11 OF VERIFICATION OF EXPERIENCE ACCEPTABLE TO THE BOARD.

12 (6) THE DIRECTOR SHALL ISSUE A REGISTRATION UPON RECOMMENDA-
13 TION OF THE BOARD AND UPON THE APPLICANT'S PAYMENT OF A TESTING
14 FEE OF \$10.00 AND A REGISTRATION FEE OF \$20.00 OR A FEE PRE-
15 SCRIBED PURSUANT TO SECTION 4A, WHICHEVER IS HIGHER, FOR EACH
16 APPLICATION. A REGISTRATION SHALL BE RENEWED ANNUALLY UPON PAY-
17 MENT OF A FEE OF \$20.00 OR A FEE PRESCRIBED PURSUANT TO
18 SECTION 4A, WHICHEVER IS HIGHER.

19 (7) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE
20 1995 AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD SHALL REC-
21 OMMEND FOR REGISTRATION WITHOUT EXAMINATION AN APPLICANT WHO SUB-
22 MITS EVIDENCE SATISFACTORY TO THE BOARD OF 1 OR MORE OF THE
23 FOLLOWING:

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

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

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

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

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

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

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

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

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

1 SEC. 13C. (1) NOT LATER THAN 180 DAYS AFTER THE EFFECTIVE
2 DATE OF THE 1995 AMENDATORY ACT THAT ADDED THIS SECTION, THE
3 BOARD SHALL PROMULGATE RULES DESIGNATING THE COURSE CONTENT FOR
4 QUALIFIED TECHNICAL EDUCATION PROGRAMS FOR THE VARIOUS CATEGORIES
5 AND CLASSES OF REGISTRATION OF BOILER OPERATORS AND STATIONARY
6 ENGINEERS.

7 (2) THE RULES DESCRIBED IN SUBSECTION (1) SHALL PROVIDE THAT
8 THE COURSE CONTENT OF QUALIFIED TECHNICAL EDUCATION PROGRAMS FOR
9 ENTRY LEVEL REGISTRANTS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL
10 OF THE FOLLOWING SUBJECT MATTER AREAS:

11 (A) BASIC FUNCTIONS, CONSTRUCTION, AND OPERATION OF ALL
12 TYPES OF BOILERS.

13 (B) THE FUNCTION OF BOILER APPLIANCES, ACCESSORIES, AND
14 ASSOCIATED AUXILIARIES.

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

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

19 (E) BASIC ELECTRICITY.

20 (F) PLANT OPERATION AND BOILER MAINTENANCE.

21 (G) INSTRUMENTATION AND CONTROLS.

22 (H) FUNDAMENTAL MATHEMATICS AND PRINCIPLES OF THE METRIC
23 SYSTEM.

24 (I) GENERAL SAFETY PROCEDURES.

25 (J) RECOGNITION OF DANGEROUS OPERATION CONDITIONS.

26 (3) THE BOARD SHALL PROVIDE THAT THE COURSE CONTENT FOR
27 CATEGORIES AND CLASSES OTHER THAN ENTRY LEVEL REGISTRANTS

1 INCLUDES SUBJECT MATTER SIMILAR TO THOSE DESCRIBED IN
2 SUBSECTION (2) IN THE DEGREE OF DEPTH AND DIFFICULTY APPROPRIATE
3 FOR THE CATEGORY AND CLASS.

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

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

12 (3) AN APPLICANT FOR A HIGH PRESSURE CERTIFIED BOILER OPERA-
13 TOR REGISTRATION SHALL HAVE 1 OR MORE OF THE FOLLOWING:

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

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

19 (C) SUCCESSFUL COMPLETION OF NOT LESS THAN 1 YEAR OF EITHER
20 A QUALIFIED TRAINING PROGRAM, A QUALIFIED TECHNICAL EDUCATION
21 PROGRAM, OR AN APPROVED APPRENTICESHIP PROGRAM.

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

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

1 (B) BE REGISTERED AS A LOW PRESSURE CERTIFIED BOILER
2 OPERATOR, HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERA-
3 TION OF A LOW PRESSURE BOILER, AND HAVE NOT LESS THAN 1 YEAR OF
4 MAINTENANCE EXPERIENCE ON HIGH PRESSURE BOILERS AND ASSOCIATED
5 AUXILIARIES.

6 (C) BE REGISTERED AS A HIGH PRESSURE CERTIFIED BOILER OPERA-
7 TOR AND HAVE NOT LESS THAN 1 ADDITIONAL YEAR OF BOILER MAINTENANCE
8 EXPERIENCE OR NOT LESS THAN 1 ADDITIONAL YEAR AS AN APPRENTICE
9 IN AN APPROVED TRAINING PROGRAM IN A HIGH PRESSURE BOILER
10 PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE THAN 4,000
11 SQUARE FEET.

12 (D) HAVE NOT LESS THAN 3 YEARS OF EXPERIENCE IN THE OPERA-
13 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
14 HEATING SURFACE OF MORE THAN 4,000 SQUARE FEET.

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

21 (F) HAVE BOTH OF THE FOLLOWING:

22 (i) AN ASSOCIATE DEGREE OR A 2-YEAR EQUIVALENT COURSE IN
23 ENERGY TECHNOLOGY OR A RELATED FIELD, BOTH OF WHICH ARE DETERMINED
24 ACCEPTABLE TO THE BOARD, WITH A POWER ENGINEERING CONCENTRATION
25 ACCEPTABLE TO THE BOARD. THE ASSOCIATE DEGREE OR 2-YEAR
26 EQUIVALENT COURSE SHALL BE FROM A BOARD-APPROVED 2-YEAR COLLEGE
27 OR EQUIVALENT INSTITUTION.

1 (ii) EMPLOYMENT OR COOPERATIVE EDUCATION EXPERIENCE OF NOT
2 LESS THAN 360 HOURS AS A POWER ENGINEER, BOILER OPERATOR, OR STA-
3 TIONARY ENGINEER IN A STEAM ELECTRIC GENERATION PLANT OR HIGH
4 PRESSURE STEAM HEATING OR PROCESSING PLANT. THE EMPLOYMENT OR
5 COOPERATIVE EDUCATION EXPERIENCE DESCRIBED IN THIS SUBPARAGRAPH
6 SHALL NOT INCLUDE LABORATORY EXPERIENCE.

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

10 (A) BE REGISTERED AS A THIRD-CLASS CERTIFIED STATIONARY
11 ENGINEER AND HAVE NOT LESS THAN 1 ADDITIONAL YEAR OF EXPERIENCE
12 AS A THIRD-CLASS CERTIFIED 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
17 RESEARCH DIVISION OF A STEAM ELECTRIC POWER GENERATING PLANT FOR
18 NOT LESS THAN 1 YEAR.

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

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

1 (E) HAVE NOT LESS THAN 1 YEAR 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 ALONG WITH SUFFI-
4 CIENT EXPERIENCE OPERATING BOILERS IN A HIGH PRESSURE BOILER
5 PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE THAN 4,000
6 SQUARE FEET FOR A COMBINED TOTAL OF NOT LESS THAN 4 YEARS OF
7 EXPERIENCE.

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

11 (A) BE REGISTERED AS A SECOND-CLASS CERTIFIED STATIONARY
12 ENGINEER AND HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE AS A
13 SECOND-CLASS STATIONARY ENGINEER.

14 (B) HAVE NOT LESS THAN 6 YEARS OF EXPERIENCE IN THE OPERA-
15 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGRE-
16 GATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET.

17 (C) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERA-
18 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGRE-
19 GATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
20 SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF
21 200 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 6 YEARS OF
22 EXPERIENCE.

23 (D) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERA-
24 TION OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGRE-
25 GATE HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
26 SUFFICIENT EXPERIENCE IN THE OPERATION OF BOILERS IN A HIGH
27 PRESSURE BOILER PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE

1 THAN 7,500 SQUARE FEET OF HEATING SURFACE FOR A COMBINED TOTAL OF
2 NOT LESS THAN 6 YEARS OF EXPERIENCE.

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

5 (F) COMPLETE A 4-YEAR PROGRAM WITH A BACHELOR'S DEGREE FROM
6 A COLLEGE OR UNIVERSITY IN ENGINEERING, ENGINEERING TECHNOLOGY,
7 HEATING/POWER TECHNOLOGY, OR ENERGY TECHNOLOGY WHOSE PROGRAM IS
8 APPROVED BY THE BOARD AND WHICH INCLUDES A HANDS-ON POWER OPTION
9 FROM A 2-YEAR COMMUNITY COLLEGE PROGRAM OR THE EQUIVALENT, AS
10 DETERMINED BY THE BOARD, AND NOT LESS THAN 1 YEAR OF EMPLOYMENT,
11 INTERNSHIP, OR COOPERATIVE EDUCATION EXPERIENCE IN A STEAM ELEC-
12 TRIC GENERATION PLANT OR HIGH PRESSURE STEAM HEATING PROCESS
13 PLANT.

14 Sec. 14. (1) ~~An inspector's, repairer's, or installer's~~
15 THE CHIEF INSPECTOR MAY SUSPEND THE license ~~may be suspended by~~
16 ~~the chief inspector for~~ OF AN INSPECTOR, REPAIRER, OR INSTALLER
17 OR THE REGISTRATION OF A CERTIFIED BOILER OPERATOR OR CERTIFIED
18 STATIONARY ENGINEER DUE TO the incompetence of the ~~holder~~
19 ~~thereof or for wilful~~ REGISTRANT OR LICENSEE OR DUE TO WILLFUL
20 falsification of ~~any~~ A matter or statement contained in ~~his~~
21 THAT REGISTRANT'S OR LICENSEE'S application or in a report of
22 ~~any~~ inspection made by ~~him~~ THE REGISTRANT OR LICENSEE.
23 Written notice of the suspension shall be given by the chief
24 inspector within ~~not more than~~ 10 days AFTER THE SUSPENSION to
25 the REGISTRANT OR licensee, ~~his~~ THE REGISTRANT'S OR LICENSEE'S
26 employer, and the board. A person whose REGISTRATION OR license
27 has been suspended may appeal to the board as provided in

1 section 22 and be present in person and be represented by counsel
2 at the hearing of the appeal.

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

16 (3) A person whose REGISTRATION OR license has been sus-
17 pended may apply, after 90 days from the date of the suspension,
18 for reinstatement of the REGISTRATION OR license.

19 Sec. 24. (1) ~~It shall be unlawful for any~~ A person, firm,
20 partnership, or corporation ~~to~~ SHALL NOT operate ~~in this~~
21 ~~state~~ a boiler without a valid inspection certificate. The
22 operation of a boiler without ~~such~~ A VALID inspection certifi-
23 cate ~~—~~ or at a pressure exceeding that specified in ~~such~~ THE
24 inspection certificate ~~—~~ is a misdemeanor on the part of the
25 owner, user, or operator ~~thereof and shall be~~ punishable by ~~a~~
26 ~~fine not exceeding \$500.00, or imprisonment not to exceed~~ FOR

1 NOT MORE THAN 60 days, or BY A FINE OF NOT MORE THAN \$500.00, OR
2 both. Each day of the unlawful operation is a separate offense.

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