SUBSTITUTE FOR HOUSE BILL NO. 4216

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 TITLE

- 2 An act to regulate the use, construction, installation, and
- 3 repair of CERTAIN boilers; to create a board of boiler rules; to
- 4 prescribe uniform rules and regulations for CERTAIN boilers; to
- 5 provide for the licensing of CERTAIN boiler inspectors, installers,
- 6 and repairers AND REGISTRATION OF CERTAIN BOILER OPERATORS AND
- 7 STATIONARY ENGINEERS; TO PROVIDE FOR POWERS AND DUTIES FOR CERTAIN

- 1 STATE AGENCIES AND OFFICERS; to provide fees for REGISTRATIONS,
- 2 licenses, permits, inspections, and certificates; to provide
- 3 penalties AND REMEDIES for the violation of this act; and to repeal
- 4 certain acts and parts of acts.
- 5 Sec. 2. As used in this act:
- 6 (a) "Antique steam boiler" means a boiler that is no longer
- 7 used in production applications and is used to demonstrate the
- 8 historical significance of steam boilers in American history.
- 9 (B) "APPROVED APPRENTICESHIP PROGRAM" MEANS A TRAINING PROGRAM
- 10 FOR BOILER OPERATORS OR STATIONARY ENGINEERS CERTIFIED BY OR
- 11 MEETING THE STANDARDS OF THE UNITED STATES DEPARTMENT OF LABOR
- 12 BUREAU OF APPRENTICESHIP TRAINING AND APPROVED BY THE BOARD.
- 13 (C) "ASSOCIATED AUXILIARIES" MEANS EQUIPMENT THAT IS REQUIRED
- 14 IN THE OPERATION OF A BOILER THAT INCLUDES, BUT IS NOT LIMITED TO,
- 15 PUMPS, REGULATORS, FEEDWATER HEATERS, SUPERHEATERS, DE-
- 16 SUPERHEATERS, ECONOMIZERS, AIR PREHEATERS, DRAFT FANS, COMBUSTION
- 17 AND POLLUTION CONTROL EQUIPMENT, AND PRIME MOVERS.
- 18 (D) (b)—"Board" means the board of boiler rules created in
- **19** section 3.
- 20 (E) (c) "Boiler" means a closed vessel in which water is
- 21 heated, steam is generated, steam is superheated, or a combination
- 22 thereof, under pressure or vacuum by the application of heat from
- 23 combustible fuels, electricity, or nuclear energy. Boiler does not
- 24 include facilities of an integral part of a continuous processing
- 25 unit but does include a fired unit for heating or vaporizing
- 26 liquids other than water, if the unit is separate from a processing
- 27 system and is complete within itself.

- 1 (F) (d)—"Boiler for agricultural purposes" means a portable
- 2 boiler used in a field or similar open area for the sole purpose of
- 3 operating farm equipment or farm machinery.
- 4 (G) "BOILER OPERATOR" OR "STATIONARY ENGINEER" MEANS A PERSON
- 5 ENGAGED IN THE OPERATION OF BOILERS AND ASSOCIATED AUXILIARIES.
- 6 (H) (e)—"Certificate inspection" means an inspection, the
- 7 report of which is used by the chief inspector to decide whether a
- 8 certificate, as provided by section 19-20, shall be issued. The
- 9 certificate inspection shall be an internal inspection if
- 10 construction allows; otherwise the certificate inspection shall be
- 11 as complete an inspection as possible.
- 12 (I) (f) "Director" means the director of THE DEPARTMENT OF
- 13 labor and economic growth or a representative designated by the
- 14 director.
- 15 (J) (g) "External inspection" means an inspection which THAT
- 16 does not involve examination of the internal surfaces of the
- 17 pressure parts of the boiler.
- 18 (K) (h) "Heating surface" means the heating surface determined
- 19 by the boiler manufacturer and recorded in the manufacturer's data
- 20 report or by rules established by the board for a boiler if the
- 21 manufacturer's data report is not available or the boiler is not
- 22 stamped with its heating surface.
- 23 (l) (i)—"High pressure, high temperature water boiler" means a
- 24 water heating boiler operating at pressure exceeding 160 p.s.i.g.
- 25 or temperatures exceeding 250 degrees Fahrenheit.
- 26 (M) (j)—"Low pressure boiler" means a steam boiler operated at
- 27 pressures not exceeding 15 p.s.i.g., or a hot water heating boiler

- 1 operated at pressures not exceeding 160 p.s.i.g. or temperatures
- 2 not exceeding 250 degrees Fahrenheit.
- 3 (N) (k) "P.S.I.G." means pounds per square inch gauge.
- 4 (O) (1)—"Power boiler" means a closed vessel in which steam or
- 5 other vapor is generated at a pressure of more than 15 p.s.i.g. by
- 6 the direct application of heat.
- 7 (P) (m)—"Process boiler" means a boiler operated at a pressure
- 8 or temperature from which more than 10% of the boiler's capacity is
- 9 used for direct steam humidification or direct process work.
- 10 (Q) "QUALIFIED TECHNICAL EDUCATION PROGRAM" MEANS AN
- 11 EDUCATIONAL PROGRAM APPROVED BY THE BOARD THAT HAS A MINIMUM OF 350
- 12 CONTACT HOURS IN CLASSROOM HANDS-ON TRAINING, FIELD TRAINING, OR
- 13 SUPERVISED PLANT VISITS FOR HIGH PRESSURE BOILER OPERATORS. THE
- 14 BOARD MAY ESTABLISH LESSER STANDARDS FOR AN EDUCATIONAL PROGRAM FOR
- 15 LOW PRESSURE OPERATOR TRAINING OR OTHER ENTRY LEVEL TRAINING
- 16 POSITIONS ONLY.
- 17 (R) "QUALIFIED TRAINING PROGRAM" MEANS AN IN-HOUSE TRAINING
- 18 PROGRAM APPROVED BY THE BOARD AND OFFERED TO BOILER OPERATORS AND
- 19 STATIONARY ENGINEERS BY AN EMPLOYER AS A RESULT OF NEGOTIATIONS
- 20 BETWEEN AN EMPLOYER AND ITS EMPLOYEES.
- 21 (S) "RULE" MEANS A RULE PROMULGATED PURSUANT TO THE
- 22 ADMINISTRATIVE PROCEDURES ACT OF 1969, 1969 PA 306, MCL 24.201 TO
- 23 24.328.
- 24 (T) (n)—"Secondhand boiler" means a boiler which—THAT has
- 25 changed ownership and location after initial use.
- 26 Sec. 4. (1) The board DEPARTMENT shall formulate definitions
- 27 and PROMULGATE rules for the safe construction, installation,

- 1 inspection, OPERATION, and repair of boilers in the state.
- 2 (2) The definitions and rules formulated PROMULGATED for new

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- 3 construction shall be based upon and follow the generally accepted
- 4 nationwide engineering standards, formulae, and practices
- 5 established and pertaining to boiler construction and safety. The
- 6 board DEPARTMENT, by resolution RULE, may adopt an existing
- 7 published codification, known as the boiler and pressure vessel
- 8 code of the American society of mechanical engineers, with the
- 9 amendments and interpretations.
- 10 (3) The board DEPARTMENT shall formulate PROMULGATE rules for
- 11 the safe inspection and maintenance of boilers , which THAT were in
- 12 use in the state before July 1, 1966. The rules formulated
- 13 PROMULGATED shall be based upon and follow the generally accepted
- 14 nationwide engineering standards and may be based upon an existing
- 15 published codification known as the inspection code of the
- 16 national board of boiler and pressure vessel inspectors.
- 17 (4) The rules formulated by the board shall be promulgated
- 18 pursuant to Act No. 306 of the Public Acts of 1969, as amended,
- 19 being sections 24.201 to 24.315 of the Michigan Compiled Laws.
- 20 (4) (5)—A departure from the requirements of this section
- 21 shall be—IS permitted in an unusual situation involving a boiler of
- 22 special design or construction if the board is satisfied that a
- 23 proposed facility will provide a degree of safety commensurate with
- 24 the intent of this act.
- 25 (5) UPON PAYMENT OF A FEE AS PRESCRIBED BY SECTION 4A AND
- 26 WITHOUT EXAMINATION, THE BOARD MAY REGISTER AN APPLICANT FOR THE
- 27 USE OF A TITLE DESCRIBED IN SECTION 13A WHO IS A BOILER OPERATOR OR

- 1 STATIONARY ENGINEER LICENSED OR REGISTERED AS A BOILER OPERATOR OR
- 2 STATIONARY ENGINEER IN ANOTHER STATE, MUNICIPALITY, OR COUNTRY
- 3 WHOSE REQUIREMENTS FOR LICENSURE OR REGISTRATION ARE, AT A MINIMUM,
- 4 SUBSTANTIALLY EQUIVALENT TO THE REQUIREMENTS OF THIS STATE FOR
- 5 REGISTRATION AS DETERMINED BY THE BOARD, IF THAT OTHER STATE,
- 6 MUNICIPALITY, OR COUNTRY EXTENDS THE SAME PRIVILEGES THROUGH
- 7 RECIPROCITY TO A BOILER OPERATOR OR STATIONARY ENGINEER REGISTERED
- 8 IN THIS STATE.
- 9 Sec. 4a. (1) The board, with the advice of the director
- 10 DEPARTMENT, IN CONSULTATION WITH THE BOARD, shall promulgate rules
- 11 pursuant to the administrative procedures act of 1969, 1969 PA 306,
- 12 MCL 24.201 to 24.328, to establish the fee schedules for licenses,
- 13 permits, certificates, REGISTRATIONS, EXAMINATIONS, and
- 14 inspections. The fees shall reflect the actual costs and expenses
- 15 for the department of labor and economic growth in issuing
- 16 licenses, permits, REGISTRATIONS, EXAMINATIONS, and certificates
- 17 and in conducting inspections.
- 18 (2) Beginning the effective date of the amendatory act that
- 19 added subsection (3) JULY 23, 2004, the department of labor and
- 20 economic growth shall issue an initial or renewal license, to
- 21 install or repair a boiler or a permit, for the installation or
- 22 repair of a boiler OR REGISTRATION, not later than 90 days after
- 23 the applicant files a completed application. Receipt of the
- 24 application is considered the date the application is received by
- 25 any agency or department of the state of Michigan. If the
- 26 application is considered incomplete by the department of labor and
- 27 economic growth, the department of labor and economic growth shall

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- 1 notify the applicant in writing, or make the information
- 2 electronically available, within 30 days after receipt of the
- 3 incomplete application, describing the deficiency and requesting
- 4 the additional information. The 90-day period is tolled upon
- 5 notification by the department of labor and economic growth of a
- 6 deficiency until the date the requested information is received by
- 7 the department of labor and economic growth. The determination of
- 8 the completeness of an application does not operate as an approval
- 9 of the application for the REGISTRATION, license, or permit and
- 10 does not confer eligibility of an applicant determined otherwise
- 11 ineligible for issuance of a REGISTRATION, license, or permit.
- 12 (3) If the department of labor and economic growth fails to
- 13 issue or deny a REGISTRATION, license, or permit within the time
- 14 required by this section, the department of labor and economic
- 15 growth shall return the REGISTRATION, license, or permit fee and
- 16 shall reduce the REGISTRATION, license, or permit fee for the
- 17 applicant's next renewal application, if any, by 15%. The failure
- 18 to issue a REGISTRATION, license, or permit within the time
- 19 required under this subsection does not allow the department to
- 20 otherwise delay the processing of the application, and that
- 21 application, upon completion, shall be placed in sequence with
- 22 other completed applications received at that same time. The
- 23 department of labor and economic growth shall not discriminate
- 24 against an applicant in the processing of the application based
- 25 upon the fact that the **REGISTRATION**, license, or permit fee was
- 26 refunded or discounted under this subsection.
- 27 (4) Beginning October 1, 2005, the director shall submit a

- 1 report by December 1 of each year to the standing committees and
- 2 appropriations subcommittees of the senate and house of
- 3 representatives concerned with occupational issues. The director
- 4 shall include all of the following information in the report
- 5 concerning the preceding fiscal year:
- 6 (a) The number of initial and renewal applications the
- 7 department OF LABOR AND ECONOMIC GROWTH received and completed
- 8 within the 90-day time period described in subsection (2).
- 9 (b) The number of applications denied.
- 10 (c) The number of applicants not issued a **PERMIT**,
- 11 REGISTRATION, OR license within the 90-day time period and the
- 12 amount of money returned to licensees, **PERMITTEES**, 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 Legislature
- 25 LEGISLATURE for the operations of the boiler division and indirect
- 26 overhead expenses in the department of labor and economic growth.
- 27 Funds that are unexpended at the end of each fiscal year shall not

- 1 lapse to the general fund and shall be returned to the state boiler
- 2 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 REGISTRATION, licensing, or permit 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:
- 11 (a) Boilers under federal control.
- 12 (b) Boilers used in the power plants of self-propelled
- 13 vehicles designed primarily for the transportation of persons or
- 14 property upon a highway, except vehicles used exclusively upon
- 15 stationary rails or tracks.
- 16 (c) Boilers used solely for agricultural purposes.
- 17 (d) Steam or vapor boilers carrying a pressure of not more
- 18 than 15 p.s.i.g., which are located in a private residence or in an
- 19 apartment building with a capacity of less than 6 families. except
- 20 that installers and repairers of such boilers shall be licensed as
- 21 provided in section 13.
- (e) Hot water boilers operated at a pressure not exceeding 160
- 23 p.s.i.g. or a temperature not exceeding 250 degrees Fahrenheit that
- 24 are located in a private residence or in an apartment building with
- 25 a capacity of less than 6 families. except that installers and
- 26 repairers of such boilers shall be licensed as provided in section
- 27 13.

- 1 Sec. 12. Examination THE EXAMINATION for chief, deputy, or
- 2 special inspectors shall be in writing and WRITTEN. THE EXAMINATION
- 3 FOR BOILER OPERATORS SHALL BE EITHER WRITTEN OR ORAL. THE
- 4 EXAMINATION FOR STATIONARY ENGINEERS SHALL BE BOTH WRITTEN AND
- 5 ORAL. THE EXAMINATIONS shall be held—ADMINISTERED by the board,
- 6 with at least AND NOT LESS THAN 2 members of the board SHALL BE
- 7 present at all times during the AN examination. Such examination
- 8 EXAMINATIONS shall be confined to questions , the answers to which
- 9 THAT will aid in determining the fitness and competency of the
- 10 applicant for the intended service, and may be those prepared by
- 11 the national board of boiler and pressure vessel inspectors. THE
- 12 BOARD MAY ADOPT ANY EXAMINATION IT DETERMINES APPROPRIATE AND MAY
- 13 DELEGATE ANY ADMINISTRATIVE FUNCTIONS RELATING TO THE CONDUCT OF
- 14 THE EXAMINATION. If an applicant for an inspector's A license fails
- 15 to pass the examination, he—THE APPLICANT may appeal to the board
- 16 for another examination which shall be given by the board within 90
- 17 days. The record of an applicant's examination shall be accessible
- 18 to the applicant and his THE APPLICANT'S employer.
- 19 SEC. 13A. (1) AN INDIVIDUAL MAY OPERATE A BOILER AND
- 20 ASSOCIATED AUXILIARIES WITHOUT OBTAINING A REGISTRATION UNDER THIS
- 21 ACT.
- 22 (2) AN INDIVIDUAL OR BUSINESS ENTITY SHALL NOT USE THE TERMS
- 23 "REGISTERED BOILER OPERATOR", "CERTIFIED BOILER OPERATOR",
- 24 "REGISTERED STATIONARY ENGINEER", "CERTIFIED STATIONARY ENGINEER",
- 25 "LOW PRESSURE REGISTERED BOILER OPERATOR", "LOW PRESSURE CERTIFIED
- 26 BOILER OPERATOR", "HIGH PRESSURE REGISTERED BOILER OPERATOR", "HIGH
- 27 PRESSURE CERTIFIED BOILER OPERATOR", "THIRD-CLASS REGISTERED

- 1 STATIONARY ENGINEER", "THIRD-CLASS CERTIFIED STATIONARY ENGINEER",
- 2 "SECOND-CLASS REGISTERED STATIONARY ENGINEER", "SECOND-CLASS
- 3 CERTIFIED STATIONARY ENGINEER", "FIRST-CLASS REGISTERED STATIONARY
- 4 ENGINEER", "FIRST-CLASS CERTIFIED STATIONARY ENGINEER", OR ANY
- 5 OTHER NAME, STYLE, OR DESCRIPTION THAT INDICATES THAT THE
- 6 INDIVIDUAL OR AN INDIVIDUAL EMPLOYED BY THE BUSINESS ENTITY IS
- 7 REGISTERED UNDER THIS ACT UNLESS THE INDIVIDUAL HAS BEEN ISSUED A
- 8 REGISTRATION UNDER THIS ACT.
- 9 (3) THE INDIVIDUAL PARTICIPATING IN AN APPROVED APPRENTICESHIP
- 10 PROGRAM, A QUALIFIED TECHNICAL TRAINING PROGRAM, OR A QUALIFIED
- 11 TRAINING PROGRAM MAY USE THE TITLE "APPRENTICE CERTIFIED BOILER
- 12 OPERATOR" OR "APPRENTICE CERTIFIED STATIONARY ENGINEER".
- 13 (4) AN INDIVIDUAL REGISTERED UNDER THIS ACT SHALL ONLY USE 1
- 14 OF THE TITLES DESCRIBED IN SUBSECTION (2) OR THE ABBREVIATION
- 15 "R.B.O.", "C.B.O.", "R.S.E.", OR "C.S.E.".
- 16 (5) A PERSON APPLYING FOR A REGISTRATION UNDER THIS ACT SHALL
- 17 BE NOT LESS THAN 18 YEARS OF AGE, SHALL POSSESS THE PHYSICAL AND
- 18 MENTAL CAPACITIES TO PERFORM HIS OR HER DUTIES IN A COMPETENT AND
- 19 SAFE MANNER, AND SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION
- 20 13D. AN APPLICANT SHALL USE A FORM PROVIDED BY THE DIRECTOR.
- 21 (6) THE DIRECTOR SHALL ISSUE A REGISTRATION UPON
- 22 RECOMMENDATION OF THE BOARD AND UPON THE APPLICANT'S PAYMENT OF AN
- 23 EXAMINATION AND REGISTRATION FEE AS PROVIDED FOR IN RULES OF THE
- 24 DEPARTMENT AS PRESCRIBED IN SECTION 4A FOR EACH APPLICATION. A
- 25 REGISTRATION SHALL BE RENEWED ANNUALLY UPON PAYMENT OF A FEE
- 26 PRESCRIBED PURSUANT TO SECTION 4A.
- 27 (7) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE

- 1 AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD SHALL RECOMMEND
- 2 FOR REGISTRATION WITHOUT EXAMINATION AN APPLICANT WHO SUBMITS
- 3 EVIDENCE SATISFACTORY TO THE BOARD OF 1 OR MORE OF THE FOLLOWING:
- 4 (A) THE APPLICANT HAS HAD NOT LESS THAN 5 YEARS OF EXPERIENCE
- 5 IN THE CLASS OR CATEGORY OF BOILER OPERATOR OR STATIONARY ENGINEER
- 6 FOR WHICH THE APPLICANT IS APPLYING.
- 7 (B) THE APPLICANT POSSESSES A LICENSE AS A BOILER OPERATOR OR
- 8 STATIONARY ENGINEER FROM THE CITIES OF DETROIT OR DEARBORN IN A
- 9 CLASS FOR WHICH THE APPLICANT IS APPLYING.
- 10 (C) THE APPLICANT HAS SUCCESSFULLY COMPLETED A 4-YEAR APPROVED
- 11 APPRENTICESHIP PROGRAM, A QUALIFIED TECHNICAL EDUCATION PROGRAM, OR
- 12 A 4-YEAR QUALIFIED TRAINING PROGRAM.
- 13 SEC. 13B. BOILER OPERATOR AND STATIONARY ENGINEER
- 14 REGISTRATIONS ARE CLASSIFIED AS FOLLOWS:
- 15 (A) LOW PRESSURE BOILER OPERATOR, WHO OPERATES LOW PRESSURE
- 16 BOILER PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 4,000 SQUARE
- 17 FEET OF BOILER HEATING SURFACE.
- 18 (B) HIGH PRESSURE BOILER OPERATOR, WHO OPERATES BOILER PLANTS
- 19 HAVING AN AGGREGATE OF NOT MORE THAN 4,000 SQUARE FEET OF BOILER
- 20 HEATING SURFACE OR NOT MORE THAN 10 STEAM ENGINE-TURBINE
- 21 HORSEPOWER.
- 22 (C) THIRD-CLASS STATIONARY ENGINEER, WHO OPERATES BOILER
- 23 PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 7,500 SQUARE FEET OF
- 24 BOILER HEATING SURFACE OR NOT MORE THAN 100 STEAM ENGINE-TURBINE
- 25 HORSEPOWER.
- 26 (D) SECOND-CLASS STATIONARY ENGINEER, WHO OPERATES BOILER
- 27 PLANTS HAVING AN AGGREGATE OF NOT MORE THAN 20,000 SQUARE FEET OF

- 1 BOILER HEATING SURFACE OR NOT MORE THAN 200 STEAM ENGINE-TURBINE
- 2 HORSEPOWER.
- 3 (E) FIRST-CLASS STATIONARY ENGINEER, WHO OPERATES BOILER
- 4 PLANTS HAVING AN AGGREGATE OF 20,000 SQUARE FEET OR MORE OF BOILER
- 5 HEATING SURFACE OR 200 STEAM ENGINE-TURBINE HORSEPOWER OR MORE.
- 6 SEC. 13C. (1) NOT LATER THAN 180 DAYS AFTER THE EFFECTIVE DATE
- 7 OF THE AMENDATORY ACT THAT ADDED THIS SECTION, THE BOARD SHALL
- 8 PROMULGATE RULES DESIGNATING THE COURSE CONTENT FOR QUALIFIED
- 9 TECHNICAL EDUCATION PROGRAMS FOR THE VARIOUS CATEGORIES AND CLASSES
- 10 OF REGISTRATION OF BOILER OPERATORS AND STATIONARY ENGINEERS.
- 11 (2) THE RULES DESCRIBED IN SUBSECTION (1) SHALL PROVIDE THAT
- 12 THE COURSE CONTENT OF QUALIFIED TECHNICAL EDUCATION PROGRAMS FOR
- 13 ENTRY LEVEL REGISTRANTS INCLUDE AT LEAST ALL OF THE FOLLOWING
- 14 SUBJECT MATTER AREAS:
- 15 (A) BASIC FUNCTIONS, CONSTRUCTION, AND OPERATION OF ALL TYPES
- 16 OF BOILERS.
- 17 (B) THE FUNCTION OF BOILER APPLIANCES, ACCESSORIES, AND
- 18 ASSOCIATED AUXILIARIES.
- 19 (C) MATERIALS USED IN BOILERS AND THE EFFECT OF TEMPERATURE
- 20 EXTREMES ON THOSE MATERIALS.
- 21 (D) THE FUELS USED IN BOILERS AND FUNDAMENTALS OF COMBUSTION.
- 22 (E) BASIC ELECTRICITY.
- 23 (F) PLANT OPERATION AND BOILER MAINTENANCE.
- 24 (G) INSTRUMENTATION AND CONTROLS.
- 25 (H) FUNDAMENTAL MATHEMATICS AND PRINCIPLES OF THE METRIC
- 26 SYSTEM.
- 27 (I) GENERAL SAFETY PROCEDURES.

- 1 (J) RECOGNITION OF DANGEROUS OPERATION CONDITIONS.
- 2 (3) THE BOARD SHALL PROVIDE THAT THE COURSE CONTENT FOR
- 3 CATEGORIES AND CLASSES OTHER THAN ENTRY LEVEL REGISTRANTS INCLUDES
- 4 SUBJECT MATTER SIMILAR TO THOSE DESCRIBED IN SUBSECTION (2) IN THE
- 5 DEGREE OF DEPTH AND DIFFICULTY APPROPRIATE FOR THE CATEGORY AND
- 6 CLASS.
- 7 SEC. 13D. (1) THE DIRECTOR SHALL NOT ISSUE A REGISTRATION FOR
- 8 A TITLE DESCRIBED IN SECTION 13A(2) UNLESS THE APPLICANT MEETS THE
- 9 REQUIREMENTS FOR THE CLASSIFICATION AS PRESCRIBED IN SUBSECTIONS
- 10 (2) TO (6).
- 11 (2) AN APPLICANT FOR A LOW PRESSURE BOILER OPERATOR
- 12 REGISTRATION SHALL HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE
- 13 OPERATING OR MAINTAINING LOW OR HIGH PRESSURE BOILERS, STEAM PRIME
- 14 MOVERS, OR ASSOCIATED AUXILIARIES.
- 15 (3) AN APPLICANT FOR A HIGH PRESSURE BOILER OPERATOR
- 16 REGISTRATION SHALL HAVE 1 OR MORE OF THE FOLLOWING:
- 17 (A) NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION OF A
- 18 HIGH PRESSURE BOILER.
- 19 (B) A LOW PRESSURE BOILER OPERATOR'S REGISTRATION AND NOT LESS
- 20 THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A LOW PRESSURE
- 21 BOILER.
- 22 (C) NOT LESS THAN 1 YEAR OF EITHER A QUALIFIED TRAINING
- 23 PROGRAM, A QUALIFIED TECHNICAL EDUCATION PROGRAM, OR AN APPROVED
- 24 APPRENTICESHIP PROGRAM.
- 25 (4) AN APPLICANT FOR A THIRD-CLASS STATIONARY ENGINEER
- 26 REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING REQUIREMENTS:
- 27 (A) BE REGISTERED AS A HIGH PRESSURE BOILER OPERATOR AND HAVE

- 1 NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A HIGH
- 2 PRESSURE BOILER.
- 3 (B) BE REGISTERED AS A LOW PRESSURE BOILER OPERATOR, HAVE NOT
- 4 LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION OF A LOW PRESSURE
- 5 BOILER, AND HAVE NOT LESS THAN 1 YEAR OF MAINTENANCE EXPERIENCE ON
- 6 HIGH PRESSURE BOILERS AND ASSOCIATED AUXILIARIES.
- 7 (C) BE REGISTERED AS A HIGH PRESSURE BOILER OPERATOR AND HAVE
- 8 NOT LESS THAN 1 YEAR OF BOILER MAINTENANCE EXPERIENCE OR NOT LESS
- 9 THAN 1 YEAR AS AN APPRENTICE IN AN APPROVED TRAINING PROGRAM IN A
- 10 HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE HEATING SURFACE OF
- 11 MORE THAN 4,000 SOUARE FEET.
- 12 (D) HAVE NOT LESS THAN 3 YEARS OF EXPERIENCE IN THE OPERATION
- 13 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
- 18 SUFFICIENT 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 AN ASSOCIATE DEGREE IN ENERGY TECHNOLOGY OR A RELATED
- 22 FIELD AS DETERMINED BY THE BOARD WITH A POWER ENGINEERING OPTION
- 23 FROM A 2-YEAR COLLEGE WHOSE PROGRAM IS APPROVED BY THE BOARD AND
- 24 EMPLOYMENT OR COOPERATIVE EDUCATION EXPERIENCE OF NOT LESS THAN 360
- 25 HOURS AS A POWER ENGINEER, BOILER OPERATOR, OR STATIONARY ENGINEER
- 26 IN A STEAM ELECTRIC GENERATION PLANT OR A HIGH PRESSURE STEAM
- 27 HEATING OR PROCESS PLANT.

- 1 (5) AN APPLICANT FOR A SECOND-CLASS STATIONARY ENGINEER
- 2 REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING REQUIREMENTS:
- 3 (A) BE REGISTERED AS A THIRD-CLASS STATIONARY ENGINEER AND
- 4 HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE AS A THIRD-CLASS STATIONARY
- 5 ENGINEER.
- 6 (B) HAVE A BACHELOR'S DEGREE IN ENGINEERING, ENGINEERING
- 7 TECHNOLOGY, HEATING/POWER TECHNOLOGY, OR ENERGY TECHNOLOGY FROM A
- 8 COLLEGE OR UNIVERSITY WHOSE PROGRAM IS APPROVED BY THE BOARD AND
- 9 EMPLOYMENT EXPERIENCE AS AN ENGINEER IN THE ENGINEERING OR RESEARCH
- 10 DIVISION OF A STEAM ELECTRIC POWER GENERATING PLANT FOR NOT LESS
- 11 THAN 1 YEAR.
- 12 (C) HAVE NOT LESS THAN 4 YEARS 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.
- 15 (D) 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 7,500 SQUARE FEET ALONG WITH
- 18 SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 100
- 19 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 4 YEARS OF
- 20 EXPERIENCE.
- 21 (E) HAVE NOT LESS THAN 1 YEAR OF EXPERIENCE IN THE OPERATION
- 22 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
- 23 HEATING SURFACE OF MORE THAN 7,500 SQUARE FEET ALONG WITH
- 24 SUFFICIENT EXPERIENCE OPERATING BOILERS IN A HIGH PRESSURE BOILER
- 25 PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE THAN 4,000 SQUARE
- 26 FEET FOR A COMBINED TOTAL OF NOT LESS THAN 4 YEARS OF EXPERIENCE.
- 27 (6) AN APPLICANT FOR A FIRST-CLASS STATIONARY ENGINEER

- 1 REGISTRATION SHALL MEET 1 OR MORE OF THE FOLLOWING REQUIREMENTS:
- 2 (A) BE REGISTERED AS A SECOND-CLASS STATIONARY ENGINEER AND
- 3 HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE AS A SECOND-CLASS
- 4 STATIONARY ENGINEER.
- 5 (B) HAVE NOT LESS THAN 6 YEARS OF EXPERIENCE IN THE OPERATION
- 6 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
- 7 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET.
- 8 (C) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION
- 9 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
- 10 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
- 11 SUFFICIENT EXPERIENCE OPERATING STEAM PRIME MOVERS IN EXCESS OF 200
- 12 HORSEPOWER FOR A COMBINED TOTAL OF NOT LESS THAN 6 YEARS OF
- 13 EXPERIENCE.
- 14 (D) HAVE NOT LESS THAN 2 YEARS OF EXPERIENCE IN THE OPERATION
- 15 OF BOILERS IN A HIGH PRESSURE BOILER PLANT HAVING AN AGGREGATE
- 16 HEATING SURFACE OF MORE THAN 20,000 SQUARE FEET ALONG WITH
- 17 SUFFICIENT EXPERIENCE IN THE OPERATION OF BOILERS IN A HIGH
- 18 PRESSURE BOILER PLANT HAVING AN AGGREGATE HEATING SURFACE OF MORE
- 19 THAN 7,500 SQUARE FEET OF HEATING SURFACE FOR A COMBINED TOTAL OF
- 20 NOT LESS THAN 6 YEARS OF EXPERIENCE.
- 21 (E) COMPLETE A 4-YEAR APPROVED APPRENTICESHIP PROGRAM OR A 4-
- 22 YEAR QUALIFIED TRAINING PROGRAM.
- 23 (F) COMPLETE A 4-YEAR PROGRAM WITH A BACHELOR'S DEGREE FROM A
- 24 COLLEGE OR UNIVERSITY IN ENGINEERING, ENGINEERING TECHNOLOGY,
- 25 HEATING/POWER TECHNOLOGY, OR ENERGY TECHNOLOGY WHOSE PROGRAM IS
- 26 APPROVED BY THE BOARD AND WHICH INCLUDES A HANDS-ON POWER OPTION
- 27 FROM A 2-YEAR COMMUNITY COLLEGE PROGRAM OR THE EQUIVALENT, AS

- 1 DETERMINED BY THE BOARD, AND NOT LESS THAN 1 YEAR OF EMPLOYMENT,
- 2 INTERNSHIP, OR COOPERATIVE EDUCATION EXPERIENCE IN A STEAM ELECTRIC
- 3 GENERATION PLANT OR HIGH PRESSURE STEAM HEATING PROCESS PLANT.
- 4 Sec. 14. (1) An inspector's, repairer's, or installer's THE
- 5 CHIEF INSPECTOR MAY SUSPEND THE license may be suspended by the
- 6 chief inspector for OF AN INSPECTOR, REPAIRER, OR INSTALLER OR THE
- 7 REGISTRATION OF A BOILER OPERATOR OR STATIONARY ENGINEER DUE TO the
- 8 incompetence of the holder thereof or for wilful REGISTRANT OR
- 9 LICENSEE OR DUE TO WILLFUL falsification of any A matter or
- 10 statement contained in his THAT REGISTRANT'S OR LICENSEE'S
- 11 application or in a report of any inspection made by him THE
- 12 REGISTRANT OR LICENSEE. Written notice of the suspension shall be
- 13 given by the chief inspector within not more than 10 days AFTER THE
- 14 SUSPENSION to the REGISTRANT OR licensee, his THE REGISTRANT'S OR
- 15 LICENSEE'S employer, and the board. A person whose REGISTRATION OR
- 16 license has been suspended may appeal to the board as provided in
- 17 section 22 and be present in person and be represented by counsel
- 18 at the hearing of the appeal.
- 19 (2) If the board has reason to believe that a **REGISTRANT OR**
- 20 licensee is no longer qualified to hold his OR HER REGISTRATION OR
- 21 license, the board, upon not less than 10 days' written notice to
- 22 the REGISTRANT OR licensee and his THE REGISTRANT'S OR LICENSEE'S
- 23 employer, shall hold a—AN ADMINISTRATIVE hearing at which the
- 24 REGISTRANT OR licensee and his OR HER employer shall have an
- 25 opportunity to be heard. If, as a result of the hearing, the board
- 26 finds that the REGISTRANT OR licensee is no longer qualified to
- 27 hold his OR HER REGISTRATION OR license, the board shall recommend

- 1 to the commissioner DIRECTOR that the REGISTRATION OR license be
- 2 revoked, and the commissioner DIRECTOR shall thereupon IMMEDIATELY
- 3 revoke such THE REGISTRATION OR license. forthwith.
- 4 (3) A person whose **REGISTRATION OR** license has been suspended
- 5 may apply, after 90 days from the date of the suspension, for
- 6 reinstatement of the REGISTRATION OR license.
- 7 Sec. 24. (1) It shall be unlawful for any AN INDIVIDUAL, OR
- 8 OTHER person, firm, partnership, or corporation to SHALL NOT
- 9 operate in this state a boiler without a valid inspection
- 10 certificate. The operation of a boiler without such A VALID
- 11 inspection certificate or at a pressure exceeding that specified
- in such THE inspection certificate is a misdemeanor on the part
- 13 of the owner, user, or operator thereof and shall be punishable by
- 14 a fine not exceeding \$500.00, or imprisonment not to exceed FOR NOT
- 15 MORE THAN 60 days, or BY A FINE OF NOT MORE THAN \$500.00, OR both.
- 16 Each day of the unlawful operation is a separate offense.
- 17 (2) A PERSON USING A TITLE DESCRIBED IN SECTION 13A(2) WITHOUT
- 18 A REGISTRATION ISSUED UNDER THIS ACT IS GUILTY OF A MISDEMEANOR
- 19 PUNISHABLE BY IMPRISONMENT FOR NOT MORE THAN 60 DAYS, A FINE OF NOT
- 20 MORE THAN \$2,000.00, OR BOTH.
- 21 (3) A BUSINESS ENTITY USING OR ADVERTISING THE USE OF AN
- 22 INDIVIDUAL HAVING A TITLE DESCRIBED IN SECTION 13A(2), IF THAT
- 23 INDIVIDUAL IS NOT REGISTERED UNDER THIS ACT, IS GUILTY OF A
- 24 MISDEMEANOR PUNISHABLE BY IMPRISONMENT FOR NOT MORE THAN 60 DAYS, A
- 25 FINE OF NOT MORE THAN \$2,000.00, OR BOTH.