



OHIO DEPARTMENT OF COMMERCE
DIVISION OF INDUSTRIAL COMPLIANCE
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REYNOLDSBURG, OHIO 43068

LICENSE LAWS
AND
RULES

Governing the Examination of Applicants
for Licenses as Stationary Steam
Engineers and Boiler Operators

Ohio Revised Code Requirements

4104.05. Operation of certain boilers or stationary steam engines at more than thirty horsepower.

(A) No person shall operate a low pressure boiler at more than thirty horsepower, unless one of the following applies to that person:

- (1) The person is licensed as a steam engineer, high pressure boiler operator, or low pressure boiler operator in accordance with section 4104.19 of the Revised Code.
- (2) The person is working under the direct supervision of a steam engineer, high pressure boiler operator, or low pressure boiler operator.

(B) No person shall operate a power boiler at more than thirty horsepower unless one of the following applies to that person:

- (1) The person is licensed as a steam engineer or high pressure boiler operator in accordance with section 4104.19 of the Revised Code.
- (2) The person is working under the direct supervision of a steam engineer or high pressure boiler operator.

(C) No person shall operate a stationary steam engine at more than thirty horsepower unless one of the following applies to that person:

- (1) The person is licensed as a steam engineer in accordance with section 4104.19 of the Revised Code.
- (2) The person is working under the direct supervision of a steam engineer.

(D) For purposes of this section, a horsepower means twelve square feet of boiler heating surface.

4104.18. Fees

The application fee for applicants for steam engineer, high pressure boiler operator, or low pressure boiler operator licenses is fifty dollars. The fee for each original or renewal steam engineer, high pressure boiler operator, or low pressure boiler operator license is thirty-five dollars.

4104.19. Operator's license

(A) Any person seeking a license to operate as a steam engineer, high pressure boiler operator, or low pressure boiler operator shall file a written application with the superintendent of industrial compliance on a form prescribed by the superintendent with the appropriate application fee as set forth in section 4104.18 of the Revised Code. The application shall contain information satisfactory to the superintendent to demonstrate that the applicant meets the requirements of division (B) of this section. The application shall be filed with the superintendent not more than sixty days and not less than thirty days before the license examination is offered.

(B) To qualify to take the examination required to obtain a steam engineer, high pressure boiler operator, or low pressure boiler operator license, a person shall meet both of the following requirements:

- (1) Be at least eighteen years of age;
- (2) Have one year of experience in the operation of steam engines, high pressure boilers, or low pressure boilers as applicable to the type of license being sought, or a combination of experience and education for the type of license sought as determined to be acceptable by the superintendent.

(C) No applicant shall qualify to take an examination or to renew a license if the applicant has violated this chapter or if the applicant has obtained or renewed a license issued under this chapter by fraud, misrepresentation, or deception.

(D) The superintendent shall issue a license to each applicant who receives a passing score on the examination, as determined by the superintendent, for the license for which the applicant applied.

(E) The superintendent may select and contract with one or more persons to do all of the following relative to the examinations for a license to operate as a steam engineer, high pressure boiler operator, or low pressure boiler operator:

- (1) Prepare, administer, score, and maintain the confidentiality of the examination;
- (2) Maintain responsibility for all expenses required to fulfill division (E) (1) of this section;
- (3) Charge each applicant a fee for administering the examination, in an amount authorized by the superintendent;
- (4) Design the examination for each type of license to determine an applicant's competence to operate the equipment for which the applicant is seeking licensure.

(F) Each license issued under this chapter expires one year after the date of issue. Each person holding a valid, unexpired license may renew the license, without reexamination, by applying to the superintendent not more than ninety days before the expiration of the license, and submitting with the application the renewal fee established in section 4104.18 of the Revised Code. Upon receipt of the renewal information and fee, the superintendent shall issue the licensee a certificate of renewal.

(G) The superintendent, in accordance with Chapter 119 of the Revised Code, may suspend or revoke any license, or may refuse to issue a license under this chapter upon finding that a licensee or an applicant for a license has violated or is violating the requirements of this chapter.

Ohio Administrative Code Requirements

1301:3-5-10 Boiler Operator and Steam Engineer Experience Requirements

To establish compliance with the experience requirement in section 4104.19, an applicant for licensing under section 4104.19 of the Revised Code shall specify in writing to the superintendent that the applicant has had education, active participation, direct observation and practical engagement in the activities listed here relevant to the equipment for which licensing is sought, verified in writing by a person licensed in accordance with section 4104.19 of the Revised Code to operate the equipment for which the application is being made.

(A) No person shall be examined for licensing as a low-pressure boiler operator who has not first demonstrated that they meet one of the following experience qualifications:

- (1) Two thousand hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler not exceeding fifteen pounds per square inch, or
- (2) Six hundred hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler not exceeding fifteen pounds per square inch and the successful completion of a fifty hour course teaching steam boiler operation approved by the superintendent.

(B) No person shall be examined for licensing as a high-pressure boiler operator who has not first demonstrated that they meet one of the following experience qualifications:

- (1) Two thousand hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler exceeding fifteen pounds per square inch;
- (2) One thousand hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler exceeding fifteen pounds per square inch and the successful completion of a seventy-five hour course teaching steam boiler operation approved by the superintendent; or
- (3) Current possession of a low-pressure boiler operator license with an additional five hundred hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler exceeding fifteen pounds per

square inch and the successful completion of a seventy-five hour course teaching steam boiler operation approved by the superintendent.

(C) No person shall be examined for licensing as a stationary steam engineer who has not first demonstrated that they meet one of the following experience qualifications:

(1) Two thousand hours of operating experience associated in direct care, custody and control of the system load, turbine speed, lubrication, temperatures, and vibrations of a steam turbine exceeding thirty horsepower or two thousand hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler exceeding fifteen pounds per square inch;

(2) One thousand hours of operating experience associated in direct care, custody and control of the system load, turbine speed, lubrication, temperatures, and vibrations of a steam turbine exceeding thirty horsepower or one thousand hours of operating experience associated in direct care, custody and control of the fuel, combustion air, water level, steam pressure, system load, and supporting equipment of a steam boiler exceeding fifteen pounds per square inch and the successful completion and the successful completion of a one hundred twenty-five hour steam boiler and steam turbine operation course approved by the superintendent;

(3) Current possession of a high-pressure boiler operator license with an additional five hundred hours of operating experience associated in direct care, custody and control of the system load, turbine speed, lubrication, temperatures, and vibrations of a steam turbine exceeding thirty horsepower and the successful completion of a one hundred twenty-five hour steam boiler and steam turbine operation course approved by the superintendent;

(4) Two thousand hours of operating experience associated in direct care, custody and control of the system load, turbine speed, lubrication, temperatures, and vibrations of a steam turbine in excess of one hundred horsepower; or

(5) Two thousand hours of operating experience associated in direct care, custody and control of the system load, turbine speed, lubrication, temperatures, and vibrations of a steam turbine for electrical generation.

4101:4-3-40 Licensure and Attendance Requirements of Operators

(A) In accordance with section 4104.05 of the Revised Code, no person shall operate a low pressure boiler operating at more than thirty horsepower, a power boiler operating at more than thirty horsepower, or a stationary steam engine operating at more than thirty horsepower, unless one of the following applies to that person:

(1) The person holds the required license as specified in section 4104.05 of the Revised Code, or

(2) The person is working under the direct supervision of a person holding the required license as specified in section 4104.05 of the Revised Code.

(B) The operator described in paragraph (A) of this rule shall maintain continuous manned attendance during all times of operation of a steam boiler or stationary steam engine operating at more than thirty horsepower, except as follows:

(1) When the steam boiler or stationary steam engine can be monitored, controlled, and shut down from a central control room and is equipped with manual operational resets, the continuous, manned attendance may occur from the central control room during all times of operation of such steam boiler or stationary steam engine.

(2) A steam boiler of more than thirty horsepower may be operated without manned attendance for a maximum length of time equal to the time it takes for the boiler to go into a low water condition when subjected to an annual evaporation test conducted in accordance with ASME Section VI, 7.05(H).

(C) For the purposes of this rule, a horsepower means twelve square feet of boiler heating surface.

