



## Ohio Administrative Code

### Rule 4101:4-10-01 Licensure and attendance requirements of operators.

Effective: August 1, 2018

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(A) In accordance with section 4104.05 of the Revised Code, no person shall operate a low pressure steam boiler that has more than three hundred sixty square feet of heating surface, a power steam boiler that has more than three hundred sixty square feet of heating surface, 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 that has more than three hundred sixty square feet of heating surface or a stationary steam engine operating at more than thirty horsepower, except as follows:

- (1) The continuous, manned attendance by the operator during all times of operation of such steam boiler or stationary steam engine may occur from a central control room on the premises when the steam boiler or stationary steam engine can be monitored, controlled, and shut down from that central control room by the operator and is equipped with manual operational resets.
- (2) The steam boiler may be operated without continuous, 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 the "ASME Boiler and Pressure Vessel Code, Section VI, 7.05 (H)" referenced in rule 4101:4-3-01 of the Administrative Code.
- (3) The continuous, manned attendance by the operator during all times of operation of a non-solid-fuel-fired steam boiler or stationary steam engine is not required when the superintendent of the division of industrial compliance has approved a site-specific, detailed written plan to provide for



automated electronic monitoring of the steam boiler or stationary steam engine which utilizes controls that contain all operational functions, are equipped with manual operational resets, and are labeled for the intended operation, provided that all of the following apply:

- (a) The control equipment must be located within the same complex or production facility premises;
  - (b) A person licensed under section 4104.19 of the Revised Code is present at all times within the same complex or production facility premises and is available to respond to an emergency condition when summoned by the automated electronic monitoring system;
  - (c) A secondary means of alerting such licensed person is within the same complex or production facility premises in the event of failure of the primary electronic monitoring system;
  - (d) A qualified individual as defined in rule 4101:4-1-01 of the Administrative Code performs annual operational tests on the automated electronic monitoring system to verify that the system is maintained in accordance with that original manufacturer specification; and
  - (e) A copy of such dated and signed service report or checklist, listing each control and safety device tested with the manufacturer's name, model number, set point, and actual operational test point is provided to the superintendent of the division of industrial compliance upon request. Failure to produce such service report may result in the issuance of an adjudication order within the meaning of Chapter 119. of the Revised Code.
- (4) The continuous, manned attendance by the operator during all times of operation of a non-solid-fuel-fired steam boiler having a fuel input rating of less than 12,500,000 BTU/hr is not required when an automated electronic control system meeting the requirements of "ASME CSD-1" referenced in rule 4101:4-3-01 of the Administrative Code is utilized, provided that all of the following requirements have also been met:
- (a) The boiler manufacturer and the installing contractor shall complete and sign a certification report (similar to the report shown in Appendix C of ASME CSD-1) for each boiler. The certification report shall meet the requirements of Section CG-510 of the ASME CSD-1 and shall identify the manufacturer, model number, and operational test date for each specific boiler control and safety



device and certify that each control and safety device was installed and tested in accordance with the manufacturer's installation instructions and the ASME CSD-1.

(b) The installing contractor, who shall be registered in accordance with rule 4101:4-7-01 of the Administrative Code, shall obtain and provide to the owner or user the operating, testing, servicing, and cleaning instructions for the controls and safety devices. Additionally, the installing contractor shall provide to the owner or user the complete wiring and piping diagrams and a written precaution that the annual operating, testing, and servicing of the controls and safety devices is to be performed only by a qualified individual. The contractor shall obtain a receipt from the owner or user for the delivery of these instructions.

(c) The certification report and the receipt described in paragraphs (B)(4)(a) and (B)(4)(b) of this rule shall be submitted to the superintendent prior to the required inspection and issuance of the certificate of operation prescribed in rule 4101:4-8-01 of the Administrative Code. Failure to submit this documentation may result in the issuance of an adjudication order within the meaning of Chapter 119. of the Revised Code.

(d) The owner or user shall develop, coordinate, and implement a preventative maintenance program and ensure that the employee responsible for maintaining the boiler is trained, knowledgeable, and competent to operate and maintain such boiler, controls, and safety devices. The maintenance program shall be consistent with the manufacturer's recommendations and shall include regular inspections and operational testing for the boiler controls and safety devices. Annual inspection and operational testing shall be performed and documented by a qualified individual as defined in rule 4101:4-1-01 of the Administrative Code. Daily, weekly, monthly, and semi-annual inspections and operational testing, as outlined by the manufacturer and as recommended in Appendix D of the ASME CSD-1, shall be performed and documented by an employee who has been trained, is knowledgeable, and is competent to operate and maintain such boiler, controls, and safety devices. The maintenance records shall identify the manufacturer, model number, set point, the operational tests performed, the operational test date, the inspection results, and who performed the tests or inspection for each specific boiler control and safety device. The maintenance records shall be made available to the inspector for review during the certificate inspection. Failure to provide the required maintenance records may result in the issuance of an adjudication order within the meaning of Chapter 119. of the Revised Code.



(5) The continuous, manned attendance by the operator during all times of operation of a non-solid-fuel-fired steam boiler having a fuel input rating of greater than or equal to 12,500,000 BTU/hr and meeting the requirements of "NFPA 85" referenced in rule 4101:4-3-01 is not required when an automated electronic control system is utilized meeting the requirements of the ASME CSD-1 referenced in rule 4101:4-3-01 of the Administrative Code, provided that all of the following requirements have also been met:

(a) The certification report, wiring diagrams, instructions, maintenance, and testing requirements for the control system outlined in paragraphs (B)(4)(a) to (B)(4)(d) of this rule shall apply.

(b) Prior to installation of the boiler(s), the owner shall submit a detailed, written, process hazard analysis (PHA) to the superintendent of industrial compliance that identifies and evaluates the hazards associated with the unattended operation of the boiler and justifies the method(s) proposed to address the hazards. The analysis shall be prepared and sealed by a registered professional engineer holding a certificate issued under section 4733.14 of the Revised Code and shall identify possible incident scenarios, the proposed protection/solution for each scenario, and any such additional information as determined necessary by the superintendent. The PHA shall be reviewed by the owner, updated at least every five years, and submitted to the superintendent for review and filing. Failure to provide the required PHA may result in the issuance of an adjudication order within the meaning of Chapter 119. of the Revised Code.