PART A - Boiler and Pressure Vessel Rules

*** DRAFT - NOT YET FILED ***

4101:4-1-01 **Definitions and abbreviations.**

As used in Chapters 4101:4-1 to 4101:4-10 of the Administrative Code,

(A) "Alteration" means any change in the item described on the original manufacturer's data report which affects the pressure containing capability of the boiler or pressure vessel. Non physical changes such as an increase in the maximum allowable working pressure (internal or external) or design temperature of a boiler or pressure vessel ~~shall be~~ are considered ~~an alteration~~alterations. A reduction in minimum temperature such that additional mechanical tests are required ~~shall~~ is also ~~be~~ considered an alteration.

(B) "ASME" means the "American Society of Mechanical Engineers". Referenced standards, codes, and related technical information developed by this organization can be purchased by logging on to http://www.asme.org or by calling 1-800-the-asme.

(C) "Authorized Inspection Agency" means an entity, accepted by the "National Board," that provides third party inspection services in which boilers and pressure vessels are inspected during construction, repairs, and alterations to verify their conformity with the code of construction adopted by the board of building standards. Authorized inspection agencies employ authorized inspectors.

(D) "Authorized Inspector" means an individual holding a "National Board" commission with the appropriate endorsement and designated as such by an "Authorized Inspection Agency".

(E) "Board" means the board of building standards established by section 3781.07 of the Revised Code and authorized by section 4104.02 of the Revised Code to formulate rules and regulations for the construction, installation, repair, conservation of energy, and operation of boilers and for the construction and repair of pressure vessels.

(F) "Boiler" means a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure or vacuum for use externally to itself by the direct application of heat from the combustion of fuels, or from electricity or nuclear energy. The term boiler ~~shall include~~includes fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves.

(G) "Boiler, high pressure, high temperature water" means a water heating boiler operating at pressures exceeding one hundred sixty psig or temperatures exceeding two hundred fifty degrees Fahrenheit.

(H) "Boiler, low pressure" means a steam boiler operating at pressures not exceeding fifteen psig, or a hot water heating boiler operating at pressures not exceeding one hundred sixty psig or temperatures not exceeding two hundred fifty degrees Fahrenheit.

(I) "Boiler, portable" means a boiler which is primarily intended for temporary use and the construction and usage of which is obviously portable.

(J) "Boiler, potable water heater" means a boiler used for supplying potable hot water for commercial purposes at pressures not exceeding one hundred sixty psig and temperatures not exceeding two hundred ten degrees Fahrenheit, except that water heaters are exempted when none of the following limitations are exceeded:

(1) Heat input of two hundred thousand Btu per hour;

(2) Water temperature of two hundred ten degrees Fahrenheit;

(3) Nominal water-containing capacity of one hundred twenty gallons.

(K) "Boiler, power" means a boiler in which steam or other vapor, to be used externally to itself, is generated at a pressure of more than fifteen psig.

(L) "Boiler, process" means a boiler to which all of the following apply:

(1) The steam in the boiler is either generated or superheated, or both, under pressure or vacuum for use external to itself.

(2) The source of heat for the boiler is, in part or in whole, from a process other than the boiler itself.

(3) The boiler is part of a continuous processing unit, such as used in chemical manufacture or petroleum refining, other than a steam-generated process unit.

(M) "Btu" means "British Thermal Unit".

(N) "Certificate of competency" means the document issued by the superintendent to a person who has passed the examination prescribed by the board of building standards.

(O) "Certificate of inspection" means a report of the inspection of a boiler as required by

sections 4104.11, 4104.12, and 4104.13 of the Revised Code and the rules of the board of building standards. The written report, completed by a general or special inspector, when filed in the office of the superintendent, ~~shall be~~becomes the basis on which a certificate of operation may be granted or denied. The certificate of inspection would then be replaced with a certificate of operation, if granted.

(P) "Certificate of operation" means the certificate issued by the superintendent to the owner or user following the general or special inspector's inspection of a boiler in accordance with section 4104.12 of the Revised Code.

(Q) "Code stamp" means the permanent "ASME" identifying stamping applied to boilers and pressure vessels which indicates that the vessel has been constructed in accordance with the rules of the board and the applicable section of the "ASME Boiler and Pressure Vessel Code" and has been approved by an authorized inspector.

(R) "Commission, National Board" means a certificate and renewable commission card issued by the "National Board" to an individual who has satisfied the requirements and the rules of the "National Board."

(S) "Commission, Ohio" means a document issued by the superintendent pursuant to section 4104.08 of the Revised Code, which authorizes a general or special inspector to inspect boilers and pressure vessels for use in the state of Ohio.

(T) "Contractor" means any person, firm, partnership, company, or corporation that engages in the practice of installing or making major repairs or modifications to any boiler that is subject to the provisions of Chapters 4101:4-1 to 4101:4-10 and 1301:3-5 of the Administrative Code.

(U) "Inspection, external" means the inspection of the exterior parts of a boiler and the fittings, appurtenances, controls, and safety appliances attached thereto while the boiler is under operating conditions.

(V) "Inspection, internal" means a complete visual and physical inspection of the interior of a boiler.

(W) "Inspector, general" means a state of Ohio employee holding a certificate of competency and a valid Ohio commission to inspect boilers and pressure vessels to be used in the state of Ohio.

(X) "Inspector, special" means an individual who holds a valid "National Board"

commission and a valid Ohio commission to inspect boilers and pressure vessels to be used in the state of Ohio. Special inspectors are typically employed by an insurance company authorized to write boiler and pressure vessel insurance in the state of Ohio but can also be employed as an inspector by the owner-user of the boiler or pressure vessel which is proposed for use or is operating within the state of Ohio. The owner-user ~~must~~ is obligated to maintain an established inspection program meeting the requirements of the "National Board" publication "NB-371, Accreditation of Owner-User Inspection Organizations (OUIO)" referenced in rule 4101:4-3-01 of the Administrative Code. In their capacity as a special inspector, they are a representative of the state boiler inspection department, acting independently of their relationship with their employer.

(Y) "Installation, existing" means any boiler or pressure vessel within the scope of these rules that has been previously approved and issued a certificate of operation.

(Z) "Installation, new" means any boiler or pressure vessel that has not yet been placed in service or issued a certificate of operation.

(AA) "National Board" or "NB" means the "National Board of Boiler and Pressure Vessel Inspectors." Referenced standards, codes, publications, and other technical information developed by this organization can be purchased and obtained by logging on to http://www.nationalboard.org or by calling (614)888-8320.

(BB) "NBIC" means the "National Board Inspection Code" as published by the "National Board of Boiler and Pressure Vessel Inspectors" and referenced in rule 4101:4-3-01 of the Administrative Code.

(CC) "NFPA" means the "National Fire Protection Association." Referenced standards published by this organization can be purchased by logging on to http://www.nfpa.org or by calling (800)344-3555.

(DD) "Non-standard" means an existing power boiler or pressure vessel which was installed prior to July 1, 1913 and was not constructed and stamped in accordance with the rules adopted by the industrial commission of Ohio or the Ohio board of building standards.

(EE) "Ohio special" means a boiler or pressure vessel which does not fully comply with "ASME" code requirements, but has been approved for use in Ohio by special action of the board of building standards under section 4104.02 of the Revised Code or permitted for use by the board of building appeals under section 3781.19 of the Revised Code.

(FF) "Ohio-standard" means an existing boiler or pressure vessel constructed to meet the rules of the Ohio industrial commission code requirements but not stamped with the applicable "ASME" symbol.

(GG) "Owner or user" means any person, firm or corporation owning or operating any boiler or pressure vessel.

(HH) "Pressure vessel" means a container for the containment of pressure, either internal or external. This pressure may be obtained from an external source or by the application of heat from a direct or indirect source or any combination thereof.

(II) "psi" means pounds per square inch.

(JJ) "psig" means pounds per square inch ~~gage~~gauge.

(KK) "Qualified individual" means a service technician trained and thoroughly knowledgeable about the installation, operation, maintenance and service of the specific boiler fuel-burning system, controls, and safety devices.

(LL) "Reinstallation" means a boiler or pressure vessel removed from its original setting and re-erected at the same location or a new location without a change of ownership.

(MM) "Repair, major" means the process of restoring a boiler, pressure vessel, or component of a boiler or pressure vessel to a safe and satisfactory condition such that the existing design requirements are met.

(NN) "Repair, routine" means repairs meeting the conditions prescribed in "Part 3" of the "NBIC ~~Part 3~~" and determined acceptable to the superintendent as a routine repair.

(OO) "Revised Code" means the general statutes of the state of Ohio as revised and consolidated into titles, chapters, and sections.

(PP) "Secondhand" means a used boiler or used pressure vessel which has had a change of ownership and location.

(QQ) "Stationary Steam Engine" means an engine or turbine in which the mechanical force arising from the elasticity and expansion action of steam or from its property of rapid condensation or from a combination of the two is made available as a motive power.

(RR) "Superintendent" means the superintendent of the division of industrial compliance created in the department of commerce under section 121.04 of the Revised Code, or the person designated by the superintendent as responsible for the enforcement of rules 4101:4-1-01 to 4101:4-10-01 and 1301:3-5-01 to 1301:3-5-10 of the Administrative Code.

4101:4-2-01 **Scope, administration, and enforcement.**

(A) All boilers and pressure vessels proposed for use in the state of Ohio ~~shall~~are to be designed, constructed, installed, altered, repaired, maintained, and operated in accordance with the rules adopted by the board as prescribed in Chapters 4101:4-1 to 4101:4-10 of the Administrative Code, except as follows:

(1) Boilers, pressure vessels, and stationary steam engines under federal control or subject to inspection under federal laws;

(2) Air tanks located on vehicles operating under the rules of other state authorities and used for carrying passengers, or freight;

(3) Air tanks installed on the right of way of railroads and used directly in the operation of trains;

(4) Pressure vessels that are under the regulation and control of the state fire marshal under Chapter 3737. of the Revised Code;

(5) Boilers and pressure vessels outside the scope of the applicable section of the "ASME Code for Boilers and Pressure Vessels" as referenced in rule 4101:4-3-01 of the Administrative Code;

(6) Historical steam boilers of riveted construction, preserved, restored, or maintained for hobby or demonstration use. In accordance with section 4104.33 of the Revised Code, these boilers ~~shall~~are to be repaired, altered, inspected and operated in compliance with Chapter 1301:3-4 of the Administrative Code, the rules adopted by the historical boilers licensing board.

(B) All boilers and pressure vessels proposed for use in the state of Ohio, except those exempt in paragraph (A) of this rule ~~shall~~are to be inspected by an authorized inspector during fabrication and construction and upon completion for compliance with the rules of the board. The inservice inspections ~~shall~~are to be conducted by general and special inspectors in accordance with rules adopted by the superintendent in Chapter 1301:3-5 of the Administrative Code. The following boilers and pressure vessels ~~shall~~ are to comply with the rules of the board for construction but ~~shall~~ are not to be subjected to the superintendent's inspection requirements or contractor registration requirements prescribed in Chapter 1301:3-5 or 4101:4-7, respectively, of the Administrative Code:

(1) Portable boilers or pressure vessels when located on farms and used solely for agricultural purposes;

(2) Low pressure boilers which are located in private residences or in apartment houses of less than or equal to five family units (these boilers are regulated by Chapters 4101:8-1 to 4101:8-44 of the Administrative Code known as the "Residential Code of Ohio" or Chapters 4101:2-1 to 4101:2-15 of the Administrative Code known as the "Ohio Mechanical Code");

(3) Pressure vessels containing only water under pressure for domestic supply purposes, including those containing air, the compression of which serves only as a cushion or airlift pumping system, when located in private residences or in apartment houses of less than or equal to five family units (these pressure vessels, hot water expansion tanks, and pressure tanks are regulated by the Chapters 4101:2-1 to 4101:2-15 of the Administrative Code known as the "Ohio Mechanical Code" and Chapters 4101: 3-1 to ~~4101:3-13~~4101:3-15 of the Administrative Code known as the "Ohio Plumbing Code");

(4) Portable boilers used in pumping, heating, steaming, and drilling, in the open field, for water, gas, and oil;

(5) Portable boilers used in the construction of and repair to public roads, railroads, and bridges.

(C) If the owner or user of any boiler disagrees with the inspector as to the necessity for shutting down a boiler or for making repairs or alterations to it, or taking any other measures for safety, the owner or user may appeal the decision of the inspector to the board of building appeals.

(D) In the event of a conflict, the rules of the board adopted pursuant to section 3781.10 of the Revised Code and known as the "Ohio Building Code," the "Ohio Mechanical Code," and the "Ohio Plumbing Code" ~~shall~~ govern any ~~rule~~rules or standards adopted by the board pursuant to section 4104.02 of the Revised Code.

(E) In any condition not covered by these rules, the applicable section of the "ASME Code for Boilers and Pressure Vessels" as referenced in rule 4101:4-3-01 of the Administrative Code for new installations ~~shall apply~~ applies when not inconsistent with the provisions of Chapter 4104. of the Revised Code. Should any paragraph, subparagraph, sentence, clause, phrase, provision, or exemption of these rules be declared unconstitutional or invalid for any reason, the invalidity ~~shall~~does not affect the remaining portions or paragraphs.

4101:4-2-02 **Types and qualifications of inspectors.**

(A) Only an "Authorized Inspector" employed by an "Authorized Inspection Agency" ~~shall~~is permitted to conduct inspections of boilers and pressure vessels during construction and fabrication to determine compliance with the rules of the board.

(B) Only a general or special inspector ~~shall~~ is permitted to conduct inservice periodic inspections for boilers and repair and alteration inspections of boilers and pressure vessels to determine compliance with the rules of the board.

(C) An applicant for examination as an inspector of boilers and pressure vessels ~~shall~~is to be qualified as prescribed in the "National Board" publication "NB-263, Rules for National Board Inservice and New Construction Commissioned Inspectors" as referenced in rule 4101:4-3-01 of the Administrative Code.

(D) The written examination administered by the superintendent ~~shall~~is to be the "National Board Commission Examination." ~~The examination shall be given four times each year, on the first Wednesday of March, June, September, and December.~~

(E) The superintendent may allow an applicant to sit for the examination at an "On-Demand" location accepted by the "National Board" in accordance with "Part 2" of the "National Board" publication "NB-263, Rules for National Board Inservice and New Construction Commissioned Inspectors" as referenced in rule 4101:4-3-01 of the Administrative Code.

4101:4-3-01 **Accepted engineering practice and approved standards.**

(A) Where references are made in Chapters 4101:4-1 to 4101:4-10 of the Administrative Code to the applicable section of the "ASME Boiler and Pressure Vessel Code" or to other standards or publications, this rule identifies the specific edition of the code, standard, or publication that is adopted. Conformity to the applicable technical provisions, requirements, recommendations, and determinations in the codes, standards or other referenced publications adopted in "Table 4-3-01" of this rule, is prima-facie evidence of conformity with accepted engineering practice or with an approved standard.

(B) The board of building standards adopts existing published standards by year of issue as shown in "Table 4-3-01" of the Administrative Code as well as amendments, supplements, and addenda subsequently published prior to issuance of the next edition by the same authority in accordance with section 4104.02 of the Revised Code.

Table 4-3-01

Authority	Edition Date	Designation	Title
ASME	~~2017~~2023	BPVC -Section I (see footnote a)	Rules for Construction ofPower Boilers.
ASME	~~2017~~2023	BPVC -Section II	~~Material Specifications.~~Materials. Part A-Ferrous. Part B-Non-Ferrous. Part C-Welding Rods, Electrodes and Filler Metals. Part D-Properties.
ASME	~~2017~~2023	BPVC -Section III	Rules for Construction ofNuclear Facility Components.
ASME	~~2017~~2023	BPVC -Section IV	Rules for Construction ofHeating Boilers.
ASME	~~2017~~2023	BPVC -Section V	Nondestructive Examination.
ASME	~~2017~~2023	BPVC -Section VI	Recommended Rules for Care and

			Operation of Heating Boilers.
ASME	~~2017~~2023	BPVC -Section VII	Recommended Guidelines for the Care of Power Boilers.
ASME	~~2017~~2023	BPVC -Section VIII	Rules for Construction ofPressure Vessels-Division 1.
ASME	~~2017~~2023	BPVC -Section VIII	Rules for Construction ofPressure Vessels-Division 2, Alternative Rules.
ASME	~~2017~~2023	BPVC -Section VIII	Pressure Vessels-Division 3, Alternative Rules for Construction of High Pressure Vessels.
ASME	~~2017~~2023	BPVC -Section IX	Welding, Brazing, and Fusing Qualifications.
ASME	~~2017~~2023	BPVC -Section X	Fiber-Reinforced Plastic Pressure Vessels.
ASME	~~2017~~2023	BPVC -Section XI	Rules for Inservice Inspection of Nuclear ~~Power Plant~~Reactor Facility Components.
ASME	~~2017~~2023	BPVC	Code Cases: Boilers and Pressure Vessels.
ASME	~~2016~~2022	B 31.1	Power Piping.
ASME	~~2015~~2021	CSD-1	~~"~~Controls and Safety Devices for

			Automatically Fired Boilers.""
NFPA	20152021	NFPA 85	""Boiler and Combustion Systems Hazards Code""
National Board	20172023	NBIC	National Board Inspection Code.
National Board	Jul. 2012, Rev. 1	NB-27	A Guide for Blowoff Vessels.
National Board	Jul. 20172023	NB-263	Rules for Commissioned Inspectors (RCI-1).
National Board	Oct. 2016Jul. 2020, Rev. 8.1.1.010	NB-371	Accreditation of Owner-User Inspection Organizations (OUIO).

Footnote a: For riveted construction, see "ASME, BPVC-Section I, Power Boilers, Part PR (1971 edition)."

4101:4-4-01 **Design of boilers and pressure vessels.**

(A) All new boilers and pressure vessels proposed for use in the state of Ohio, except those exempt by division (A) of section 4104.04 of the Revised Code, ~~shall~~are to be designed in accordance with the applicable approved referenced standard(s) adopted in "Table 4101:4-3-01" of rule 4101:4-3-01 of the Administrative Code and other requirements as prescribed in rules 4101:4-4-01 to 4101:4-4-04 of the Administrative Code.

(B) A boiler having the standard stamping of another state that has adopted rules of construction equivalent to those of Ohio may be accepted by the superintendent provided that the person desiring to install the boiler ~~shall make~~makes application to the superintendent for the installation and ~~shall include~~includes the manufacturers' data report covering the construction of the boiler.

(C) All electric boilers ~~shall~~are to be wired and the shell grounded, in accordance with "NFPA 70, the National ~~Electric~~Electrical Code" referenced in rule 4101:1-35-01 of the Administrative Code.

4101:4-4-02 **Maximum allowable working pressure of new boilers and pressure vessels.**

(A) The maximum allowable working pressure for boilers and pressure vessels built in accordance with the applicable section of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code ~~shall~~is to be as determined in the applicable approved referenced standard to which it is constructed and stamped. In no case ~~shall~~is the maximum allowable pressure permitted to exceed the pressure indicated by the manufacturer's identification stamped or cast upon the boiler or pressure vessel. Upon inspection of a boiler, if conditions are found which justify a reduction of the maximum allowable working pressure, the factor of safety shall be appropriately increased.

(B) The maximum allowable steam working pressure for cast iron boilers, except for hot water boilers, ~~shall be~~is fifteen psig.

4101:4-4-03 **Safety devices and controls.**

(A) All boilers and pressure vessels ~~shall~~are to be provided with the necessary safety appliances and controls that will prevent pressure and temperature from rising above the design limits. The required safety devices and controls ~~shall~~are to be installed and tested as required in the applicable section of the "ASME Boiler and Pressure Vessel Code" and the applicable parts of the "NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code. Where differences occur between the "ASME Boiler and Pressure Vessel Code" and the "NBIC", the requirements of the "ASME Boiler and Pressure Vessel Code" will govern.

(B) The operation of a boiler or pressure vessel without the required safety devices or controls is prohibited, except where alternate device(s) are provided for use on a temporary basis.

(C) Any owner or operator who in any manner loads the safety valve or valves to a greater pressure than that allowed by the certificate of operation ~~shall be~~is subject to the penalty provided in section 4104.99 of the Revised Code.

(D) The minimum safety or relief valve relieving capacity for electric boilers ~~shall be~~ is 3.5 pounds of steam per hour for each kilowatt input.

(E) The discharge of safety valves and other outlets ~~shall be installed~~is to be directed and terminated in such a manner so as not to endanger any person.

(F) Replacement of existing safety devices and controls ~~shall~~is to comply with the requirements for new safety devices and controls as prescribed in the applicable section of the "ASME Boiler and Pressure Vessel Code" and the applicable parts of the ""NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code.

(G) When an owner wishes to install safety devices and controls which will enable a new or an existing boiler to be operated without continuous, manned attendance by a licensed operator, the requirements of paragraph (B)(4) or (B)(5) of rule 4101:4-10-01 of the Administrative Code ~~shall~~are to be met.

4101:4-4-04 **Steam boiler blowoff systems.**

(A) The blowoff from boilers may be discharged directly to any place such as a lake, swamp, stream, sump, or open pit provided there is no hazard to life or property. Where a safe place of discharge is not available, a blowoff tank ~~shall~~is to be used. The tank ~~shall~~is to be designed to separate the flash steam from the water and ~~shall~~is to be flashed to a lower pressure system or vented to the atmosphere. The vent ~~shall~~is to be large enough to prevent a steam pressure greater than five psig in the blowoff tank. The water from the blowoff tank may be discharged into a building drain or building sewer provided the water temperature does not exceed one hundred forty degrees Fahrenheit.

(B) When a blowoff tank is elevated above the lowest point of a boiler, provisions ~~shall~~are to be made for draining water from the boiler.

(C) The shell thickness of a blowoff tank ~~shall~~is to be not less than one-fourth inch and ~~shall~~is to be constructed for a pressure of not less than twenty five per cent of the allowed pressure of the boilers connected to it for boilers up to and including four hundred psig. For boiler pressure greater than four hundred psig, use "Table 4-4-04(C)" for the blowoff tank allowable pressure. Construction of the blowoff tank ~~shall~~is to comply with section VIII, division 1, of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code and as modified in this rule.

Table 4-4-04(C)

Maximum allowable working pressure of boiler (psig)	Blowoff tank allowable pressure (psig)
3000	400
2250	325
1500	275
1000	200
750	165
500	125

(D) Blowoff piping between the boiler blowoff valve and the blowoff tank or other safe place of discharge, where the pressure is approximately atmospheric and when there are no intervening valves, ~~shall~~is to be constructed in accordance with "Table 4-4-04(D)". All boiler blowoff pipe fittings ~~shall~~are to be fabricated of steel.

Table 4-4-04(D)

Boiler pressure (psig)	Piping pressure (psig)
1501 to 2000	900
901 to 1500	600
601 to 900	400
250 to 600	250
Below 250	150

(E) In lieu of the design requirements of paragraphs (C) and (D) of this rule, the "National Board" publication entitled "NB-27, A Guide for Blowoff Vessels" as referenced in rule 4101:4-3-01 of the Administrative Code may be used for the design, construction, and arrangement of boiler blowoff equipment.

4101:4-4-05 **Clearances.**

When boilers are replaced or when new boilers are installed in either existing or new buildings, a minimum clear space of three feet ~~shall~~is to be provided on the control and service sides of the boiler. All other sides ~~shall~~are to comply with the boiler manufacturer's installation instructions for clearances to combustible materials. All boilers ~~shall~~are to be so located that adequate space will be provided for the proper operation of the boiler and its appurtenances, for the inspection of all surfaces, tubes, water walls, economizer piping, valves, and other equipment, and for their necessary maintenance and repair.

4101:4-5-01 **Boilers and pressure vessels of special design.**

(A) When a boiler or pressure vessel proposed for use in Ohio does not conform to all the provisions of the applicable section of the "ASME Boiler and Pressure Vessel Code" referenced in rule 4101:4-3-01 of the Administrative Code, application can be made to the board for legal use in Ohio by submitting, prior to fabrication, the following documents, sealed by a registered professional engineer holding a certificate issued under section 4733.14 of the Revised Code:

(1) A written analysis detailing how the proposed boiler or pressure vessel does not conform to the requirements of the "ASME Boiler and Pressure Vessel Code";

(2) Detailed construction drawings;

(3) Materials specifications;

(4) Design calculations;

(5) Welding details and procedures, and procedure qualification tests (when applicable); and

(6) Detailed quality control procedures used in all phases of construction.

(Note: All documents submitted ~~shall~~are to be in the English language, and all dimensions, pressures, temperatures, and material properties ~~shall~~are to be in the same units as used in the applicable section of the "ASME Boiler and Pressure Vessel Code" referenced in rule 4101:4-3-01 of the Administrative Code.

(B) After receipt by the board, the documents listed above ~~shall~~will be reviewed by a registered professional engineer assigned or approved by the board. After review, the professional engineer ~~shall~~will make a recommendation to the board.

(C) If the application is approved by the board, the boiler or pressure vessel ~~shall~~is to be inspected during construction by an authorized inspector, tested as required by the applicable section of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code and in accordance with the conditions of the resolution issued by the board. If approved, the boiler or pressure vessel of special design ~~shall~~ is to be tagged with an "OHIO SPECIAL" serial number by a general inspector.

(D) When an existing "Ohio Special" boiler or pressure vessel that has been approved by

the board is proposed to be repaired, reinstalled, or relocated, the work ~~shall~~is to be performed in accordance with rule 4101:4-9-01 of the Administrative Code.

(E) When an existing "Ohio Special" boiler or pressure vessel that has been approved by the board is proposed to be altered, the proposed alterations ~~shall~~are to be documented by a registered design professional and evaluated and approved by the board, prior to the alteration, in the same manner as described in paragraphs (A) and (B) of this rule. If the alterations are approved by the board, the boiler or pressure vessel may be altered in accordance with the conditions of the resolution and, consistent with "Part 3" of the "NBIC", the original code of construction or the currently adopted "ASME Boiler and Pressure Vessel Code" referenced in rule 4101:4-3-01 of the Administrative Code. The boiler or pressure vessel ~~shall~~is to be tested and inspected as required by the conditions of the resolution issued by the board.

4101:4-6-01 **Construction and stamping of boilers and pressure vessels.**

Unless exempt by rule 4101:4-2-01 of the Administrative Code,

(A) All boilers and pressure vessels ~~shall~~are to be constructed and tested in accordance with the applicable section(s) of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code.

(B) All boilers and pressure vessels ~~shall~~are to be inspected during construction and after completion by an authorized inspector to determine compliance with the applicable section of the "ASME Boiler and Pressure Vessel Code."

(C) Unless exempt from stamping requirements by the "ASME Boiler and Pressure Vessel Code," after certification of the manufacturer's data report and acceptance by an authorized inspector, the manufacturer ~~shall~~is to apply the appropriate "ASME" code stamp symbol and other required markings to the boiler or pressure vessel indicating that the boiler or pressure vessel complies with all of the "ASME" code requirements that are prescribed in the applicable code section referenced in rule 4101:4-3-01 of the Administrative Code.

(D) All boilers and pressure vessels ~~shall~~are to be registered with the "National Board." In accordance with the "National Board" registration requirements, the original manufacturer's data report, properly executed and signed by both the manufacturer and an authorized inspector, ~~shall~~is to be filed with the "National Board" for permanent retention.

(E) The manufacturer, in accordance with the "National Board" registration requirements, ~~shall~~is also to apply the "National Board" registration number to the boiler or pressure vessel.

4101:4-7-01 **Contractor registration and boiler permits.**

Unless exempt by paragraph (B) of rule 4101:4-2-01 of the Administrative Code,

(A) Every contractor or owner ~~shall~~is to be registered with the division of industrial compliance before installing or making major repairs or alterations to any boiler. Applications for registration will be obtained from the division of industrial compliance on forms prescribed by the superintendent.

(B) All contractors or owners performing boiler installations, repairs, or alterations ~~shall~~are to register annually with the superintendent. The annual registration processing fee ~~shall be~~is fifty dollars.

(C) Every contractor or owner ~~shall~~is to apply for and obtain a permit from the division of industrial compliance prior to making the installation of any boiler. The application ~~shall~~is to be made on forms prescribed by the superintendent. A permit fee of one-hundred dollars per boiler ~~shall~~is to be submitted with each permit application form.

(D) Unless the contractor or owner obtains a "National Board "R" Certificate of Authorization" as prescribed in "Part 3" of the "NBIC" referenced in rule 4101:4-3-01 of the Administrative Code, every contractor or owner ~~shall~~is to apply for and obtain a permit from the division of industrial compliance prior to making a routine repair that involves welding or a major repair to an existing boiler. The application ~~shall~~is to be made on forms prescribed by the superintendent. A permit fee of one-hundred dollars per boiler ~~shall~~is to be submitted with each permit application form.

(E) Every contractor or owner performing boiler alterations ~~shall~~is to obtain a "National Board "R" Certificate of Authorization" as prescribed in "Part 3" of the "NBIC" referenced in rule 4101:4-3-01 of the Administrative Code. The contractor or owner is not required to apply for or obtain a permit from the division of industrial compliance. However, in accordance with "Part 3" of the "NBIC" and rule 4101:4-9-01 of the Administrative Code, authorization from an authorized inspector ~~shall~~is to be obtained prior to making the proposed alteration.

4101:4-8-01 **Inspection of boilers.**

(A) Unless exempt by paragraph (B) of rule 4101:4-2-01 of the Administrative Code, upon completion of an installation performed in accordance with the applicable part of the "NBIC" as determined by the superintendent and referenced in rule 4101:4-3-01 of the Administrative Code and in accordance with rules 1301:3-5-01 to 1301:3-5-09 of the Administrative Code, all boilers ~~shall~~are to be inspected by a general or special inspector who holds an Ohio commission issued by the superintendent. Each boiler ~~shall~~will be assigned a state of Ohio serial number obtained from the superintendent and affixed by the inspector. Unless otherwise authorized by the superintendent, the boilers ~~shall~~are not to be operated until a certificate of operation has been issued by the superintendent.

(B) In accordance with division ~~(F)~~(G) of section 4104.18 of the Revised Code, in addition to any fee assessed and collected directly from the owner or user for the inspection and issuance of a certificate of operation, the superintendent will collect, directly from the owner or user, a board assessed fee of three dollars and twenty-five cents for each certificate of operation or renewal thereof and for each inspection conducted.

(C) The three dollar and twenty-five cent assessment fee collected directly from the owner or user on behalf of the board ~~shall~~is to be remitted to the board when deposited by the division of industrial compliance pursuant to section 121.084 of the Revised Code. The superintendent ~~shall~~will report to the board the amounts remitted not later than one month following the first full month's collection and then monthly thereafter.

(D) Before inspection or any other work is started on an electric boiler, ~~it shall~~the boiler is to be isolated electrically. An appropriate warning tag ~~shall~~is to be posted on the disconnect.

(E) If, in the judgment of the inspector, it is advisable to apply a hydrostatic test to a boiler or pressure vessel, the owner or user ~~shall~~is to prepare for and apply the test, which ~~shall~~will be witnessed by the inspector.

4101:4-9-01 **Existing boilers and pressure vessels.**

(A) All existing boilers and pressure vessels and the associated equipment, controls, devices, and safeguards ~~shall~~are to be maintained in a safe and sanitary condition, in good working order, and free of leaks and defects. The owner or the owner's designated agent ~~shall be~~is responsible for the maintenance of such boilers and pressure vessels and associated equipment, controls, devices, and safeguards.

If the original stamping, marking, or nameplate becomes illegible, detached, or lost, the owner or user is to have the stamped data, markings, or nameplate replaced in accordance with the applicable part of the "NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code.

(B) The rules of the board ~~shall~~are not to be retroactively applied to existing boilers or pressure vessels that are not otherwise being altered, repaired, reinstalled, or relocated. Portions of a boiler or pressure vessel not altered or repaired and not affected by an alteration or repair are not required to comply with the code requirements for a new boiler or pressure vessel.

(C) Routine boiler repairs such as piping or tube replacement or repairs considered general maintenance may be made without permit or inspection. However, routine repairs that involve welding do require a permit and approval ~~must~~ is to be obtained from a general or special inspector prior to performing the repair. In the case where the contractor or owner making the routine repair has obtained a "National Board "R" Certificate of Authorization", the authorized inspector ~~shall~~is to authorize the routine repair prior to the work being performed. If the repair requires welding, ~~it shall~~the welding is to be performed in accordance with the provisions of section IX of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code.

(D) Where a major repair or alteration (including a re-rating) is necessary or desired on an existing boiler which bears the stamp of the appropriate "ASME" symbol or which is stamped with a state of Ohio boiler number, the repair or alteration ~~shall~~is to comply with the requirements of "Part 3" of the "NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code. The repair or alteration ~~shall~~is to meet the requirements for the conditions under which it will be operated.

(1) In accordance with rule 4101:4-7-01 of the Administrative Code, unless the contractor or owner has obtained a "National Board "R" Certificate of Authorization", all contractors or owners ~~shall~~are to apply for a permit from the division of industrial compliance to make proposed repairs and the repairs ~~shall~~are to be approved by a special or general inspector. A repair report, executed and signed by the special or general inspector, ~~shall~~is to be filed with the superintendent on forms provided.

(2) In accordance with "Part 3" of the "NBIC," contractors or owners performing boiler alterations ~~shall~~are to obtain a "National Board "R" Certificate of Authorization" prior to making any alterations. All alterations ~~shall~~are to be authorized and approved by an authorized inspector.

(E) Where a major repair or alteration (including a re-rating) is necessary or desired on an existing boiler or pressure vessel which does not bear the appropriate "ASME" symbol stamp or which is not stamped with a state of Ohio boiler number, the boiler or pressure vessel ~~shall~~is to be evaluated by the superintendent and required to meet the applicable requirements of the "ASME Boiler and Pressure Vessel Code" referenced in rule 4101:4-3-01 of the Administrative Code. Otherwise, the boiler or pressure vessel ~~shall~~is to be retired from use.

(F) Repairs made to an existing "Ohio Special" boiler or pressure vessel ~~shall~~are to be done in accordance with paragraph (C), (D)(1), or (H)(1) of this rule, as applicable.

(G) Alterations, including re-ratings, made to an existing "Ohio Special" boiler or pressure vessel ~~shall~~are to be approved, prior to the alteration, by the board of building standards in accordance with the special procedure outlined in rule 4101:4-5-01 of the Administrative Code for boilers and pressure vessels of special design.

(H) Where a major repair or alteration (including a re-rating) is necessary or desired on an existing pressure vessel which bears the stamp of the appropriate "ASME" symbol, the repair or alteration ~~shall~~is to comply with the requirements of "Part 3" of the "NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code. The repair or alteration ~~shall~~is to meet the requirements for the conditions under which it will be operated.

(1) Unless the contractor or owner has obtained a "National Board "R" Certificate of Authorization", all contractors or owners ~~shall~~are to notify the division of industrial compliance prior to making repairs to an existing pressure vessel and the repairs ~~shall~~are to be approved by a special or general inspector. A repair report, executed and signed by the special or general inspector, ~~shall~~is to be filed with the superintendent on forms provided.

(2) In accordance with "Part 3" of the "NBIC", contractors or owners performing pressure vessel alterations ~~shall~~are to obtain a "National Board "R" Certificate of Authorization" prior to making any alterations. All alterations ~~shall~~are to be authorized and approved by an authorized inspector.

(I) Whenever repairs are made to fittings, safety devices, appliances, or controls or it

becomes necessary or desirable to replace them, the work ~~shall~~ is to comply with the requirements for new installations as prescribed in the applicable section of the "ASME Boiler and Pressure Vessel Code" and the applicable part of the "NBIC" as referenced in rule 4101:4-3-01 of the Administrative Code. When an owner wishes to install safety devices and controls which will enable an existing boiler to be operated without continuous, manned attendance by a licensed operator, the requirements of paragraph (B)(4) or (B)(5) of rule 4101:4-10-01 of the Administrative Code ~~shall~~are to be met.

(J) An existing stationary boiler or pressure vessel which bears the appropriate "ASME" symbol or which is stamped with a state of Ohio boiler number may be reinstalled or relocated within Ohio, provided that the installation complies with the applicable section of the "ASME Boiler and Pressure Vessel Code" as referenced in rule 4101:4-3-01 of the Administrative Code and an inspection is made by a special or general inspector prior to operation. The fittings and appliances ~~shall~~are to comply with the requirements for a new installation.

(K) A secondhand boiler or pressure vessel stamped with the appropriate "ASME" symbol or having the standard stamping of another state that has adopted rules of construction equivalent to those of Ohio may be installed for use in the state of Ohio provided that application is made for the installation, the manufacturer's data report, indicating that the boiler or pressure vessel was inspected during construction by an authorized inspector, is filed in the office of the superintendent, and an inspection is made by a special or general inspector prior to operation. The inspector ~~shall~~is to submit a report to the superintendent which contains a facsimile of the code stamping, a statement concerning any corrosion or other deteriorating conditions and the extent and location of any welded or riveted repairs. Upon approval of a secondhand boiler by the superintendent, a certificate of operation ~~shall~~is to be issued.

(L) Except as permitted in paragraph (K) of this rule, an existing boiler or pressure vessel that does not bear the appropriate "ASME" symbol, was not registered with the "National Board," does not have a state of Ohio boiler number stamped upon it, or does not have an "Ohio Special" serial number tagged upon it is prohibited from reinstallation or relocation within the state of Ohio.

(M) The maximum allowable steam working pressure for cast iron boilers, except for hot water boilers, ~~shall~~ is to be fifteen psig.

(N) The maximum allowable working pressure on the shell or drum of an existing nonstandard boiler ~~shall~~is to be determined by the strength of the weakest section of the structure, computed from the thickness of the plate, the tensile strength of the plate, the efficiency of the longitudinal joint or the tube ligaments, the inside

diameter of the weakest course and the factor of safety allowed by these rules.

(S)(t)(E)/(R)(F) = Maximum allowable working pressure, psig.

Where:

S = ultimate tensile strength of shell plates, psi.

When the ultimate tensile strength, "S", of steel or wrought-iron shell plates is not known, it ~~shall~~ is to be taken as fifty-five thousand psi for steel and forty-five thousand psi for wrought-iron.

t = minimum thickness of shell plate, in weakest course, inch.

E = efficiency of longitudinal joint.

For riveted construction, "E" ~~shall~~is to be determined by rules given in paragraph "PR-15" of the 1971 edition of the "ASME Boiler and Pressure Vessel Code, section I."

For tube ligaments, "E" ~~shall~~is to be determined by rules "PG-52" or, "PG-53" of the "ASME Boiler and Pressure Vessel Code, section I" and "PR-25", of the 1971 edition of the "ASME Boiler and Pressure Vessel Code, section I."

R = inside radius of the weakest course of the shell or drum in inches.

F = factor of safety permitted.

(1) When computing the ultimate strength of rivets in shear, the following values in pounds per square inch of the cross-sectional area of the rivet shank (after driving) ~~shall~~ is to be used:

Strength of existing rivets in shear

Type of rivet	Strength
Iron rivet in single shear	38,000
Iron rivet in double shear	76,000
Steel rivets in single shear	44,000
Steel rivets in double shear	88,000

(2) When the diameter of the rivet holes in the longitudinal joints of a boiler is not known, the diameter and cross sectional area of rivets, after driving, may be

ascertained from the following table or by cutting out one rivet in the body of the joint:

Sizes of rivets in inches based on plate thickness

Thickness of plate, inches.	1/4	9/32	5/16	11/32	3/8	13/32
Diameter of rivet after driving, inches.	11/16	11/16	3/4	3/4	13/16	13/16
Thickness of plate, inches.	7/16	15/32	1/2	9/16	5/8	-
Diameter of rivet after driving, inches.	15/16	15/16	15/16	17/16	17/16	-

(3) The resistance of steel to crushing ~~shall~~ is to be taken as ninety-five thousand psi.

(4) The lowest factor of safety permissible on existing installations ~~shall~~is to be 4.5 excepting for horizontal return tubular boilers having continuous longitudinal lap seams more than twelve feet in length where the factor of safety ~~shall~~is to be 8, and when this latter type of boiler is removed from its existing setting, it ~~shall~~is not to be reinstalled for pressure in excess of fifteen psig. Reinstalled or secondhand nonstandard boilers ~~shall~~are to have a minimum factor of safety of 6 when the longitudinal seams are of lap riveted construction, and a minimum factor of 5 when the longitudinal seams are of butt and double strap construction. A boiler constructed of wrought iron ~~shall~~is to have a factor of safety of 7. Upon inspection of the boiler, if conditions are found which justify a reduction of the safe working pressure, the factor of safety as stated above ~~shall~~is to be appropriately increased.

(O) The maximum allowable working pressure of a nonstandard low pressure steam boiler ~~shall~~ is not to exceed fifteen psig.

(P) The maximum allowable working pressure of a nonstandard boiler constructed principally of cast iron or constructed of a cast iron shell or heads and steel tubes ~~shall~~is not to exceed thirty psig for hot water service.

(Q) The maximum allowable working pressure of a nonstandard water tube boiler, the tubes of which are secured to cast iron or malleable iron headers, or which have cast iron mud drums, ~~shall~~is not to exceed one hundred sixty psig for steam service.

(R) If in the judgment of the inspector a low pressure boiler is unsafe for operation at the pressure previously approved, the pressure ~~shall~~is to be reduced, proper repair made, or the boiler retired from service.

(S) Nonstandard pressure vessels except those exempt in section 4104.04 of the Revised Code and paragraph "U-1" of the "ASME Boiler and Pressure Vessel Code, section VIII", are prohibited for use in excess of fifteen psi internal or external pressure.

(T) Any owner or operator who in any manner loads the safety valve or valves to a greater pressure than that allowed by the certificate of operation ~~shall be~~is subject to the penalty provided in section 4104.99 of the Revised Code.

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

(A) In accordance with section 4104.05 of the Revised Code, no person ~~shall~~is to 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~~is to 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~~ is 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~~ completes and ~~sign~~ signs a certification report (similar to the report shown in Appendix C of ASME CSD-1) for each boiler. The certification report ~~shall~~is to meet the requirements of Section CG-510 of the ASME CSD-1 and ~~shall~~is to 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~~is to be registered in accordance with rule 4101:4-7-01 of the Administrative Code, ~~shall~~is to 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~~is to 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~~is to 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~~are to 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~~is to 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~~is to be consistent with the manufacturer's recommendations and ~~shall~~is to include regular inspections and operational testing for the boiler controls and safety devices. Annual inspection and operational testing ~~shall~~is to 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~~is to 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~~are to 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~~are to 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~~is to 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~~is to be prepared and sealed by a registered professional engineer holding a certificate issued under section 4733.14 of the Revised Code and ~~shall~~is to 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~~is to 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.