ALABAMA DEPARTMENT OF WORKFORCE
ADMINISTRATIVE CODE

CHAPTER 480-7-1
GENERAL PROVISIONS
ED. NOTE: FORMER CHAPTER 490-X-1 HAS BEEN RENUMBERED CHAPTER 480-7-1. DUE TO THE MERGER OF THE DEPARTMENT OF INDUSTRIAL RELATIONS AND THE DEPARTMENT OF LABOR, THE DEPARTMENT OF INDUSTRIAL RELATIONS HAS BEEN DISSOLVED AND ALL THE RULES WILL BE LISTED UNDER THE DEPARTMENT OF LABOR AS PER CERTIFICATION FILED JANUARY 9, 2013; EFFECTIVE FEBRUARY 13, 2013.

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480-7-1-.01 Definition Of Terms.

As used in this chapter, the terms provided herein shall have the following meanings:

(1) Accumulation test - a test by which the capacity of the safety or safety relief valves is checked to ensure that the pressure of the boiler does not rise six percent above the highest setting of any valve and, in no case, six (6) percent above the maximum allowable working pressure under maximum firing conditions.

(2) Act - the provisions of the Boiler and Pressure Vessel Safety Act, codified at Code of Ala. 1975, §§25-12-1 to - 22 (2000).

(3) Alabama State Special - a boiler or pressure vessel that is of a special design and cannot be constructed to the Code. This may include hobby boilers or boilers used for educational or historical purposes.

(4) Alteration - a change in any item described on the original manufacturer's data report that affects the pressure capability of the boiler or pressure vessel. Nonphysical 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 considered an alteration. A reduction of minimum temperature such that additional mechanical tests are required shall be considered an alteration.

(5) Approved - approved by the Alabama Board of Boiler and Pressure Vessels, the Secretary of Labor, or the Secretary's designee.

(6) Authorized inspection agency - one of the following:

(a) The State of Alabama Department of Labor; or

(b) Any insurance company that has been licensed to write boiler and pressure vessel insurance in the State of Alabama, is insuring boilers and pressure vessels in this State, and provides inspection services as may be required by such insurance company in this State; or

(c) An approved owner/user inspector.

(7) Board - the Alabama Board of Boilers and Pressure Vessels.

(8) Boiler - a closed vessel in which water or other liquid is heated, steam or vapor is generated, or steam is superheated, or in which any combination of these functions is accomplished, under pressure or vacuum, for use externally to itself, by the direct application of energy from the combustion of fuels or from electrical, solar, or nuclear energy. The term "boiler" includes fired units for heating or vaporizing liquids other than water where these units are separate from processing systems and are complete within themselves. The term "boiler" is further defined to include any of the following terms:

(a) Electric Boiler - a power boiler or heating boiler in which electricity provides the source of heat.

(b) Heating Boiler - a steam or vapor boiler operating at a pressure not exceeding 15 psig or a boiler in which water or other fluid is heated and intended for operation at pressures not exceeding 160 psig or temperatures not exceeding 250°F.

(c) High Pressure High Temperature Water Boiler - a water boiler operating at pressures exceeding 160 psig or temperatures exceeding 250°F.

(d) Hot Water Heating Boiler - a boiler in which no steam is generated, from which hot water is circulated for heating purposes and then returned to the boiler, and which operates at a pressure not exceeding 160 psig and/ or a temperature of 250°F at or near the boiler outlet.

(e) Hot Water Supply Boiler - a boiler or heater completely filled with water that furnishes hot water to be used externally to itself at pressures not exceeding 160 psig or a temperature not exceeding 250°F for hot

water supply boilers, or temperatures not exceeding 210°F for hot water supply heaters. This shall include, fired storage water heaters greater than 5 gallons, which are directly fired with steam, oil, gas or electricity located in buildings owned by or under the control of the state, county, municipality, separate school district or other public entity.

(f) Low Pressure Steam or Vapor Heating Boiler - a steam or vapor boiler operated at pressures not exceeding 15 psig.

(g) Miniature Boiler - a power boiler or high temperature water boiler that does not exceed the following limits:

1. 16 inches inside diameter of shell;

2. 20 square feet heating surface (not applicable to electric boilers);

3. 5 cubic feet gross volume, exclusive of casing and insulation;

4. 100 psig maximum allowable working pressure.

(h) Portable Boiler - a boiler primarily intended for a temporary location whose construction and usage permits it to be readily moved from one location to another.

(i) Power Boiler - a boiler in which steam or other vapor is generated at a pressure of more than 15 psig.

(j) Steam Heating Boiler - a steam boiler for operation at pressures not exceeding 15 psig.

(k) Unfired Steam Boiler - an unfired pressure vessel or system of unfired pressure vessels intended for operation at a pressure in excess of 15 psig steam for the purpose of producing and controlling an output of thermal energy.

(9) Certificate inspection - an inspection, the report of which is used by the chief inspector as justification for issuing, withholding, or revoking the certificate of inspection. This certificate inspection shall be as complete an inspection as possible. Regular certificate inspections are re-inspections or new inspections scheduled by the State.

(a) Internal inspection - as complete an examination as can reasonably be made of the internal and external surfaces of a boiler, pressure vessel, or nuclear component while it is shut down, and in which manhole plates, handhole plates, or other inspection-opening closures are removed as required by the inspector.

(b) External inspection - an inspection made when a boiler, pressure vessel, or nuclear component is in operation, if possible.

(10) Certificate of competency - a certificate issued to a person who has passed the examination prescribed by the Board.

(11) Certificate of inspection - a certificate issued by the chief inspector for the operation of a boiler or pressure vessel, as required by the Act.

(12) Chief inspector - the chief boiler and pressure vessel inspector appointed by this Act.

(13) Code - the required minimum standards for the safe construction, installation, inspection, maintenance, and repair of boilers and pressure vessels as set out in the publications adopted by reference herein: API Code Sections 510, 570; ASME Boiler and Pressure Vessel Code Sections I; III, Divisions I and II; IV; VIII, Divisions I, II, and III; and X; National Board Inspection Code; Controls and Safety Devices for Automatically Fired Boilers (CSD-1); National Fire Protection Association, Inc. Code Sections 31, 54, 58, 70, 85, and 211; ASME Pressure Vessels for Human Occupancy (PVHO-1).

(14) Commission; National Board - the commission issued by the National Board of Boiler and Pressure Vessel Inspectors to a holder of a certificate of competency who desires to make inspections in accordance with the National Board bylaws and whose employer submits the inspector's application to the National Board for such commission.

(15) Condemned boiler or pressure vessel - a boiler or pressure vessel that has been inspected and declared unsafe or disqualified by legal requirements by an inspector. A stamp or marking has been applied to the boiler or pressure vessel by the chief inspector or the deputy inspector designating its condemnation.

(16) Department - the Alabama Department of Labor.

(17) Existing installation - includes any boiler and/or pressure vessel constructed, installed, placed in operation, or contracted for before January 1, 2002.

(18) Fitting, Appliance, or Appurtenance - such necessary safety and operating devices as are attached to a boiler and/or pressure vessel.

(19) Hobby - an activity pursued outside of one's regular work, primarily for pleasure, for which one receives no monetary gain.

(20) Inspector - the chief inspector, or any deputy inspector, special inspector, or owner/user inspector.

(a) Chief inspector - the chief boiler and pressure vessel inspector appointed under the Act.

(b) Deputy inspector - any inspector appointed by the Secretary under the provisions of the Act and who is responsible to the chief inspector.

(c) Special inspector - an inspector holding an Alabama certificate of competency who is regularly employed by an insurance company authorized to insure and is insuring against loss from explosions of boilers or pressure vessels in this State.

(d) Owner/User inspector - an inspector continuously employed by a company owning and operating pressure vessels in this State for the purpose of making inspections of pressure vessels used or to be used by such company, but not for resale, providing such company complies with the requirements of Section 25-12-10 of the Boiler and Pressure Vessel Safety Act, Code of Ala. 1975.

(21) Installation - the act of installing boilers and pressure vessels, including all fittings, appliances, and/or appurtenances, as defined herein.

(22) Installation permit – written authorization to perform the installation of boilers and pressure vessels in this State.

(23) Insurance company - an insurance company that has been licensed or registered by the appropriate authority of a state of the United States or a province of Canada to write boiler and pressure vessel insurance in the State of Alabama, is insuring boilers and pressure vessels in this State, and provides inspection services as may be required by such insurance company in this State.

(24) Investigative committee - a subcommittee of the Board established for the purpose of investigating any incidents or complaints referred to the Board for possible violations of the Act and/or any appeals to the Board pursuant to the provisions of this chapter. The committee is comprised of the chief inspector, one Board member appointed by the Secretary, and the Secretary or his/her designee.

(25) Jurisdiction - a state, commonwealth, county, or municipality of the United States or a province of Canada that has adopted one or more sections of the ASME Code, one of which is Section I, and that maintains a duly constituted

department, bureau, or division for the purpose of enforcement of such Code.

(26) Lap seam crack – a crack found in a lap seam, extending parallel to the longitudinal joint and located either between or adjacent to rivet holes.

(27) Potable Water Heater - a water heater directly fired with steam, oil, gas or electricity with a corrosion resistant lining or constructed with corrosion resistant material, used to supply potable hot water at a pressure not exceeding 160psig or a temperature not exceeding 210°F when any of the following is exceeded:

(a) a heat input of 200,000 BTUs per hour;

(b) a nominal water containing capacity of 120 gallons.

(c) a nominal water containing capacity greater than 5 gallons if located in buildings owned by or under the control of the state, county, municipality, separate school district or other public entity.

(28) National Board (NB) - the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, whose membership is comprised of the chief inspectors of jurisdictions who are charged with the enforcement of the provisions of the Act.

(29) National Board commission - a certificate issued by the National Board to an individual who has passed the National Board examination, who holds a valid certificate of competency, and who is regularly employed by an authorized inspection agency.

(30) National Board commissioned inspector - an individual who holds a valid certificate of competency to perform in-service, repair, and alteration inspections, as defined by the National Board Inspection Code, and who holds a National Board commission and is regularly employed as an inspector by an authorized inspection agency.

(31) National Board Inspection Code (NBIC) - the manual for boiler and pressure vessel inspectors published by the National Board and adopted by the Board.

(32) New boiler or pressure vessel installation - all boilers and/or pressure vessels constructed, installed, placed in operation, or contracted for after January 1, 2002.

(33) Nonstandard boiler or pressure vessel - a boiler or pressure vessel that does not bear the ASME stamp and National

Board number or that otherwise does not comply with the Act or the stated rules and regulations of the Board.

(34) Owner/User - any person, firm, or corporation legally responsible for the safe installation, operation, and maintenance of any boiler or pressure vessel in this State.

(35) Owner/User inspection agency - an owner or user of pressure vessels who maintains a regularly established inspection department, whose organization and inspection procedures meet the requirements of Code of Ala. 1975, §25-12-10 (2000) and the rules and regulations of this Board and are acceptable to the Board.

(36) Pressure vessel - a vessel other than those vessels defined as boilers in which the pressure is obtained from an external source or from the application of heat.

(37) psig - pounds per square inch gage.

(38) Reinstalled boiler or pressure vessel - a boiler or pressure vessel removed from its original setting and reinstalled at the same or at a new location in the State of Alabama without change of ownership.

(39) Relief valve - a pressure relief valve actuated by inlet static pressure having a gradual lift proportional to the increase in pressure over opening pressure. It may be provided with an enclosed spring housing suitable for closed discharge system application and is primarily used for liquid service.

(40) Repair - the work necessary to restore a boiler or pressure vessel to a safe and satisfactory operating condition, provided there is no deviation from the original design.

(41) Rerating - a change in the maximum allowable working pressure or temperature of a boiler or pressure vessel, regardless of whether or not physical work is performed on the boiler or pressure vessel. Rerating shall be considered an alteration.

(42) Safety valve - a pressure relief valve actuated by inlet static pressure and characterized by rapid opening or pop action.

(43) Secondhand boiler or pressure vessel - a boiler or pressure vessel that has changed both location and ownership since last used.

(44) Special inspection - any inspection performed by the State other than a regularly scheduled inspection, including instances where the original inspection was rescheduled due to

the owner or user's failure to prepare the boiler or pressure vessel after notification.

(45) Standard boiler or pressure vessel - a boiler or pressure vessel that bears the ASME stamp and National Board number; cast iron boilers are not registered with the National Board and are not considered to be standard boilers.

Author: Board of Boilers & Pressure Vessels, Dr. David Dyer, Chairman
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480-7-1-.02 Adoption Of Codes And Standards.

(1) Unless otherwise provided by applicable law or the provisions of this chapter, the required minimum standards for the safe construction, installation, inspection, maintenance, and repair of boilers and pressure vessels in the State of Alabama shall be those prescribed in the following publications. All codes and standards adopted herein by the Alabama Board of Boilers and Pressure Vessels shall incorporate the most current editions made, approved, and/or adopted by each code or standard society, unless otherwise stated by the Board.

(a) Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers (ASME), published by the ASME, 22 Law Drive, Box 2300, Fairfield, New Jersey 07007-2300.

(b) National Board Inspection Code (NBIC), published by the National Board of Boiler and Pressure Vessel Inspectors (NB), 1055 Crupper Avenue, Columbus, Ohio 43229.

(c) American Petroleum Institute (API) Codes 510 and 570, published by the American Petroleum Institute, 1220 L Street NW, Washington, D.C. 20005.

(d) ASME Code Section I for Boiler Pressure Piping and Piping Systems, as described in B31.1, published by the ASME, 345 East 47th Street, New York, New York 10017.

(e) Controls and Safety Devices for Automatically Fired Boilers (ANSI/ASME CSD-1) for boilers of less than 12.5 million BTU per hour, published by the ASME, 345 East 47th Street, New York, New York 10017.

(f) National Fire Protection Association (NFPA) Section 85 Standards for boiler controls and safety devices of boilers

with more than 12.5 million BTU per hour, published by the National Fire Protection Association, Inc., Battery-march Park, Quincy, Massachusetts 02269.

(g) ASME Pressure Vessels for Human Occupancy (PVHO-1), published by the ASME, 345 East 47th Street, New York, New York 10017.

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