# BOILER AND UNFIRED PRESSURE VESSEL LAW
## Act of 1998, P.L. 2036, No. 85

## AN ACT

Regulating the construction, equipment, maintenance, operation and inspection of boilers and unfired pressure vessels; granting certain authority to and imposing certain duties upon the Department of Labor and Industry; providing for penalties; and making a repeal.

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The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

***Section 1. Short title.***

This act shall be known and may be cited as the Boiler and Unfired Pressure Vessel Law.

***Section 2. Definitions.***

The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Accident." A failure of a boiler or unfired pressure vessel resulting in personal injury or property loss.

"ASME." The American Society of Mechanical Engineers.

"Boiler." Any closed vessel in which water is heated, steam is generated, steam is superheated or any combination thereof under pressure or vacuum for use external to itself by the direct application of heat from the combustion of fuels or from electricity. The term shall include fired vessels for heating or vaporizing liquids other than water where these vessels are separate from processing systems and are complete within themselves.

"Department." The Department of Labor and Industry of the Commonwealth.

"Farms." Any properties or structures used primarily for production and/or raising of agriculture.

"Field inspection." An internal/external inspection as defined by the National Board Inspection Code (ANSI/NB-23).

"Inspector." A person commissioned by the Department of Labor and Industry to field-inspect boilers or unfired pressure vessels in this Commonwealth.

"National board." The National Board of Boiler and Pressure Vessel Inspectors.

"Person." Any individual, firm, partnership, unincorporated association, corporation or municipality. The term shall include the Commonwealth.

"Power boiler." A boiler in which steam or other vapor is generated at a pressure of more than 15 pounds per square inch (psi).

"Process boiler." Any vessel in which steam is generated or superheated under pressure or vacuum for use external to itself by direct or indirect application of heat. The source of heat must be in part or whole from a process other than the boiler itself. In order to be classified as a process boiler, the boiler must be directly tied to another process other than the generation of steam.

"Unfired pressure vessel." Any vessel in which pressure is obtained from an external source or from an indirect application of heat.

***Section 3. Compliance required.***

It shall be unlawful to install or use any boiler or unfired pressure vessel in this Commonwealth which does not comply with the provisions of this act and the regulations promulgated under this act.

***Section 4. Design and construction.***

Every boiler or unfired pressure vessel used or destined for use in this Commonwealth shall be so designed and constructed with respect to the thickness and strength of the materials used in construction, stay bolts and braces, drums, headers, tubes, doors, riveting, welding, steam, air and water gauges, safety devices, blow-offs, all necessary piping and all other parts and appurtenances and shall be installed, operated and maintained as to safely sustain the pressure at which the boiler or unfired pressure vessel is designed and intended to operate.

***Section 5. Construction of act.***

Nothing in this act shall be construed to apply to:

(1) Boilers and unfired pressure vessels owned or operated by the Federal Government.

(2) Boilers and unfired pressure vessels regulated under the Atomic Energy Act of 1954 (68 Stat. 921, 42 U.S.C. § 2011 et seq.).

(3) Pressure vessels used for the transportation of compressed gases if constructed and operated in compliance with specifications and regulations of the United States Department of Transportation.

(4) Air tanks located on vehicles operating under the rules of other Commonwealth agencies and used for carrying passengers or freight.

(5) Air tanks installed on the right-of-way of railroads and used directly in the operation of switcher and signals and under Federal or other Commonwealth agency jurisdiction.

(6) Boilers located in single-family dwellings, multiunit dwellings with four or fewer units.

(7) Boilers located in farms, except in sales areas which are accessible to the public.

***Section 6. Registration of boilers and unfired pressure vessels.***

The owner or user of every boiler or unfired pressure vessel subject to this act shall register with the department every boiler or unfired pressure vessel it operates, showing compliance with the provisions of this act and the regulations promulgated under this act. The registration shall be in a format prescribed by the department. If the location of any boiler or unfired pressure vessel is changed, a change of address shall be filed with the department within ten days of the change in a format prescribed by the department. If the boiler or unfired pressure vessel is to be used for a

purpose other than that shown on the original registration, the owner or user must reregister the equipment with the department prior to the change of use.

***Section 7. Shop inspection.***

(a) Inspection required. - Every boiler or unfired pressure vessel destined for use in this Commonwealth shall be inspected during its construction by an individual who has a valid national board commission to perform an inspection. Every boiler or unfired pressure vessel which has been so inspected shall, upon completion, have placed upon it a stamp bearing a symbol and number authorized by the department for this purpose. The department may accept comparable shop inspection and quality control standards which are equivalent to or exceed the ASME or national board standards. A manufacturer's data report for every boiler or unfired pressure vessel inspected under this subsection shall be registered with the national board.

(b) Boiler not shop-inspected. - Any boiler or unfired pressure vessel which has not been shop-inspected as required under subsection (a) may be installed within this Commonwealth if the following requirements are met:

(1) Submission of a request to install the equipment, in a form prescribed by the department, to the department.

(2) Furnishing of mill test reports of material to show compliance with the ASME Code or another code accepted by the department.

(3) Furnishing of calculations and stress analyses showing the maximum allowable working pressure under the ASME Code or another code accepted by the department. These stress analyses shall be certified by a registered professional engineer.

(4) If equipment is of welded construction, all seams that are required to be X-rayed by the ASME Code or another code accepted by the department shall be X-rayed.

(5) Establishment that welding meets requirements of the ASME Code or another code accepted by the department.

(6) Subjection of equipment to nondestructive examination or test that verifies structural integrity.

(7) All tests shall be made under the supervision of a Commonwealth-commissioned inspector or an individual holding a valid national board commission.

(8) Submission of a data sheet comparable to the appropriate ASME data report form and certified by a national board-commissioned inspector.

(9) If mill test reports, names of welders or other required information cannot be produced, the department may, in its discretion, accept other documentation.

(10) Payment of a special equipment application fee.

(11) Compliance with the requirements outlined under section 7.

(c) Exemption. - Boilers built prior to December 31, 1929, or any unfired pressure vessels built prior to June 1, 1938, which have not been removed from this Commonwealth shall be exempt from the requirements of subsections (a) and (b).

***Section 8. Repairs and alterations.***

Repairs and alterations to boilers and unfired pressure vessels shall be made in accordance with the requirements of the most current edition of the National Board Inspection Code (ANSI/NB-23) and performed by a person holding a national board inspection code "R," "VR" or "NR" repair certificate or a certificate of authorization issued by the ASME. The department may approve alternative repair or alteration guidelines for any boiler or unfired pressure vessel subject to section 7(b).

***Section 9. Field inspection.***

(a) Insurance company. - If a boiler or unfired pressure vessel is insured by a company authorized to insure boilers or unfired pressure vessels in this Commonwealth, the owner may request that the insurance company assure that a field inspection is made by an inspector employed by the insurance company. The furnishing of or failure to furnish field inspections, insurance inspections or advisory services in connection with or incidental to the issuance or renewal of a policy of property, casualty or boiler and machinery insurance shall not subject the insurer, whether domestic or foreign, its agents, employees or service contractors to liability for damages from injury, death or loss occurring as a result of any act or omission in the course of those services. This provision shall not apply in the event the intentional act of the insurer, its agent, employee or service contractor created the condition that was the proximate cause of injury, death or loss.

(b) Inspector employed by owner. - Boilers or unfired pressure vessels may be field-inspected by an inspector in the employ of the owner if:

(1) The inspector is a full-time employee of the owner for the purpose of making inspections of boilers or unfired pressure vessels used or to be used by the owner.

(2) The inspector has obtained a commission from the department as required under section 11.

(3) The owner continuously maintains an engineering division.

(4) The boilers or unfired pressure vessels are involved in process operations, of which a knowledge of the process, in addition to that of the construction of the vessels, is required by the inspector.

(5) The owner files regular field inspection reports with the department in a form approved by the department and pays the certificate fee set by the department through regulation.

(c) Department inspector. - If the owner does not assure that a field inspection is made by an inspector, the boiler or unfired pressure vessel shall be inspected by a department inspector. The owner shall be responsible to pay the department a fee for the inspection. If the owner fails to assure a field inspection, the owner shall be subject to appropriate enforcement action as provided under this act.

(d) Regular field inspections. - Regular field inspections shall be made as follows:

(1) Power boilers and process boilers shall be field-inspected once every 12 months except as provided under subsections (e) and (f).

(2) Low-pressure steam vapor, hot water heating and hot water supply boilers shall be field-inspected every two years.

(3) Unfired pressure vessels shall be inspected every three years.

(4) The department by regulation may adopt different inspection frequencies for specific classifications of boilers, miniature boilers and unfired pressure vessels.

(e) Power boiler internal inspections. - Power boiler internal inspections may be extended to 24 months if the following requirements are met:

(1) Continuous boiler water treatment under the direct supervision of persons trained and experienced in water treatment for the purpose of controlling and limiting corrosion and deposits.

(2) Recordkeeping available for review showing:

(i) The date and time the boiler is out of service and the reason therefor.

(ii) Daily analysis of water samples that adequately show the conditions of the water and any elements or characteristics which are capable of producing corrosion or other deterioration to the boiler or its parts.

(3) Annual external inspections are performed by a Commonwealth-commissioned inspector, which shall include a review of items under paragraphs (1) and (2).

(4) The boiler is operated under direct supervision of persons competent in all aspects of boiler operations.

(5) Inspection records demonstrate that no significant scaling, corrosion, erosion or overheating has occurred.

(f) Process boiler internal inspections. - Process boiler internal inspections may be extended to 60 months if:

(1) Conditions under subsection (e)(1), (2), (3) and (5) are met.

(2) The boiler is in continuous operation and is fully attended.

(g) Altering inspection. - The department upon the request of the owner, user or insurer of the boiler or unfired pressure vessel may alter the inspection schedule for a period of not more than six months.

(h) Certificate of operation. - The department upon written notification to the owner may limit issuance of the certificate of operation based on conditions reported by the department inspector.

(i) Extension. - Holders of current certificates of operation for process boilers or power boilers may apply for extension of their certificates by written request to the department. The request must include an assurance that all requirements specified in this act are being met. The department may carry out any necessary inspections to verify the accuracy of this assurance.

***Section 10. Issuance of certificates of operation.***

(a) Report. - Every inspector shall forward to the department a report of each field inspection made of any boiler or unfired pressure vessel showing the exact condition of the boiler or unfired pressure vessel. Inspection reports shall be submitted within 30 days of the date of inspection. Inspection reports received 30 days after the inspection was made may be considered invalid by the department. This report shall be filed in a manner prescribed by the department.

(b) Initial certificate of compliance. - If the initial inspection indicates that the boiler or unfired pressure vessel is in compliance and is in a safe condition to be operated, the inspector shall so notify the department. The department shall issue an initial certificate of operation. The certificate of operation shall become valid upon payment of the appropriate fee.

(c) Renewal certificate. - If subsequent inspections indicate that the boiler or unfired pressure vessel is in a safe condition to be operated, the inspector shall so notify the department. The department shall issue a renewal certificate. The renewal certificate shall become valid upon payment of the appropriate fee.

(d) Boiler not to be operated. - If an inspection indicates that the boiler or unfired pressure vessel is not in a safe condition to be operated, the boiler or unfired pressure vessel shall not be operated until:

(1) Proper repairs are made in accordance with this act.

(2) An inspection or reinspection of the boiler or unfired pressure vessel indicates that it is in a safe condition to be operated.

(3) An initial certificate of operation or renewal certificate of operation, as appropriate, is issued.

(e) Boiler dangerous to life or property. - If an inspector, upon inspection, finds that a boiler or unfired pressure vessel is dangerous to life or property, the inspector shall immediately notify the department of all facts in connection with the boiler or unfired pressure vessel. After review of all facts presented, the department may require the owner or user of the boiler or unfired pressure vessel to discontinue its operation immediately, and the department shall place a notice upon the boiler or unfired pressure vessel placing the boiler or unfired pressure vessel out of service. The owner or user of the boiler or unfired pressure vessel shall not operate the same until the requirements of subsection (d) are met.

***Section 11. Inspector commissions and fees for examination.***

(a) Examination. - No person shall perform field inspections until he has passed an examination administered by the department.

(b) Issuance of commission. - The department shall issue an inspector commission if the applicant passes the examination described under subsection (a) and remits the appropriate fee.

(c) Renewal. - An inspector shall renew his commission annually by submitting an application to the department, accompanied by the appropriate renewal fee.

(d) Suspension. - The Secretary of Labor and Industry may suspend an inspector commission for due cause. No inspector commission may be revoked until the inspector has been granted an opportunity to appear before the department at a hearing.

***Section 12. Enforcement.***

The department shall enforce this act and the regulations promulgated under this act.

***Section 13. Placement of equipment out of service.***

If the owner, operator or user of any boiler or unfired pressure vessel fails to comply with the provisions of this act or has received a written order served by the department requesting compliance with the provisions of this act and nevertheless fails to comply with the written order within the time specified, the department may immediately order the boiler or unfired pressure vessel to be placed out of service until the requirements of this act have been fully complied with.

***Section 14. Regulatory authority.***

The department may make, alter, amend or repeal regulations for the construction, stamping, installation, maintenance, repair, inspection and operation of boilers and unfired pressure vessels used or destined for use in this Commonwealth. The regulations may be based upon generally accepted national or international engineering standards, formulas and practices established and pertaining to boiler and unfired pressure vessel construction insofar as they are consistent with this act.

***Section 15. Right of entry.***

For the purposes of enforcing this act, the department shall have the power to enter any buildings or structures housing boilers or unfired pressure vessels, and no person shall hinder, delay or interfere with the department in the performance of its duty nor refuse information necessary to determine whether the provisions of this act are or will be complied with.

***Section 16. Accident report.***

The owner, user or operator of a boiler or unfired pressure vessel shall immediately notify the department by telephone, fax, telegraph or messenger of any accident. No part or parts of the affected equipment shall be removed or disturbed without the permission of the department except to perform emergency rescue or limit serious property damage. Within five days of the accident, the owner, user or operator shall file with the department a written report in a form prescribed by the department.

***Section 17. Fees.***

Fees for inspections, certificates of operation, inspector commission examinations, inspector commission renewals, registration of equipment and special equipment application shall be as set forth in section 613-A of the act of April 9, 1929 (P.L.177, No.175), known as The Administrative Code of 1929, until changed by law.

***Section 18. Procedure in prosecutions.***

Prosecutions for violations of the provisions of this act or the regulations promulgated under this act may be instituted by the department and shall be in the form of summary proceedings before a district justice. Upon conviction after a hearing, the penalties provided in this act shall be imposed and shall be final unless an appeal is taken to a court of proper jurisdiction in the manner prescribed by law.

***Section 19. Penalties.***

(a) Violation of provisions. - A person who violates this act or the regulations promulgated under this act or who fails or neglects to pay the fees required by this act shall, upon conviction for the first offense, be sentenced to pay a fine

of not more than $500 plus costs and, upon nonpayment thereof, to imprisonment for not more than ten days. For each subsequent offense, the person shall, upon conviction, be sentenced to pay a fine of not more than $1,000 plus costs and, upon nonpayment thereof, to imprisonment for not more than 30 days.

(b) Interfering with enforcement. - A person who hinders or delays or interferes with the department in the enforcement of this act shall, upon conviction, be sentenced to pay not more than $500 for the first offense. For subsequent offenses, the person may be sentenced to pay not more than $1,000 plus costs or to not more than three months' imprisonment, or both, in the discretion of the court.

(c) Refusal to put boiler out of service. - A person who fails or refuses to place a boiler or unfired pressure vessel out of service after the department serves notice on him and upon the boiler or unfired pressure vessel shall, upon conviction, be sentenced to pay $500 per day for each day he fails or refuses to place the boiler or unfired pressure vessel out of service.

***Section 20. Repeal.***

The act of May 2, 1929 (P.L.1513, No.451), referred to as the Boiler Regulation Law, is repealed.

***Section 21. Effective date.***

This act shall take effect as follows:

(1) Section 8 shall take effect in one year.

(2) This section shall take effect immediately.

(3) The remainder of this act shall take effect in 30 days.