
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 888 Session of
1997

INTRODUCED BY ARMSTRONG, APRIL 10, 1997

SENATOR ARMSTRONG, LABOR AND INDUSTRY, AS AMENDED, JUNE 3, 1997

AN ACT

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

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

13 Section 1. Short title.

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

16 Section 2. Definitions.

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

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

22 "ASME." The American Society of Mechanical Engineers.

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

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

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

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

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

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

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

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

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

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

28 Section 3. Compliance required.

29 It shall be unlawful to install or use any boiler or unfired
30 pressure vessel in this Commonwealth which does not comply with

1 the provisions of this act and the regulations promulgated under
2 this act.

3 Section 4. Design and construction.

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

13 Section 5. Construction of act.

14 Nothing in this act shall be construed to apply to:

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

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

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

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

27 (5) Boilers located in single-family dwellings,
28 multiunit dwellings with four or fewer units and farms,
29 except sales areas which are accessible to the public.

30 Section 6. Registration of boilers and unfired pressure

1 vessels.

2 The owner or user of every boiler or unfired pressure vessel
3 subject to this act shall register with the department every
4 boiler or unfired pressure vessel it operates, showing
5 compliance with the provisions of this act and the regulations
6 promulgated under this act. The registration shall be in a
7 format prescribed by the department. If the location of any
8 boiler or unfired pressure vessel is changed, a change of
9 address shall be filed with the department within ten days of
10 the change in a format prescribed by the department. If the
11 boiler or unfired pressure vessel is to be used for a purpose
12 other than that shown on the original registration, the owner or
13 user must reregister the equipment with the department prior to
14 the change of use.

15 Section 7. Shop inspection.

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

28 (b) Boiler not inspected.--Any boiler or unfired pressure
29 vessel which has not been shop inspected as required under
30 subsection (a) may be installed within this Commonwealth if the

1 following requirements are met:

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

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

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

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

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

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

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

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

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

28 (10) Payment of a special equipment application fee.

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

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

5 Section 8. Repairs and alterations.

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

13 Section 9. Field inspection.

14 (a) Insurance company.--If a boiler or unfired pressure
15 vessel is insured by a company authorized to insure boilers or
16 unfired pressure vessels in this Commonwealth, the owner may
17 request that the insurance company assure that a field
18 inspection is made by an inspector. THE FURNISHING OF OR FAILURE <—
19 TO FURNISH FIELD INSPECTIONS, INSURANCE INSPECTIONS OR ADVISORY
20 SERVICES IN CONNECTION WITH OR INCIDENTAL TO THE ISSUANCE OR
21 RENEWAL OF A POLICY OF PROPERTY, CASUALTY OR BOILER AND
22 MACHINERY INSURANCE SHALL NOT SUBJECT THE INSURER, WHETHER
23 DOMESTIC OR FOREIGN, ITS AGENTS, EMPLOYEES OR SERVICE
24 CONTRACTORS TO LIABILITY FOR DAMAGES FROM INJURY, DEATH OR LOSS
25 OCCURRING AS A RESULT OF ANY ACT OR OMISSION IN THE COURSE OF
26 THOSE SERVICES. THIS PROVISION SHALL NOT APPLY IN THE EVENT THE
27 INTENTIONAL ACT OF THE INSURER, ITS AGENT, EMPLOYEE OR SERVICE
28 CONTRACTOR CREATED THE CONDITION THAT WAS THE PROXIMATE CAUSE OF
29 INJURY, DEATH OR LOSS.

30 (b) Inspector employed by owner.--Boilers or unfired

1 pressure vessels may be field-inspected by an inspector in the
2 employ of the owner if:

3 (1) The inspector is a full-time ~~employer~~ EMPLOYEE of ←
4 the owner for the purpose of making inspections of boilers or
5 unfired pressure vessels used or to be used by the owner.

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

8 (3) The owner continuously maintains an engineering
9 division.

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

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

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

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

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

30 (2) Low-pressure steam vapor, hot water heating and hot

1 water supply boilers shall be field inspected every two
2 years.

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

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

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

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

15 (2) Recordkeeping available for review showing:

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

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

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

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

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

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

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

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

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

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

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

20 Section 10. Issuance of certificates of operation.

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

29 (b) Initial certificate of compliance.--If the initial
30 inspection indicates that the boiler or unfired pressure vessel

1 is in compliance and is in a safe condition to be operated, the
2 inspector shall so notify the department. The department shall
3 issue an initial certificate of operation. The certificate of
4 operation shall become valid upon payment of the appropriate
5 fee.

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

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

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

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

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

22 (e) Boiler dangerous to life or property.--If an inspector,
23 upon inspection, finds that a boiler or unfired pressure vessel
24 is dangerous to life or property, the inspector shall
25 immediately notify the department of all facts in connection
26 with the boiler or unfired pressure vessel. After review of all
27 facts presented, the department may require the owner or user of
28 the boiler or unfired pressure vessel to discontinue its
29 operation immediately, and the department shall place a notice
30 upon the boiler or unfired pressure vessel placing the boiler or

1 unfired pressure vessel out of service. The owner or user of the
2 boiler or unfired pressure vessel shall not operate the same
3 until the requirements of subsection (d) are met.

4 Section 11. Inspector commissions and fees for examination.

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

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

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

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

18 Section 12. Enforcement.

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

21 Section 13. Placement of equipment out of service.

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

30 Section 14. Regulatory authority.

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

9 Section 15. Right of entry.

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

16 Section 16. Accident report.

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

26 Section 17. Fees.

27 Fees for inspections, certificates of operation, inspector
28 commission examinations, inspector commission renewals,
29 registration of equipment and special equipment application
30 shall be established by the department through regulation.

1 Section 18. Procedure in prosecutions.

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

9 Section 19. Penalties.

10 (a) Violation of provisions.--A person who violates this act
11 or the regulations promulgated under this act or who fails or
12 neglects to pay the fees required by this act shall, upon
13 conviction for the first offense, be sentenced to pay a fine of
14 not more than \$500 plus costs and, upon nonpayment thereof, to
15 imprisonment for not more than ten days. For each subsequent
16 offense, the person shall, upon conviction, be sentenced to pay
17 a fine of not more than \$1,000 plus costs and, upon nonpayment
18 thereof, to imprisonment for not more than 30 days.

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

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

1 fails or refuses to place the boiler or unfired pressure vessel
2 out of service.

3 Section 20. Retention of existing fee schedule.

4 Until the department promulgates regulations establishing
5 fees to be charged for inspections, certificates of operation,
6 inspector commissions, inspector commission renewals,
7 registration of equipment and special equipment application, the
8 fees established by the act of April 9, 1929 (P.L.177, No.175),
9 known as The Administrative Code of 1929, shall remain in
10 effect.

11 Section 21. Repeal.

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

14 Section 22. Effective date.

15 This act shall take effect as follows:

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

17 (2) This section shall take effect immediately.

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