
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 888 Session of
1997

INTRODUCED BY ARMSTRONG, APRIL 10, 1997

AS AMENDED ON THIRD CONSIDERATION, DECEMBER 8, 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.

6 TABLE OF CONTENTS

- 7 Section 1. Short title.
- 8 Section 2. Definitions.
- 9 Section 3. Compliance required.
- 10 Section 4. Design and construction.
- 11 Section 5. Construction of act.
- 12 Section 6. Registration of boilers and unfired pressure
13 vessels.
- 14 Section 7. Shop inspection.
- 15 Section 8. Repairs and alterations.
- 16 Section 9. Field inspection.
- 17 Section 10. Issuance of certificates of operation.
- 18 Section 11. Inspector commissions and fees for examination.
- 19 Section 12. Enforcement.

- 1 Section 13. Placement of equipment out of service.
- 2 Section 14. Regulatory authority.
- 3 Section 15. Right of entry.
- 4 Section 16. Accident report.
- 5 Section 17. Fees.
- 6 Section 18. Procedure in prosecutions.
- 7 Section 19. Penalties.
- 8 Section 20. Retention of existing fee schedule.
- 9 Section 21. Repeal.
- 10 Section 22. Effective date.

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 OR 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) BOILERS AND UNFIRED PRESSURE VESSELS REGULATED UNDER <—
18 THE ATOMIC ENERGY ACT OF 1954 (68 STAT. 921, 42 U.S.C. § 2011
19 ET SEQ.).

20 ~~(2)~~ (3) Pressure vessels used for the transportation of <—
21 compressed gases if constructed and operated in compliance
22 with specifications and regulations of the United States
23 Department of Transportation.

24 ~~(3)~~ (4) Air tanks located on vehicles operating under <—
25 the rules of other Commonwealth agencies and used for
26 carrying passengers or freight.

27 ~~(4)~~ (5) Air tanks installed on the right-of-way of <—
28 railroads and used directly in the operation of switcher and
29 signals and under Federal or other Commonwealth agency
30 jurisdiction.

1 ~~(5)~~ (6) Boilers located in single-family dwellings, <—
2 multiunit dwellings with four or fewer units.

3 ~~(6)~~ (7) Boilers located in farms, except in sales areas <—
4 which are accessible to the public.

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

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

20 Section 7. Shop inspection.

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

1 boiler or unfired pressure vessel inspected under this
2 subsection shall be registered with the national board.

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

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

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

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

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

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

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

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

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

30 (9) If mill test reports, names of welders or other

1 required information can not be produced, the department may,
2 in its discretion, accept other documentation.

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

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

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

10 Section 8. Repairs and alterations.

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

18 Section 9. Field inspection.

19 (a) Insurance company.--If a boiler or unfired pressure
20 vessel is insured by a company authorized to insure boilers or
21 unfired pressure vessels in this Commonwealth, the owner may
22 request that the insurance company assure that a field
23 inspection is made by an inspector employed by the insurance
24 company. The furnishing of or failure to furnish field
25 inspections, insurance inspections or advisory services in
26 connection with or incidental to the issuance or renewal of a
27 policy of property, casualty or boiler and machinery insurance
28 shall not subject the insurer, whether domestic or foreign, its
29 agents, employees or service contractors to liability for
30 damages from injury, death or loss occurring as a result of any

1 act or omission in the course of those services. This provision
2 shall not apply in the event the intentional act of the insurer,
3 its agent, employee or service contractor created the condition
4 that was the proximate cause of injury, death or loss.

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

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

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

13 (3) The owner continuously maintains an engineering
14 division.

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

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

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

30 (d) Regular field inspections.--Regular field inspections

1 shall be made as follows:

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

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

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

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

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

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

20 (2) Recordkeeping available for review showing:

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

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

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

30 (4) The boiler is operated under direct supervision of

1 persons competent in all aspects of boiler operations.

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

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

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

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

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

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

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

25 Section 10. Issuance of certificates of operation.

26 (a) Report.--Every inspector shall forward to the department
27 a report of each field inspection made of any boiler or unfired
28 pressure vessel showing the exact condition of the boiler or
29 unfired pressure vessel. Inspection reports shall be submitted
30 within 30 days of the date of inspection. Inspection reports

1 received 30 days after the inspection was made may be considered
2 invalid by the department. This report shall be filed in a
3 manner prescribed by the department.

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

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

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

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

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

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

27 (e) Boiler dangerous to life or property.--If an inspector,
28 upon inspection, finds that a boiler or unfired pressure vessel
29 is dangerous to life or property, the inspector shall
30 immediately notify the department of all facts in connection

1 with the boiler or unfired pressure vessel. After review of all
2 facts presented, the department may require the owner or user of
3 the boiler or unfired pressure vessel to discontinue its
4 operation immediately, and the department shall place a notice
5 upon the boiler or unfired pressure vessel placing the boiler or
6 unfired pressure vessel out of service. The owner or user of the
7 boiler or unfired pressure vessel shall not operate the same
8 until the requirements of subsection (d) are met.

9 Section 11. Inspector commissions and fees for examination.

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

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

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

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

23 Section 12. Enforcement.

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

26 Section 13. Placement of equipment out of service.

27 If the owner, operator or user of any boiler or unfired
28 pressure vessel fails to comply with the provisions of this act
29 or has received a written order served by the department
30 requesting compliance with the provisions of this act and

1 nevertheless fails to comply with the written order within the
2 time specified, the department may immediately order the boiler
3 or unfired pressure vessel to be placed out of service until the
4 requirements of this act have been fully complied with.

5 Section 14. Regulatory authority.

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

14 Section 15. Right of entry.

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

21 Section 16. Accident report.

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

1 Section 17. Fees.

2 Fees for inspections, certificates of operation, inspector
3 commission examinations, inspector commission renewals,
4 registration of equipment and special equipment application
5 shall be established by the department through regulation.

6 Section 18. Procedure in prosecutions.

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

14 Section 19. Penalties.

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

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

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

8 Section 20. Retention of existing fee schedule.

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

16 Section 21. Repeal.

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

19 Section 22. Effective date.

20 This act shall take effect as follows:

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

22 (2) This section shall take effect immediately.

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