
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 888 Session of
1997

INTRODUCED BY ARMSTRONG, APRIL 10, 1997

REFERRED TO LABOR AND INDUSTRY, APRIL 10, 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.

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

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

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

27 (3) The owner continuously maintains an engineering
28 division.

29 (4) The boilers or unfired pressure vessels are involved
30 in process operations, of which a knowledge of the process,

1 in addition to that of the construction of the vessels, is
2 required by the inspector.

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

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

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

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

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

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

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

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

30 (1) Continuous boiler water treatment under the direct

1 supervision of persons trained and experienced in water
2 treatment for the purpose of controlling and limiting
3 corrosion and deposits.

4 (2) Recordkeeping available for review showing:

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

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

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

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

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

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

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

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

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

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

1 inspector.

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

9 Section 10. Issuance of certificates of operation.

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

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

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

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

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

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

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

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

23 Section 11. Inspector commissions and fees for examination.

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

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

30 (c) Renewal.--An inspector shall renew his commission

1 annually by submitting an application to the department,
2 accompanied by the appropriate renewal fee.

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

7 Section 12. Enforcement.

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

10 Section 13. Placement of equipment out of service.

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

19 Section 14. Regulatory authority.

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

28 Section 15. Right of entry.

29 For the purposes of enforcing this act, the department shall
30 have the power to enter any buildings or structures housing

1 boilers or unfired pressure vessels, and no person shall hinder,
2 delay or interfere with the department in the performance of its
3 duty nor refuse information necessary to determine whether the
4 provisions of this act are or will be complied with.

5 Section 16. Accident report.

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

15 Section 17. Fees.

16 Fees for inspections, certificates of operation, inspector
17 commission examinations, inspector commission renewals,
18 registration of equipment and special equipment application
19 shall be established by the department through regulation.

20 Section 18. Procedure in prosecutions.

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

28 Section 19. Penalties.

29 (a) Violation of provisions.--A person who violates this act
30 or the regulations promulgated under this act or who fails or

1 neglects to pay the fees required by this act shall, upon
2 conviction for the first offense, be sentenced to pay a fine of
3 not more than \$500 plus costs and, upon nonpayment thereof, to
4 imprisonment for not more than ten days. For each subsequent
5 offense, the person shall, upon conviction, be sentenced to pay
6 a fine of not more than \$1,000 plus costs and, upon nonpayment
7 thereof, to imprisonment for not more than 30 days.

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

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

22 Section 20. Retention of existing fee schedule.

23 Until the department promulgates regulations establishing
24 fees to be charged for inspections, certificates of operation,
25 inspector commissions, inspector commission renewals,
26 registration of equipment and special equipment application, the
27 fees established by the act of April 9, 1929 (P.L.177, No.175),
28 known as The Administrative Code of 1929, shall remain in
29 effect.

30 Section 21. Repeal.

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

3 Section 22. Effective date.

4 This act shall take effect as follows:

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

6 (2) This section shall take effect immediately.

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