
THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 888 Session of
1997

INTRODUCED BY ARMSTRONG, APRIL 10, 1997

SENATOR TILGHMAN, APPROPRIATIONS, RE-REPORTED AS AMENDED,
NOVEMBER 17, 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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12 The General Assembly of the Commonwealth of Pennsylvania
13 hereby enacts as follows:

14 Section 1. Short title.

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

17 Section 2. Definitions.

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

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

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

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

1 complete within themselves.

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

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

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

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

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

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

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

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

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

29 Section 3. Compliance required.

30 It shall be unlawful to install or use any boiler or unfired

1 pressure vessel in this Commonwealth which does not comply with
2 the provisions of this act and the regulations promulgated under
3 this act.

4 Section 4. Design and construction.

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

14 Section 5. Construction of act.

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

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

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

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

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

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

1 (6) BOILERS LOCATED IN FARMS, EXCEPT IN SALES AREAS
2 WHICH ARE ACCESSIBLE TO THE PUBLIC.

3 Section 6. Registration of boilers and unfired pressure
4 vessels.

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

18 Section 7. Shop inspection.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8 Section 8. Repairs and alterations.

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

16 Section 9. Field inspection.

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

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1 its agent, employee or service contractor created the condition
2 that was the proximate cause of injury, death or loss.

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

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

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

11 (3) The owner continuously maintains an engineering
12 division.

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

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

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

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

30 (1) Power boilers and process boilers shall be field

1 inspected once every 12 months except as provided under
2 subsections (e) and (f).

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

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

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

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

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

18 (2) Recordkeeping available for review showing:

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

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

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

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

30 (5) Inspection records demonstrate that no significant

1 scaling, corrosion, erosion or overheating has occurred.

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

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

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

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

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

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

23 Section 10. Issuance of certificates of operation.

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

1 manner prescribed by the department.

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

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

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

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

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

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

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

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

7 Section 11. Inspector commissions and fees for examination.

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

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

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

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

21 Section 12. Enforcement.

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

24 Section 13. Placement of equipment out of service.

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

1 or unfired pressure vessel to be placed out of service until the
2 requirements of this act have been fully complied with.

3 Section 14. Regulatory authority.

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

12 Section 15. Right of entry.

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

19 Section 16. Accident report.

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

29 Section 17. Fees.

30 Fees for inspections, certificates of operation, inspector

1 commission examinations, inspector commission renewals,
2 registration of equipment and special equipment application
3 shall be established by the department through regulation.

4 Section 18. Procedure in prosecutions.

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

12 Section 19. Penalties.

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

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

29 (c) Refusal to put boiler out of service.--A person who
30 fails or refuses to place a boiler or unfired pressure vessel

1 out of service after the department serves notice on him and
2 upon the boiler or unfired pressure vessel shall, upon
3 conviction, be sentenced to pay \$500 per day for each day he
4 fails or refuses to place the boiler or unfired pressure vessel
5 out of service.

6 Section 20. Retention of existing fee schedule.

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

14 Section 21. Repeal.

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

17 Section 22. Effective date.

18 This act shall take effect as follows:

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

20 (2) This section shall take effect immediately.

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