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THE GENERAL ASSEMBLY OF PENNSYLVANIA

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**SENATE BILL**

**No. 888**      Session of  
1997

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INTRODUCED BY ARMSTRONG, APRIL 10, 1997

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SENATE AMENDMENTS TO HOUSE AMENDMENTS, JUNE 2, 1998

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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 or from  
27 electricity. The term shall include fired vessels for heating or  
28 vaporizing liquids other than water where these vessels are  
29 separate from processing systems and are complete within  
30 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 (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 (4) Air tanks located on vehicles operating under the  
25 rules of other Commonwealth agencies and used for carrying  
26 passengers or freight.

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

30 (6) Boilers located in single-family dwellings,

1 multiunit dwellings with four or fewer units.

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

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

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

19 Section 7. Shop inspection.

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

1 subsection shall be registered with the national board.

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

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

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

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

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

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

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

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

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

29 (9) If mill test reports, names of welders or other  
30 required information can not be produced, the department may,

1 in its discretion, accept other documentation.

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

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

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

9 Section 8. Repairs and alterations.

10 Repairs and alterations to boilers and unfired pressure  
11 vessels shall be made in accordance with the requirements of the  
12 most current edition of the National Board Inspection Code  
13 (ANSI/NB-23) and performed by a person holding a national board  
14 inspection code "R," "VR" or "NR" repair certificate or a  
15 certificate of authorization issued by the ASME. The department  
16 may approve alternative repair or alteration guidelines FOR ANY ←  
17 BOILER OR UNFIRED PRESSURE VESSEL SUBJECT TO SECTION 7(B).

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 as set forth in section 613-A of the act of April 9,  
6 1929 (P.L.177, No.175), known as The Administrative Code of  
7 1929, until changed by law.

8 Section 18. Procedure in prosecutions.

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

16 Section 19. Penalties.

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

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

1 or to not more than three months' imprisonment, or both, in the  
2 discretion of the court.

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

10 Section 20. Repeal.

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

13 Section 21. Effective date.

14 This act shall take effect as follows:

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

16 (2) This section shall take effect immediately.

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