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1 AN ACT concerning public safety.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 5. The Boiler and Pressure Vessel Safety Act is amended by changing Sections 2a, 2b, 4, 5, 8, 10, 11, and 15 as follows:

7 (430 ILCS 75/2a) (from Ch. 111 1/2, par. 3202a)

Sec. 2a. Nuclear facilities. Notwithstanding any other provision to the contrary, the Illinois Emergency Management Department of Nuclear Safety shall have sole jurisdiction over all boilers and pressure vessels contained within or upon or in connection with any nuclear facility within this State. The Illinois Emergency Management Agency Department of Nuclear Safety shall have the same authority and shall have and exercise the same powers and duties in relation to those boilers and pressure vessels under this Act as the Board or the State Fire Marshal have and exercise in relation to all boilers and pressure vessels in this State that are not included in this Section. Notwithstanding any other provision to the contrary, the Illinois Emergency Management Agency Department of Nuclear Safety shall establish by rule the types and frequency of inspections of boilers and pressure vessels contained within or upon or in connection with any nuclear facility. The rules may provide that multiple boilers and pressure vessels in a nuclear power system shall be covered by a single inspection certificate. The Illinois Emergency Management Agency Department of Nuclear Safety may enter into such agreements with the Board or the State Fire Marshal as are necessary to carry out its duties under this Act. agreements may provide that the <u>Illinois Emergency Management</u> Agency Department of Nuclear Safety shall accept and recognize Special Inspector Commissions issued by the State Fire Marshal.

1 (Source: P.A. 86-901; 87-1169.)

2 (430 ILCS 75/2b) (from Ch. 111 1/2, par. 3202b)

Sec. 2b. In addition to its other powers, the <u>Illinois</u>

<u>Emergency Management Agency Department of Nuclear Safety</u> is authorized to enter into agreements with the United States Nuclear Regulatory Commission for the establishment of a coordinated and comprehensive program to minimize the risks posed by boilers, pressure vessels, and related components contained within or upon or in connection with any nuclear facility within this State. The program may provide for such inspections of nuclear facilities within the State as may be agreed upon and for inspections within and outside the State of Illinois of boilers and pressure vessels to be installed in any nuclear facility within this State.

15 (Source: P.A. 86-901.)

16 (430 ILCS 75/4) (from Ch. 111 1/2, par. 3205)

Sec. 4. Existing boilers and pressure vessels.

- (a) The maximum allowable pressure consistent with the maximum and minimum operating temperatures of a boiler carrying the ASME Code symbol or of a pressure vessel carrying the ASME or API-ASME Code symbol shall be determined by the applicable section of the Code under which it was constructed and stamped or a later edition of the ASME Code, provided the rating conforms with the rules of the later edition.
- (b) The maximum allowable pressure consistent with the maximum and minimum operating temperatures of a boiler or pressure vessel that does not carry the ASME or the API ASME Code symbol shall be computed in accordance with the rules and regulations of the Board, unless the boiler or pressure vessel is of special design or construction, in which case the Board may grant, at its discretion, a special operating permit consistent with the safety objectives of the rules and regulations of the Board.
 - (c) This Act does not prohibit the use, sale, or

- 1 reinstallation of a boiler or pressure vessel referred to in
- 2 this Section, provided it has been made to conform to the rules
- 3 and regulations of the Board governing existing installations,
- 4 and provided, further, it has not been found upon inspection to
- 5 be in an unsafe condition.
- 6 (Source: P.A. 87-1169.)
- 7 (430 ILCS 75/5) (from Ch. 111 1/2, par. 3206)
- 8 Sec. 5. Exemptions.

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- 9 (a) This Act shall not apply to the following boilers and pressure vessels:
 - (1) Boilers and pressure vessels under federal regulations, except for boiler and pressure vessels in nuclear facilities subject to Section 2a, and boilers and pressure vessels located in cities of more than 500,000 inhabitants.
 - (2) Pressure vessels used for transportation and storage of compressed or liquefied gases when constructed in compliance with specifications of the Department of Transportation and charged with gas or liquid, marked, maintained, and periodically requalified for use, as required by appropriate regulations of the Department of Transportation.
 - (3) Pressure vessels located on vehicles operating under the rules of other State authorities and used for carrying passengers or freight.
 - (4) Pressure vessels installed on the right of way of railroads and used directly in the operation of trains.
 - (5) Boilers and pressure vessels under the inspection jurisdiction of the Department of Natural Resources and located on mine property.
 - (6) Boilers and pressure vessels located on farms and used solely for agricultural purposes.
 - (7) Steam boilers of a miniature model locomotive, boat, tractor, or stationary engine constructed and maintained as a hobby and not for commercial use, that have

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space.

1	an inside diameter not exceeding 12 inches and a grate area
2	not exceeding 1 1/2 square feet, provided they are
3	constantly attended while in operation and are equipped
4	with a water level indicator, pressure gauge, and a safety
5	valve of adequate capacity.
6	(8) Pressure vessels regulated and inspected under the
7	Illinois Fertilizer Act of 1961.
8	(9) Pressure vessels containing liquified petroleum
9	gas regulated under the Liquified Petroleum Gas Regulation
10	Act, except those used for industrial processes.
11	(b) The following boilers and pressure vessels shall be
12	exempt from the requirements of Sections 10, 11, 12, and 13 of
13	this Act:
14	(1) Steam boilers used for heating purposes and
15	operated at a pressure not in excess of 15 pounds per
16	square inch gauge (psig) and having a rating not in excess
17	of 200,000 B.T.U. per hour input.
18	(2) Hot water heating boilers operated at a pressure
19	not in excess of 30 psig and having a rating not in excess
20	of 200,000 B.T.U. per hour.
21	(3) Boilers and pressure vessels, located in private
22	residences or in multi-family buildings having fewer than 6
23	dwelling units.
24	(4) Hot water supply boilers that are directly fired
25	with oil, gas, or electricity when none of the following
26	<u>limitations are exceeded:</u>
27	(A) Heat input of 200,000 BTU per hour.
28	(B) Water temperature of 200 degrees Fahrenheit.
29	(C) Nominal water containing capacity of 120 U.S.
30	gallons.
31	(5) Coil type hot water boilers where the water can
32	flash into steam when released directly to the atmosphere
33	through a manually operated nozzle provided the following
34	conditions are met:

(A) There is no drum, headers, or other steam

1	(B) No steam is generated within the coil.
2	(C) Outside diameter of tubing does not exceed 1
3	inch.
4	(D) Pipe size does not exceed 3/4 inch NPS.
5	(E) Water capacity of unit does not exceed 6 U.S.
6	gallons.
7	(F) Water temperature does not exceed 350 degrees
8	Fahrenheit.
9	, that are within any of the following categories:
10	(A) Steam heating boilers operated at not more than
11	15 psig.
12	(B) Hot water heating boilers operated at not more
13	than 30 psig.
14	(C) Hot water boilers operated at not more than 160
15	psig or 250 degrees Fahrenheit.
16	(6) (D) Pressure vessels containing only water under
17	pressure for domestic supply purposes, including those
18	containing air, the compression of which serves only a
19	cushion or airlift pumping function.
20	(7) Pressure vessels operated at a pressure not
21	exceeding 15 psig with no limitation on size.
22	(8) Pressure vessels that do not exceed:
23	(A) Both a volume of 15 cubic feet and 250 psig
24	when not located in a place of public assembly.
25	(B) Both a volume of 5 cubic and 250 psig when
26	located in a place of public assembly.
27	(C) A volume of 1 1/2 cubic feet or an inside
28	diameter of 6 inches with no limitation on pressure.
29	(9) Water conditioning equipment used for the removal
30	of minerals, chemicals, or organic or inorganic particles
31	from water by means other than application of heat
32	including, without limitation, water softeners, water
33	filters, dealkalizers, and demineralizers.
34	(10) Steam boilers of railroad locomotives and
35	traction engines built prior to 1955 that were constructed
36	or operated in compliance with the Federal Locomotive

Inspection Law and are in the permanent collection of a

museum or historical association are exempt from the

requirements of subsection (c) of Section 10 upon proof of

such construction or inspection being furnished to the

Board.

- (c) (Blank). Steam boilers of railroad locomotives and traction engines built prior to 1955 that were constructed or operated in compliance with the Federal Locomotive Inspection Law and are in the permanent collection of a museum or historical association are exempt from the requirements of subsection (c) of Section 10 upon proof of such construction or inspection being furnished to the Board.

 (Source: P.A. 88-608, eff. 1-1-95; 88-616, eff. 9-9-94; 89-235,
- 15 (430 ILCS 75/8) (from Ch. 111 1/2, par. 3209)

 16 Sec. 8. Special Inspectors.

eff. 8-4-95; 89-445, eff. 2-7-96.)

- (a) The Office of the State Fire Marshal shall, upon the request of any company authorized to write boiler and pressure vessel insurance in this State or authorized under Section 15 of this Act to self-insure boilers and pressure vessels, issue to inspectors of the company commissions as Special Inspectors, provided that each inspector before receiving his commission shall meet the experience requirements of the Board and shall:
 - (1) satisfactorily pass the examination provided for in Section 9 of this Act; or
 - (2) in lieu of that examination, hold a Certificate of Competency as an inspector of boilers or pressure vessels for a jurisdiction that has a standard of examination substantially equal to that of the State of Illinois; or
 - (3) hold a Commission as an inspector of boilers and pressure vessels from the National Board of Boiler and Pressure Vessel Inspectors.
- (b) Special Inspectors shall receive no salary from, nor shall any of their expenses be paid by, the State. The continuance of a Special Inspector's Commission shall be

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- conditioned upon his continuing in the employ of the duly authorized insurance company or <u>owner-user</u> self-insurer and upon maintenance of the standards imposed by this Act.
 - vessels insured or <u>operated</u> self insured by their respective companies. The Board may impose limitations on owner-user inspectors who have received their commissions based on the American Petroleum Institute API-510 Inspectors Examination. When so inspected, the owners and users of insured or self-insured boilers and pressure vessels shall be exempt from the payment to the State of the inspection fees provided for in Section 13 of this Act.
 - (d) Within 10 business days 30 days following each boiler or pressure vessel certificate inspection, except the inspection of pressure vessels covered by subsection (c) of Section 11 of this Act, made by a Special Inspector, the company employing the inspector shall file a report of the inspection with the Chief Inspector either electronically or upon the appropriate forms. Reports of non-certificate external inspections need not be submitted except when those inspections disclose that the boiler or pressure vessel is in an unsafe condition or in violation of the rules and regulations of the Board.
 - (e) The State Fire Marshal, the Chief Inspector, or any Deputy or Special Inspector, shall have free access to any premises in the State to perform inspections and investigations in accordance with the provisions of this Act.
- 28 (Source: P.A. 87-1169; 88-608, eff. 1-1-95.)
- 29 (430 ILCS 75/10) (from Ch. 111 1/2, par. 3211)
- 30 Sec. 10. Inspection of boilers and pressure vessels.
- 31 (a) Each boiler or pressure vessel used or proposed to be 32 used within this State, except boilers or pressure vessels 33 exempt under this Act or rules and regulations of the Board, 34 shall be thoroughly inspected as to its construction, 35 installation, condition, and operation as follows:

- (1) Power boilers shall be inspected annually both internally and externally while not under pressure and shall also be inspected annually externally while under pressure if possible; provided that any power boiler or steam generator, the operation of which is an integral part of or a necessary adjunct to other continuous processing operations, shall be inspected internally at such intervals as are permitted by the shutting down of the processing operations. The Board may provide by rules and regulations for extension of time within which power boilers are required to be inspected based upon type, function, or manner of operation.
- (2) Low pressure steam, and hot water heating, boilers and hot water supply boilers shall be inspected biennially as required by the rules and regulations of the Board.
- (3) Traction steam engine boilers and other boilers constructed before the effective date of this amendatory Act of 1992 and operated solely for exhibition purposes may be issued an inspection certificate by the Chief or Deputy Inspector, provided the owner can establish and document that the design, materials, fabrication, examination, testing, and operation are in accordance with the rules and regulations of the Board. Traction engine boilers and other boilers used solely for exhibition purposes shall be inspected every 2 years.
- (4) Pressure vessels subject to internal corrosion shall receive a certificate inspection every 3 years as required by rules and regulations of the Board. However, the standards of inspection and repair of pressure vessels in service by an owner-user authorized under Section 15 shall, at the option of the owner-user or user, be either (1) the applicable rules and regulations in the National Board Inspection Code, or (2) the applicable section standards in the American Petroleum Institute API-510, "API Recommended Practice for Inspection, Repair, and Rating of Pressure Vessels in Petroleum Refining Service",

(5) Pressure vessels not subject to internal corrosion shall receive certificate inspection at intervals set by the Board, but internal inspection shall not be required of pressure vessels containing materials that are known to be noncorrosive to the material of which the shell, heads, or fittings are constructed, either from the chemical composition of the materials or from evidence that the materials are adequately treated with a corrosion inhibitor, provided that the vessels are constructed in accordance with the rules and regulations of the Board.

A grace period of 2 months beyond the period specified in this Section may elapse between internal inspections of a boiler while it is not under pressure and between external inspections of a boiler while it is under pressure. The Board may, in its discretion, permit longer periods between certificate inspection.

The inspections herein required shall be made by the Chief Inspector, a Deputy Inspector, or a Special Inspector provided for in this Act.

- (b) If at any time a test is deemed necessary for a stated cause by the inspector, the owner or user shall perform a test acceptable to the inspector in the presence of and under the direction of the inspector.
- (c) All boilers and pressure vessels, except those otherwise exempted by the Board, shall be inspected during construction, as required by the applicable rules regulations of the Board, by an inspector authorized to inspect boilers and pressure vessels in this State or, if constructed outside of the State, by an inspector holding a Certificate from the National Board of Boiler and Pressure Vessel Inspectors or a Certificate of Competency as an inspector of boilers and pressure vessels for a jurisdiction that has a standard of examination substantially equal to that of this

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- 1 State as provided in Section 9.
- 2 (Source: P.A. 87-1169; 88-608, eff. 1-1-95.)
- 3 (430 ILCS 75/11) (from Ch. 111 1/2, par. 3212)
- 4 Sec. 11. Inspection Certificates and annual statements.
 - (a) Each company employing Special Inspectors, except a company operating pressure vessels covered by an owner-user inspection service, that meet the requirements of subsection (a) of Section 8 of this Act shall, within 10 business days 30 days following each certificate inspection, file a report of inspection with the Chief Inspector electronically or upon the appropriate forms as approved by the division. upon appropriate forms provided by the Division.
 - (b) If the report filed pursuant to subsection (a) of this Section shows that a boiler or pressure vessel is found to comply with the rules and regulations of the Board, the owner or user thereof shall pay directly to the Office of the State Fire Marshal the fee established by the Board, and the Chief Inspector shall issue to the owner or user an Inspection Certificate bearing the date of inspection and specifying the maximum pressure under which the boiler or pressure vessel may be operated. Notwithstanding any other provision of this Section, an Inspection Certificate shall remain valid beyond the expiration date noted on the certificate until the boiler or pressure vessel is reinspected by the authorized inspecting authorities or until the certificate is suspended by the Chief Inspector, provided that the owner or user of the boiler or pressure vessel makes it available for inspection at reasonable times. Certificates shall be posted in the room containing the boiler or pressure vessel inspected. If the boiler or pressure vessel is not located within the building, the certificate shall be posted in a location convenient to the boiler or pressure vessel inspected or in any place where it will be accessible to interested parties.
 - (c) Each company operating pressure vessels covered by an owner-user inspection program service meeting the requirements

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of subsection (a) of Section 8 of this Act shall maintain in its files an inspection record, which shall list, by number and abbreviated description as may be necessary identification, each pressure vessel covered by this Act, the date of the last inspection of each unit, and the approximate date for the next inspection. The inspection date shall be arrived at by applying the appropriate rules to all data available at the time the inspection record is compiled. The inspection record shall be readily available for examination by the Chief Inspector or his authorized representative during business hours. Each such company shall, in addition, file annually with the Chief Inspector a statement, signed by the person having supervision over the inspections made during the period covered, stating the number of vessels covered by this Act inspected during the year and certifying that each inspection was conducted pursuant to the inspection standards provided for by this Act. The annual statement shall be accompanied by the a filing fee in accordance with the rates established by the Board.

- (d) (Blank). An Inspection Certificate issued for a boiler or pressure vessel based upon a report of a Special Inspector shall be void if the boiler or pressure vessel insurance ceases.
- (e) The Chief Inspector or his authorized representative may at any time suspend an Inspection Certificate when, in his opinion, the boiler or pressure vessel for which it was issued cannot be operated without menace to public safety, when the boiler or pressure vessel is found not to comply with the rules and regulations herein provided, or when an owner or operator has failed to pay any required fees or refused to allow inspection. In that event, the Chief Inspector or representative shall issue a Notice of Suspension, which shall be posted in a conspicuous location on or near the posted Inspection Certificate. Each suspension of an Inspection Certificate shall continue in effect until the boiler or pressure vessel has been made to conform to the rules and

- 1 regulations of the Board, and until the Inspection Certificate
- 2 has been reinstated.
- 3 (Source: P.A. 88-608, eff. 1-1-95; 89-467, eff. 1-1-97.)
- 4 (430 ILCS 75/15) (from Ch. 111 1/2, par. 3216)
- Sec. 15. Self-insurers. Any owner or user of boilers or pressure vessels subject to Section 10 of this Act who 6 7 maintains and operates, under the supervision of one or more regularly employed engineers who meet the experience and 8 9 requirements of the Board, an inspection 10 maintenance program service in which one or more inspectors are 11 regularly employed on inspection of boilers or pressure vessels 12 operated by the owner or user shall, upon application to the Board showing that fact and showing that the owner or user has 13 14 the financial ability to bear any loss and to pay all final 15 judgments or awards obtained against the owner or user by 16 reason of the operation of the boilers or pressure vessels, be authorized to act as a self-insurer of his or its boiler and 17 18 pressure vessel risk in this State; and when so authorized, the 19 owner-user shall employ special inspectors to supervise inspections performed at the owner-user's facilities. The 20 owner-user and the regularly employed special inspectors shall 21 22 be entitled to all the rights and privileges and shall be 23 subject to all the requirements, duties, and obligations provided in this Act respectively for boiler and pressure 24 25 vessel insurance companies and special inspectors.
- 26 (Source: P.A. 87-1169; 88-608, eff. 1-1-95.)
- 27 (430 ILCS 75/14 rep.)
- 28 Section 10. The Boiler and Pressure Vessel Safety Act is 29 amended by repealing Section 14.
- 30 Section 99. Effective date. This Act takes effect upon 31 becoming law.