94TH GENERAL ASSEMBLY

State of Illinois

2005 and 2006

SB3011

Introduced 1/20/2006, by Sen. Arthur J. Wilhelmi

SYNOPSIS AS INTRODUCED:

430 ILCS 75/2a						-	3202a
430 ILCS 75/2b		from	Ch.	111	1/2,	par.	3202b
430 ILCS 75/4		from	Ch.	111	1/2,	par.	3205
430 ILCS 75/5		from	Ch.	111	1/2,	par.	3206
430 ILCS 75/8		from	Ch.	111	1/2,	par.	3209
430 ILCS 75/10		from	Ch.	111	1/2,	par.	3211
430 ILCS 75/11		from	Ch.	111	1/2,	par.	3212
430 ILCS 75/15		from	Ch.	111	1/2,	par.	3216
430 ILCS 75/14	rep.						

Amends the Boiler and Pressure Vessel Safety Act. Replaces references to the Department of Nuclear Safety with the Illinois Emergency Management Agency. Removes references to pressure vessels containing the API ASME Code symbol in the determination of maximum and minimum operating temperatures of a pressure vessel by using the applicable section of the ASME Code. Exempts all pressure vessels containing liquified petroleum regulated by the Liquified Petroleum Regulation Act. Exempts the listed types of hot water boilers, pressure vessels, and water conditioning equipment from the inspection and certification process under the Act. Changes the time limit for filing reports concerning boiler or pressure vessel certificate inspections and owner-user certificate inspections to 10 days (from 30 days). Provides that the inspection reports may be filed electronically. Repeals the Section requiring the Chief and Deputy Inspectors to furnish bonds. Makes other changes. Effective immediately.

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FISCAL NOTE ACT MAY APPLY

A BILL FOR

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AN ACT concerning public safety.

2 Be it enacted by the People of the State of Illinois, 3 represented in the General Assembly:

4 Section 5. The Boiler and Pressure Vessel Safety Act is 5 amended by changing Sections 2a, 2b, 4, 5, 8, 10, 11, and 15 as 6 follows:

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

Sec. 2a. Nuclear facilities. Notwithstanding any other 8 provision to the contrary, the Illinois Emergency Management 9 Department of Nuclear Safety shall have sole 10 Agency jurisdiction over all boilers and pressure vessels contained 11 within or upon or in connection with any nuclear facility 12 within this State. The Illinois Emergency Management Agency 13 14 Department of Nuclear Safety shall have the same authority and 15 shall have and exercise the same powers and duties in relation to those boilers and pressure vessels under this Act as the 16 17 Board or the State Fire Marshal have and exercise in relation 18 to all boilers and pressure vessels in this State that are not 19 included in this Section. Notwithstanding any other provision to the contrary, the Illinois Emergency Management Agency 20 Department of Nuclear Safety shall establish by rule the types 21 22 and frequency of inspections of boilers and pressure vessels 23 contained within or upon or in connection with any nuclear facility. The rules may provide that multiple boilers and 24 25 pressure vessels in a nuclear power system shall be covered by 26 a single inspection certificate. The Illinois Emergency Management Agency Department of Nuclear Safety may enter into 27 28 such agreements with the Board or the State Fire Marshal as are necessary to carry out its duties under this Act. 29 The 30 agreements may provide that the <u>Illinois Emergency Management</u> Agency Department of Nuclear Safety shall accept and recognize 31 32 Special Inspector Commissions issued by the State Fire Marshal.

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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 Illinois 3 4 Emergency Management Agency Department of Nuclear Safety is 5 authorized to enter into agreements with the United States Nuclear Regulatory Commission for the establishment of a 6 7 coordinated and comprehensive program to minimize the risks posed by boilers, pressure vessels, and related components 8 9 contained within or upon or in connection with any nuclear 10 facility within this State. The program may provide for such 11 inspections of nuclear facilities within the State as may be agreed upon and for inspections within and outside the State of 12 Illinois of boilers and pressure vessels to be installed in any 13 14 nuclear facility within this State.

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

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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.

25 (b) The maximum allowable pressure consistent with the 26 maximum and minimum operating temperatures of a boiler or pressure vessel that does not carry the ASME or the API ASME 27 28 Code symbol shall be computed in accordance with the rules and 29 regulations of the Board, unless the boiler or pressure vessel 30 is of special design or construction, in which case the Board may grant, at its discretion, a special operating permit 31 consistent with the safety objectives of the rules and 32 regulations of the Board. 33

34 (c) This Act does not prohibit the use, sale, or

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reinstallation of a boiler or pressure vessel referred to in 1 this Section, provided it has been made to conform to the rules 2 3 and regulations of the Board governing existing installations, and provided, further, it has not been found upon inspection to 4 5 be in an unsafe condition. (Source: P.A. 87-1169.) 6 7 (430 ILCS 75/5) (from Ch. 111 1/2, par. 3206) Sec. 5. Exemptions. 8 9 (a) This Act shall not apply to the following boilers and 10 pressure vessels: (1) Boilers and pressure vessels under federal 11 regulations, except for boiler and pressure vessels in 12 nuclear facilities subject to Section 2a, and boilers and 13 pressure vessels located in cities of more than 500,000 14 15 inhabitants. (2)Pressure vessels used for transportation and 16 storage of compressed or liquefied gases when constructed 17 in compliance with specifications of the Department of 18 19 Transportation and charged with gas or liquid, marked, maintained, and periodically requalified for use, 20 required by appropriate regulations of the Department of 21 22 Transportation. (3) Pressure vessels located on vehicles operating 23 24 under the rules of other State authorities and used for 25 carrying passengers or freight. 26 (4) Pressure vessels installed on the right of way of 27 railroads and used directly in the operation of trains. (5) Boilers and pressure vessels under the inspection 28

(5) Boilers and pressure vessels under the inspection jurisdiction of the Department of Natural Resources and located on mine property.

31 (6) Boilers and pressure vessels located on farms and32 used solely for agricultural purposes.

33 (7) Steam boilers of a miniature model locomotive,
 34 boat, tractor, or stationary engine constructed and
 35 maintained as a hobby and not for commercial use, that have

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an inside diameter not exceeding 12 inches and a grate area
not exceeding 1 1/2 square feet, provided they are
constantly attended while in operation and are equipped
with a water level indicator, pressure gauge, and a safety
valve of adequate capacity.
(8) Pressure vessels regulated and inspected under the
Illinois Fertilizer Act of 1961.

(9) Pressure vessels containing liquified petroleum gas regulated under the Liquified Petroleum Gas Regulation Act, except those used for industrial processes.

(b) The following boilers and pressure vessels shall be exempt from the requirements of Sections 10, 11, 12, and 13 of 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.

(3) Boilers and pressure vessels, located in private
 residences or in multi-family buildings having fewer than 6
 dwelling units.

24 (4) Hot water supply boilers that are directly fired
25 with oil, gas, or electricity when none of the following
26 limitations are exceeded:
27 (A) Heat input of 200,000 BTU per hour.

(B) Water temperature of 200 degrees Fahrenheit.

29(C) Nominal water containing capacity of 120 U.S.30gallons.

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:

35(A) There is no drum, headers, or other steam36space.

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1		(B) No steam is generated within the coil.
2		(C) Outside diameter of tubing does not exceed 1
3	in	ch.
4		(D) Pipe size does not exceed 3/4 inch NPS.
5		(E) Water capacity of unit does not exceed 6 U.S.
6	ga	llons.
7		(F) Water temperature does not exceed 350 degrees
8	Fal	nrenheit.
9	, t	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	the	an 30 psig.
14		(C) Hot water boilers operated at not more than 160
15	ps:	ig or 250 degrees Fahrenheit.
16	(6)) (D) Pressure vessels containing only water under
17	pressu	re for domestic supply purposes, including those
18	contai	ning air, the compression of which serves only a
19	cushio	n or airlift pumping function.
20	(7)	Pressure vessels operated at a pressure not
21	<u>exceed</u>	ing 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	whe	en not located in a place of public assembly.
25		(B) Both a volume of 5 cubic and 250 psig when
26	100	cated in a place of public assembly.
27		(C) A volume of 1 1/2 cubic feet or an inside
28	<u>dia</u>	ameter of 6 inches with no limitation on pressure.
29	(9)) Water conditioning equipment used for the removal
30	<u>of min</u>	erals, chemicals, or organic or inorganic particles
31	<u>from</u>	water by means other than application of heat
32	<u>includ</u>	ing, without limitation, water softeners, water
33	filter	s, dealkalizers, and demineralizers.
34	(1))) Steam boilers of railroad locomotives and
25		an anginag built prior to 1055 that yere constructed

traction engines built prior to 1955 that were constructed or operated in compliance with the Federal Locomotive

1Inspection Law and are in the permanent collection of a2museum or historical association are exempt from the3requirements of subsection (c) of Section 10 upon proof of4such construction or inspection being furnished to the5Board.

6 (c) <u>(Blank).</u> Steam boilers of railroad locomotives and 7 traction engines built prior to 1955 that were constructed or 8 operated in compliance with the Federal Locomotive Inspection 9 Law and are in the permanent collection of a museum or 10 historical association are exempt from the requirements of 11 subsection (c) of Section 10 upon proof of such construction or 12 inspection being furnished to the Board.

13 (Source: P.A. 88-608, eff. 1-1-95; 88-616, eff. 9-9-94; 89-235,
14 eff. 8-4-95; 89-445, eff. 2-7-96.)

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(430 ILCS 75/8) (from Ch. 111 1/2, par. 3209)

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Sec. 8. Special Inspectors.

(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:

24 (1) satisfactorily pass the examination provided for25 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

30 (3) hold a Commission as an inspector of boilers and
 31 pressure vessels from the National Board of Boiler and
 32 Pressure Vessel Inspectors.

33 (b) Special Inspectors shall receive no salary from, nor 34 shall any of their expenses be paid by, the State. The 35 continuance of a Special Inspector's Commission shall be - 7 - LRB094 15598 LCT 50803 b

1 conditioned upon his continuing in the employ of the duly 2 authorized insurance company or <u>owner-user</u> self-insurer and 3 upon maintenance of the standards imposed by this Act.

(c) Special Inspectors shall inspect boilers and pressure 4 5 vessels insured or operated self insured by their respective companies. The Board may impose limitations on owner-user 6 inspectors who have received their commissions based on the 7 8 American Petroleum Institute API-510 Inspectors Examination. inspected, the owners and users of insured or 9 When so 10 self-insured boilers and pressure vessels shall be exempt from 11 the payment to the State of the inspection fees provided for in 12 Section 13 of this Act.

(d) Within 10 business days 30 days following each boiler 13 pressure vessel certificate inspection, except 14 or the 15 inspection of pressure vessels covered by subsection (c) of 16 Section 11 of this Act, made by a Special Inspector, the 17 company employing the inspector shall file a report of the inspection with the Chief Inspector either electronically or 18 appropriate forms. 19 Reports of non-certificate upon the 20 external inspections need not be submitted except when those inspections disclose that the boiler or pressure vessel is in 21 an unsafe condition or in violation of the rules and 22 23 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.)

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(430 ILCS 75/10) (from Ch. 111 1/2, par. 3211)

30 Sec. 10. Inspection of boilers and pressure vessels.

(a) Each boiler or pressure vessel used or proposed to be
used within this State, except boilers or pressure vessels
exempt under this Act or rules and regulations of the Board,
shall be thoroughly inspected as to its construction,
installation, condition, and operation as follows:

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1 (1) Power boilers shall be inspected annually both 2 internally and externally while not under pressure and 3 shall also be inspected annually externally while under pressure if possible; provided that any power boiler or 4 5 steam generator, the operation of which is an integral part 6 of or a necessary adjunct to other continuous processing operations, shall be inspected internally at such 7 intervals as are permitted by the shutting down of the 8 9 processing operations. The Board may provide by rules and regulations for extension of time within which power 10 11 boilers are required to be inspected based upon type, 12 function, or manner of operation.

13 (2) Low pressure steam, and hot water heating, boilers
14 and hot water supply boilers shall be inspected biennially
15 as required by the rules and regulations of the Board.

16 (3) Traction steam engine boilers and other boilers 17 constructed before the effective date of this amendatory Act of 1992 and operated solely for exhibition purposes may 18 be issued an inspection certificate by the Chief or Deputy 19 20 Inspector, provided the owner can establish and document that the design, materials, fabrication, examination, 21 testing, and operation are in accordance with the rules and 22 regulations of the Board. Traction engine boilers and other 23 boilers used solely for exhibition purposes shall be 24 25 inspected every 2 years.

(4) Pressure vessels subject to internal corrosion 26 27 shall receive a certificate inspection every 3 years as 28 required by rules and regulations of the Board. However, the standards of inspection and repair of pressure vessels 29 30 in service by an owner-user authorized under Section 15 31 shall, at the option of the owner-user or user, be either 32 (1) the applicable rules and regulations in the National Board Inspection Code, or (2) the applicable section 33 standards in the American Petroleum Institute API-510, 34 "API Recommended Practice for Inspection, Repair, and 35 36 Rating of Pressure Vessels in Petroleum Refining Service", 1

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with any revisions, reissues, amendments, and interpretations of those inspection standards that are subsequently approved and adopted by the Board.

(5) Pressure vessels not subject to internal corrosion 4 5 shall receive certificate inspection at intervals set by 6 the Board, but internal inspection shall not be required of pressure vessels containing materials that are known to be 7 noncorrosive to the material of which the shell, heads, or 8 9 fittings are constructed, either from the chemical composition of the materials or from evidence that the 10 11 materials are adequately treated with a corrosion 12 inhibitor, provided that the vessels are constructed in accordance with the rules and regulations of the Board. 13

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.

27 (c) All boilers and pressure vessels, except those 28 otherwise exempted by the Board, shall be inspected during 29 as required by the applicable rules construction, and 30 regulations of the Board, by an inspector authorized to inspect 31 boilers and pressure vessels in this State or, if constructed 32 outside of the State, by an inspector holding a Certificate from the National Board of Boiler and Pressure Vessel 33 Inspectors or a Certificate of Competency as an inspector of 34 35 boilers and pressure vessels for a jurisdiction that has a standard of examination substantially equal to that of this 36

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1 State as provided in Section 9.

2 (Source: P.A. 87-1169; 88-608, eff. 1-1-95.)

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(430 ILCS 75/11) (from Ch. 111 1/2, par. 3212)

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Sec. 11. Inspection Certificates and annual statements.

5 (a) Each company employing Special Inspectors, except a company operating pressure vessels covered by an owner-user 6 7 inspection service, that meet the requirements of subsection (a) of Section 8 of this Act shall, within 10 business days 30 8 9 days following each certificate inspection, file a report of 10 inspection with the Chief Inspector electronically or upon the appropriate forms as approved by the division. upon appropriate 11 forms provided by the Division. 12

(b) If the report filed pursuant to subsection (a) of this 13 14 Section shows that a boiler or pressure vessel is found to 15 comply with the rules and regulations of the Board, the owner 16 or user thereof shall pay directly to the Office of the State Fire Marshal the fee established by the Board, and the Chief 17 18 Inspector shall issue to the owner or user an Inspection 19 Certificate bearing the date of inspection and specifying the maximum pressure under which the boiler or pressure vessel may 20 be operated. Notwithstanding any other provision of this 21 22 Section, an Inspection Certificate shall remain valid beyond 23 the expiration date noted on the certificate until the boiler 24 or pressure vessel is reinspected by the authorized inspecting 25 authorities or until the certificate is suspended by the Chief 26 Inspector, provided that the owner or user of the boiler or 27 pressure vessel makes it available for inspection at reasonable times. Certificates shall be posted in the room containing the 28 29 boiler or pressure vessel inspected. If the boiler or pressure 30 vessel is not located within the building, the certificate 31 shall be posted in a location convenient to the boiler or pressure vessel inspected or in any place where it will be 32 33 accessible to interested parties.

34 (c) Each company operating pressure vessels covered by an
 35 owner-user inspection program service meeting the requirements

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1 of subsection (a) of Section 8 of this Act shall maintain in 2 its files an inspection record, which shall list, by number and 3 abbreviated description as may be necessary such for 4 identification, each pressure vessel covered by this Act, the 5 date of the last inspection of each unit, and the approximate 6 date for the next inspection. The inspection date shall be arrived at by applying the appropriate rules to all data 7 8 available at the time the inspection record is compiled. The 9 inspection record shall be readily available for examination by 10 the Chief Inspector or his authorized representative during 11 business hours. Each such company shall, in addition, file 12 annually with the Chief Inspector a statement, signed by the 13 person having supervision over the inspections made during the period covered, stating the number of vessels covered by this 14 15 Act inspected during the year and certifying that each 16 inspection was conducted pursuant to the inspection standards 17 provided for by this Act. The annual statement shall be accompanied by the a filing fee in accordance with the rates 18 19 established by the Board.

20 (d) <u>(Blank).</u> An Inspection Certificate issued for a boiler
21 or pressure vessel based upon a report of a Special Inspector
22 shall be void if the boiler or pressure vessel insurance
23 ceases.

(e) The Chief Inspector or his authorized representative 24 25 may at any time suspend an Inspection Certificate when, in his 26 opinion, the boiler or pressure vessel for which it was issued 27 cannot be operated without menace to public safety, when the 28 boiler or pressure vessel is found not to comply with the rules and regulations herein provided, or when an owner or operator 29 30 has failed to pay any required fees or refused to allow 31 inspection. In that event, the Chief Inspector or his 32 representative shall issue a Notice of Suspension, which shall be posted in a conspicuous location on or near the posted 33 Inspection Certificate. Each suspension of an 34 Inspection 35 Certificate shall continue in effect until the boiler or pressure vessel has been made to conform to the rules and 36

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regulations of the Board, and until the Inspection Certificate
 has been reinstated.

3 (Source: P.A. 88-608, eff. 1-1-95; 89-467, eff. 1-1-97.)

(430 ILCS 75/15) (from Ch. 111 1/2, par. 3216)

5 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 education requirements of the Board, an inspection or 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. (Source: P.A. 87-1169; 88-608, eff. 1-1-95.) 26

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(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.