SECTION 1. SPS 341.01 is amended to read:

SPS 341.01 Purpose. The <u>Pursuant to ss. 101.02 (15), 101.17 and 101.63, the</u> purpose of this chapter is to protect the health, safety and welfare of the public and employees by establishing minimum standards for the design, construction, installation, operation, inspection, testing, maintenance, alteration and repair of boilers, and pressure vessels, power piping and solid-fuel-fired water-heating appliances.

SECTION 2. SPS 341.02 (1) (a) and (b) 1.are amended to read:

SPS 341.02 (1) (a) Except as provided in par. (b), the provisions of this chapter apply applies to boilers and piping components associated with boilers, and to pressure vessels, and power piping, and solid-fuel-fired water-heating appliances in use at places of employment, in public buildings and at one- or 2-family dwellings.

(b) 1. The provisions of subchs. <u>Subchapters</u> V, VIII and IX shall <u>do</u> not apply to one- or 2-family dwellings.

SECTION 3. SPS 341.02 (1) (b) 1. Note is repealed.

SECTION 4. SPS 341.02 (1) (b) 3. and Note are created to read:

SPS 341.02 (1) (b) 3. This chapter does not apply to the gas systems that are within the scope of ch. SPS 340.

Note: The gas systems addressed in chapter SPS 340 include pressurized vessels and piping for gases that are used for fueling purposes, such as for heating appliances or engines.

SECTION 5. SPS 341.02 Note is created to read:

SPS 341.02 Note: See chapters SPS 310 and 314 for related Departmental requirements for storage and transportation of flammable, combustible and hazardous liquids. See chapter SPS 343 for related Departmental requirements for anhydrous ammonia.

SECTION 6. SPS 341.03 is repealed and recreated to read:

SPS 341.03 Application. (1) RETROACTIVITY. (a) The operation, testing, maintenance and inspection requirements of this chapter apply to all boilers, pressure vessels, power piping, solid-fuel-fired water-heating appliances, and their components, that exist on or after [the effective date of this rule...LEGISLATIVE REFERENCE BUREAU INSERTS DATE].

(b) A design, construction or installation rule of this chapter, including the applied criteria from the standards adopted in s. SPS 341.10, does not apply retroactively to boilers, pressure vessels, power piping, solid-fuel-fired water-heating appliances, and their components, that were installed prior to the effective date of the rule unless specifically stated in the rule or standard.

(c) The design, construction and installation requirements of this chapter apply to any alterations, repairs, and replacement parts or components for all boilers, pressure vessels, power piping, solid-fuel-fired water-heating appliances, and their components, that exist on or after [the effective date of this rule...LEGISLATIVE REFERENCE BUREAU INSERTS DATE].

Note: A proposed alteration for an existing boiler, pressure vessel or power piping may necessitate modifying other components in order to make the proposed alteration comply with this chapter – and some alterations may necessitate modifying other features of a building, such as an automatic fire sprinkler system, that must comply with requirements in chapters SPS 361 to 366, the Wisconsin Commercial Building Code.

(2) DIFFERING RULES. (a) Where any department-written rule in this chapter differs from a requirement within a standard referenced in this chapter, the department-written rule shall govern, except as provided in sub. (3).

(b) Where a provision of this chapter prescribes a general requirement and another provision of this chapter prescribes a specific or more detailed requirement regarding the same subject, the specific or more detailed requirement shall govern, except as provided in par. (a).

(c) Where different sections of this chapter specify conflicting requirements, the most restrictive requirement, as determined by the department, shall govern, except as provided in pars. (a) and (b).

(3) EXCLUSIONS. The department-written rules in this chapter do not nullify any exclusions specified in the standards adopted under s. SPS 341.10.

(4) INTERPRETATIONS. Under s. 101.02 (1), Stats., the department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards.

Note: Section 101.02(1) of the Statutes reads as follows: "The department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

(5) LOCAL REQUIREMENTS. This chapter does not limit the power of cities, villages and towns to make or enforce additional or more stringent requirements, provided the requirements do not conflict with this chapter, any other rule of the department, or law.

SECTION 7. SPS 341.04 (intro.) is amended to read:

SPS 341.04 Definitions. The definitions contained in this section shall be applicable throughout In this chapter.:

SECTION 8. SPS 341.04 (1) is renumbered SPS 341.04 (1) (a) and amended to read:

SPS 341.04 (1) (a) "Alteration," means a change in for a boiler or pressure vessel, that substantially alters the original design and that requires consideration of the effect of the change on the original design. Alteration does not include the addition to a boiler or pressure vessel of nozzles smaller than an unreinforced opening size has the meaning given in NBIC part 3 section 9.1.

SECTION 9. SPS 341.04 (1) (b) and (2) Note are created to read:

SPS 341.04 (1) (b) "Alteration," for power piping or a solid-fuel-fired water-heating appliance, means a change that involves an extension or addition to, or involves the arrangement, type or purpose of, an existing installation or component.

(2) Note: The Department will ordinarily accept items approved by a nationally recognized testing laboratory.

SECTION 10. SPS 341.04 (4) is created to read:

SPS 341.04 (4) "Authorized agent" means any of the following or their authorized representatives:

(a) A certified inspector who is referred to as enforcing this chapter, in a written contract between an inspection provider and the department.

(b) A first class city that has accepted the responsibility to administer and enforce this chapter.

Note: As of [the effective date of this rule...LEGISLATIVE REFERENCE BUREAU INSERTS DATE] only the City of Milwaukee had accepted the responsibility to administer and enforce this chapter.

SECTION 11. SPS 341.04 (6), (7) and (10) are amended to read:

SPS 341.04 (6) "Boiler external piping" means piping <u>that is</u> within the scope of <u>section I</u> of the ASME code <u>section I</u> and <u>which requires</u> is required by section I to have ASME code <u>symbol</u> stamping as specified in section I.

(7) "Certified inspector" means a person who holds a valid credential issued by the department under ch. SPS 305 as a certified boiler-pressure vessel inspector <u>or a certified inservice field inspector</u>.

(10) "Dwelling" has and "dwelling unit" have the meaning meanings given in s. 101.61 (1), Stats.

SECTION 12. SPS 341.04 (11) is repealed.

SECTION 13. SPS 341.04 (12) is renumbered SPS 341.04 (11).

SECTION 14. SPS 341.04 (12) is created to read:

SPS 341.04 (12) "First class city" means a city established with that class under s. 62.05, Stats.

Note: As of [the effective date of this rule...LEGISLATIVE REFERENCE BUREAU INSERTS DATE] only the City of Milwaukee had become a first class city.

SECTION 15. SPS 341.04 (13) is renumbered SPS 341.04 (40) and amended to read:

SPS 341.04 (40) "Fusion welding <u>Welding</u>" means the melting together of filler metal and base metal, or of base metal only, which that results in coalescence.

SECTION 16. SPS 341.04 (14) to (18) are renumbered SPS 341.04 (13) to (17).

SECTION 17. SPS 341.04 (19) is repealed.

SECTION 18. SPS 341.04 (20) to (24) are renumbered SPS 341.04 (18) to (22), and SPS 341.04 (19), (21) and (22), as renumbered, are amended to read:

SPS 341.04 (19) "Low-pressure Low-pressure steam boiler" means a boiler on which the safety valves are set at pressures not exceeding 15 psig.

(21) "Miniature boiler" means a power boiler or high temperature water boiler which that does not exceed any of the following limits:

(a) 16 inches inside Inside shell diameter of 16 inches shell;

(b) 20 square feet of heating Heating surface of 20 square feet, except for electric boilers;.

(c) <u>5 cubic feet gross</u> <u>Gross</u> volume <u>of 5 cubic feet</u>, exclusive of casing and insulation; <u>and.</u>

(d) 100 psig maximum Maximum allowable working pressure of 100 psig.

(22) "National board <u>Board</u>" means the national board <u>National Board</u> of boiler <u>Boiler</u> and <u>pressure vessel inspectors</u> <u>Pressure Vessel Inspectors</u>.

SECTION 19. SPS 341.04 (23) is created to read:

SPS 341.04 (23) "NRC" means the United States nuclear regulatory commission.

SECTION 20. SPS 341.04 (25) to (29) are renumbered SPS 341.04 (24) to (28), and SPS 341.04 (24) and (28), as renumbered, are amended to read:

SPS 341.04 (24) "Owner or user" means any person, firm or corporation legally responsible for the safe operation of a boiler or pressure vessel, power piping or a solid-fuel-fired water-heating appliance.

(28) "Power piping" means any steam piping system beyond the scope of <u>section I of the</u> ASME code section I and having a maximum allowable working pressure in excess of 15 psig, any hot water piping system beyond the scope of <u>section I of the</u> ASME code section I and subject to temperatures in excess of 250°F, or any piping system using an organic thermal <u>or synthetic</u> fluid as a heat transfer <u>heat-transfer</u> media and subject to temperatures in excess of 250°F

SECTION 21. SPS 341.04 (30) and Note are repealed.

SECTION 22. SPS 341.04 (31) to (39) are renumbered SPS 341.04 (29) to (37), and SPS 341.04 (29), (31), (32) and (37), as renumbered, are amended to read:

SPS 341.04 (29) "Pressure vessel" means a container for the containment of internal or external pressure, either internal or external. which <u>This pressure</u> may be obtained from an external source or by the application of heat from a direct or indirect source, or any combination thereof.

(31) "Relief valve" means an automatic pressure relieving device actuated by the static pressure upstream of the valve which opens further with the increase in pressure over the opening pressure pressure-actuated valve which is normally held closed by a spring or other means and which is designed to automatically open enough when needed to prevent internal pressure from exceeding a predetermined level.

(32) "Repair" means work <u>and materials</u> necessary to restore a boiler, or pressure vessel, <u>power piping or solid-fuel-fired water-heating appliance</u> to a safe operating condition.

(37) "Solid fuel-fired <u>Solid-fuel-fired</u> water-heating appliance" means atmospherically vented equipment used to heat water by burning solid fuels, for the purpose of providing space or process heat.

SECTION 23. SPS 341.04 (38) is created to read:

SPS 341.04 (38) "Uniform dwelling code" or "UDC" means chs. SPS 320 to 325.

SECTION 24. SPS 341.04 (40) is renumbered SPS 341.04 (39).

SECTION 25. SPS 341.05 and Note and 341.06 are amended to read:

SPS 341.05 Petition for variance. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. SPS 303. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction, and from any first class city having jurisdiction to enforce this chapter.

Note: Chapter SPS 303 requires the submittal of a petition for variance form (SBD-9890<u>X</u>) and a fee, and that an equivalency is established in the petition for variance that which meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

341.06 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.02 (12) and (13) (a), Stats.

SECTION 26. SPS 341.07 (1) and (2) are renumbered SPS 341.07 (2) and (3), and SPS 341.07 (2), as renumbered, is amended to read:

SPS 341.07 (2) APPEAL OF LOCAL ORDER. Any Pursuant to s. 101.02 (7) (b), Stats., any person affected by a local order which may be that is in conflict with a rule an order of the department may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the rule of the department.

SECTION 27. SPS 341.07 (1) is created to read:

SPS 341.07 (1) APPEAL OF DEPARTMENT ORDER. Pursuant to s. 101.02 (6) (e), Stats., any person who owns or occupies a property that is affected by an order of the department may petition the department for a hearing on the reasonableness of the order.

SECTION 28. SPS 341.08 (1) is renumbered SPS 341.08 and amended to read:

SPS 341.08 Fees. Fees for the inspection, certificate of operation <u>inspections</u> and other services performed by the department pertaining to boilers and pressure vessels shall be submitted to the department as specified in ch. SPS 302. The owner shall be responsible for the payment of fees.

SECTION 29. SPS 341.08 (2) is repealed

SECTION 30. SPS 341.08 Note is created to read:

SPS 341.08 <u>Note:</u> A first class city may charge the same or other fees for their services. Service contractors who are authorized agents of the Department charge fees that are established in a contract with the Department.

SECTION 31. SPS 341.09 is created to read:

SPS 341.09 Enforcement. (1) This chapter shall be enforced by the department and its authorized agents, except as provided in s. SPS 341.16 (1) (b) 2. and (3) (b) for one- and 2-family dwellings.

(2) Where a first class city administers and enforces this chapter, a regulated item or activity shall be directed to or addressed by the city before requesting input from the department.

Note: Under section SPS 341.03 (4), the Department reserves the right to interpret the requirements in this chapter and in all codes and standards adopted herein.

SECTION 32. SPS 341.10 is repealed and recreated to read:

SPS 341.10 Adoption of standards by reference. The following standards, as produced by each listed organization, are hereby incorporated by reference into this chapter, subject to the modifications specified in this chapter:

(1) American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005, telephone 202/682-8000, www.api.org. Pressure Vessel Inspection Code, API 510, 9th edition, June 2006.

(2) American Society of Mechanical Engineers (ASME), Order Department, P.O. Box 2900, Fairfield, NJ 07007-2900, telephone 800/843-2763, www.asme.org, which produces each of the following:

(a) ASME *Boiler and Pressure Vessel Code*, 2010 edition,: Section I – Rules for Construction of Power Boilers, Section II – Materials, Section IV – Rules for Construction of Heating Boilers, Section V – Nondestructive Examination, Section VIII – Rules for Construction of Pressure Vessels, Section IX – Welding and Brazing Qualifications, and Section X – Fiber-Reinforced Plastic Pressure Vessels.

Note: Section VI of the ASME code, Recommended Rules for the Care and Operation of Heating Boilers and section VII of the ASME code, Recommended Guidelines for the Care of Power Boilers may be used as reference guides.

- (b) *Power Piping*, ASME B31.1–2010.
- (c) Safety Standard for Pressure Vessels for Human Occupancy, ASME PVHO-1–2007.

(d) Safety Standard for Pressure Vessels for Human Occupancy: In-Service Guidelines for PVHO Acrylic Windows, ASME PVHO-2–2003.

(e) Controls and Safety Devices for Automatically Fired Boilers, ASME CSD-1–2009.

Note: See section SPS 341.11 (2) for modifications of ASME CSD-1.

(3) National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, OH 43229-1183, telephone 614/888-8320, www.nationalboard.org. *National Board Inspection Code* (NBIC), ANSI/NB-23, 2011 edition.

Note: See section SPS 341.11 (1) for modifications of the NBIC.

(4) National Fire Protection Association[®], 1 Batterymarch Park, Quincy, MA 02169-7471, telephone 800-344-3555. *Compressed Gases and Cryogenic Fluids Code*, NFPA[®] 55, 2010 edition.

Note: Copies of the listed standards are on file in the offices of the department and the legislative reference bureau. Copies for personal use may be obtained, at a cost, from the organizations listed.

SECTION 33. SPS 341.11 is created in subchapter I to read:

SPS 341.11 Application of standards. (1) NBIC OMISSIONS. The requirements in the following portions of the NBIC are not included as part of this chapter:

(a) In part 1 – sections 1, 2.4.1, 2.5.4, 2.10.2, 2.10.6, 3.2.3, 3.4.1, 3.5.3, 3.5.4, 3.7.5.2, 3.7.7.2, 3.7.9.2, 3.8.3, 3.9.4, 3.10, and 5; Figures 3.7.5-d and 3.5.7-e; and Table 3.7.9.2.

(b) In part 2 – sections 1.1, 1.2, 1.3, 1.4, 1.4.1, 2.2.12.5, 2.2.12.6, 2.3.5.4, 2.3.6.4, 2.4, 2.5.3, 5.3 and supplement 6.

(c) In parts 1 and 2 - any reference to using an NBIC form.

(2) MODIFICATIONS OF ASME CSD-1. (a) *Sections CG-120 and CG-140*. ASME CSD-1 does not apply to boilers and burner assemblies with fuel input ratings of 400,000 Btu per hour or less.

(b) *Shutdown switch*. The requirement in ASME CSD-1 section CE-110 (a) to locate a shutdown switch or circuit breaker just outside the boiler room door is changed to include an alternative of locating the switch or breaker just inside the principal entrance into the room, where approved by the department or authorized agent.

(3) SECONDARY REFERENCES. Any codes or standards referenced in the standards adopted in s. SPS 341.10 shall apply to the prescribed extent of each such reference, except as modified by this chapter.

(4) ALTERNATE STANDARDS. Any alternate standard that is equivalent to or more stringent than a standard incorporated by reference or otherwise referenced under this chapter may be used in lieu of the incorporated or referenced standard if the alternate standard is accepted in writing by the department.

SECTION 34. SPS 341.15 (1) (intro.) and (a) are amended to read:

SPS 341.15 (1) (intro.) ALL INSPECTIONS. The certified <u>Certified</u> inspectors of the department, upon presenting appropriate credentials to the owner, operator, or agent in charge <u>user</u>, may <u>do any of the following</u>:

(a) Enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; and.

SECTION 35. SPS 341.15 (1) Note is created to read:

SPS 341.15 (1) Note: Section 101.02 (15) (g) of the Statutes authorizes the Department and its deputies to "enter any place of employment or public building, for the purpose of collecting facts and statistics, examining the provisions made for the health, safety and welfare of the employees, frequenters, the public or tenants therein and bringing to the attention of every employer or owner any law, or any order of the department, and any failure on the part of such employer or owner to comply therewith."

SECTION 36. SPS 341.15 (3) is renumbered SPS 341.15 (4) and amended to read:

SPS 341.15 (4) REPORTING CHANGES. (a) The certified inspector's employer shall report to the department not later than 30 calendar days after inspection service is started or discontinued on a boiler or pressure vessel. The reason for discontinuing the service shall be given on the report. If the boiler or pressure vessel is installed in a city of the first class city that provides boiler and pressure vessel inspections, the report shall also be provided to the city.

(b) The certified inspector's employer shall report to the department after a boiler or pressure vessel under a service contract becomes inactive or non-existent. Failure to make this report may result in assessment of a fee in accordance with s. ch. SPS $302.04 \ 302$.

SECTION 37. SPS 341.15 (3) and (5) are created to read:

SPS 341.15 (3) An insurance company may provide the inspection services specified in this chapter, in lieu of those services being provided by the department or an authorized agent, only if the company meets all of the following conditions:

(a) It is authorized by this state to provide boiler and machinery insurance.

(b) It is actively engaged in writing boiler and machinery insurance for the general public.

(c) It uses only certified inspectors to perform the inspections.

(5) COMPLIANCE RESPONSIBILITIES. (a) 1. The certified inspector shall provide any inspection report describing any noncompliance with this chapter to the owner or user within 5 business days after completing the inspection.

2. The certified inspector shall leave a copy of the inspection report on site if a life-safety violation is indicated.

(b) The owner or user shall correct any aspects that do not comply with applicable requirements of this chapter, within any time period prescribed by the certified inspector or the department.

SECTION 38. SPS 341.16 (title) is amended to read:

SPS 341.16 (title) Initial Installation inspections.

SECTION 39. SPS 341.16 (1) (a) is renumbered SPS 341.16 (1) (a) 1.

SECTION 40. SPS 341.16 (1) (a) 2. and 3. are created to read:

SPS 341.16 (1) (a) 2. Inspections under this section shall be conducted in accordance with the NBIC.

3. Inspections under this section where equipment is installed under ASME CSD-1 shall include verification of whether all of the following are available:

a. The manufacturer's instructions that are required in ASME CSD-1 sections CG-430 and 510 (c).

b. The manufacturer's and contractor's reports that are required in ASME CSD-1 sections CG-510 (a) and (b).

c. The operator's checklist that is required in ASME CSD-1 section CM-130.

SECTION 41. SPS 341.16 (1) (b) and (c) are amended to read:

SPS 341.16 (1) (b) 1. The inspections specified in par. (a) are not required for boilers and pressure vessels exempted from periodic inspections in s. Comm 41.18 (1) (a) and (c) to (n).

2. <u>Initial Installation</u> inspections for boilers and pressure vessels installed at one- and 2-family dwellings shall be performed by the municipality in accordance with local ordinances or by

the registered Uniform Dwelling Code (UDC) inspection agency administering and enforcing the UDC.

(c) Where the boilers or pressure vessels specified in par. (a) are installed in a city of the first class <u>city</u> and inspections are made by the city, the city shall keep a record of the inspections and shall submit a copy to the department.

SECTION 42. SPS 341.16 (1) (e) is renumbered SPS 341.16 (1) (e) 1. and amended to read:

SPS 341.16 (1) (e) 1. Required initial Except as provided in subd. 2., reports of required installation inspections shall be reported sent to the department on form SBD-10633 or other approved forms in accordance with the department's electronic data interchange transfer guidelines, within 5 business days after completing the inspection, unless additional time is authorized by the department.

SECTION 43. SPS 341.16 (1) (e) 1. Note and 2. are created to read:

SPS 341.16 (1) (e) 1. Note: The Department will provide assistance at no charge regarding the use of the electronic data interchange system. The guidelines are available at the Department's Web site at www.dsps.wi.gov/sb/docs/sb-BoilerEdiGuidelines.pdf.

2. a. The department's 10663-E inspection form may be used in lieu of the electronic data interchange system where approved in advance by the department.

b. No reports to the department are required for the inspections performed under par. (b) 2.

SECTION 44. SPS 341.16 (2) (a), (c), (d) and (e) are amended to read:

SPS 341.16 (2) (a) Except as provided in par. (b), all power piping systems not covered by ASME code section I and required to be constructed in accordance with <u>ANSI/ASME</u> <u>ASME</u> B31.1, shall receive an <u>initial</u> installation inspection by <u>the department or authorized agent or a</u> certified inspector.

(c) The installer shall notify the <u>department or authorized agent or a</u> certified inspector prior to the start of construction of the power piping system so that inspections may be arranged. The <u>department or authorized agent or</u> certified inspector shall be given a minimum of 5 business days notice to arrange for inspection.

(d) A power piping inspection shall be made after the piping material is delivered to the job site and prior to the start of construction of the power piping system. The installer <u>or an instate shop fabricator</u> shall complete <u>department</u> form <u>SBD 5204</u> <u>SBD 5204-E</u> and retain it at the job site prior to the power piping inspection, and the form shall be retained at the job site for reference during the inspection. The department or authorized agent or certified inspector shall indicate acceptance of the power piping system design <u>and installation</u> by signing form <u>SBD 5204</u>

<u>SBD-5204-E</u>. Power piping systems may not be insulated or placed in service without receiving an inspection that acceptance.

(e) Prefabricated piping that is part of a power piping system shall be inspected <u>at the</u> <u>fabrication shop</u> by <u>the department or authorized agent or</u> a certified inspector or an active National Board commissioned inspector for out-of-state manufacturers at the fabrication shop. The shop fabricator shall provide a copy of the certified inspector's report or a copy of the completed department form <u>SBD 5204 SBD 5204-E</u> to the installer at the job site verifying that the prefabricated piping complies with <u>ANSI/ASME</u> <u>ASME</u> B31.1. The owner or installer shall provide design calculations of for the prefabricated piping if requested by an inspector.

SECTION 45. SPS 341.16 (2) (f) and (g) and Note are repealed.

SECTION 46. SPS 341.16 (3) (title) and (a) are amended to read:

SPS 341.16 (3) (title) **INITIAL** <u>INSTALLATION</u> INSPECTION OF SOLID FUEL-FIRED <u>SOLID-FUEL-FIRED</u> WATER-HEATING APPLIANCES.

(a) Except as specified in par. (b), the installation of a solid fuel fired solid-fuel-fired water-heating appliance shall be inspected by the department for compliance with this section or authorized agent before the appliance is placed in operation.

SECTION 47. SPS 341.16 (3) Note is created to read:

SPS 341.16 (3) Note: Under section SPS 341.15, certified inspectors may conduct whatever number of inspections are needed in addition to the inspections required in this section, to verify compliance with this chapter. Also, owners or users may request additional inspections beyond the number established by the certified inspector.

SECTION 48. SPS 341.17 (1) (title) and (a) and (4) are amended to read:

SPS 341.17 (1) INSPECTION OF POWER BOILERS, <u>MINIATURE BOILERS AND</u> <u>ORGANIC- OR SYNTHETIC-FLUID HEAT-TRANSFER BOILERS</u>. (a) Except as provided in s. SPS 341.18, power boilers, <u>miniature boilers</u> and <u>organic fluid heat transfer</u> <u>organic- or</u> <u>synthetic-fluid heat-transfer</u> boilers shall be subjected to either a regular internal or external inspection at least once every 12 months by a certified inspector.

(4) INSPECTION OF SAFETY VALVES AND SAFETY RELIEF VALVES. The certified inspectors shall determine that safety valves and safety relief valves have been operated or tested at least once every 12 months or an owner or user may provide proof that testing is in compliance with the NBIC Part part 2 section 2.5.8 relating to testing of safety relief valves.

Note: See chapters SPS 381 to 387, Plumbing, for requirements relating to combination temperature and pressure relief valves.

SECTION 49. SPS 341.17 (5) is renumbered SPS 341.17 (6).

SECTION 50. SPS 341.17 (5) and (7) are created to read:

SPS 341.17 (5) INSPECTION OF RUPTURE DISKS. Except as provided in s. SPS 341.18, rupture disks shall be subjected to a visual inspection at least once every 36 months by a certified inspector.

(7) INSPECTION STANDARDS. (a) *NBIC*. Inspections under this section shall be conducted in accordance with the NBIC.

(b) *ASME CSD-1*. Inspections under this section where equipment is installed under ASME CSD-1 shall include verification of whether all of the following are available:

1. The manufacturer's instructions that are required in ASME CSD-1 sections CG-430 and 510 (c).

2. The manufacturer's and contractor's reports that are required in ASME CSD-1 sections CG-510 (a) and (b).

3. A boiler log, maintenance record, service invoice or other written record that shows the results of periodic testing, as required in ASME CSD-1 sections CM-110 and CM-130.

4. The operator's checklist that is required in ASME CSD-1 section CM-130.

SECTION 51. SPS 341.18 (1) (b) and (o) are amended to read:

SPS 341.18 (1) (b) Heating boilers located in private residences or in apartment buildings having less than 3 living units dwelling units.

(o) Installations at one- or 2-family dwelling units dwellings.

SECTION 52. SPS 341.19 (1) is amended to read:

SPS 341.19 (1) GENERAL REQUIREMENTS. The owner or user of a boiler or a pressure vessel subject to inspection shall prepare the vessel for internal inspection after due notice from the certified inspector. To prepare a vessel for an internal inspection, all manhole plates, all wash-out plugs, and a sufficient number of handhole plates to permit a satisfactory inspection shall be removed. The shell and heads shall be thoroughly cleaned and exposed when so requested. Each steam boiler shall be thoroughly drained of water and all fire side fire-side surfaces cleaned before an internal inspection is made.

SECTION 53. SPS 341.23 (1) and (2) (a) are repealed and recreated to read:

SPS 341.23 (1) REPORTING PROCESSING TIME. (a) Except as provided in par. (b) and s. SPS 341.55 (4), reports of periodic internal or external inspections of boilers and pressure vessels shall be sent to the department in accordance with the department's electronic data interchange transfer guidelines, within 5 business days after completing the inspection, unless additional time is authorized by the department.

Note: The Department will provide assistance at no charge regarding the use of the electronic data interchange system. The guidelines are available at the Department's Web site at <u>www.dsps.wi.gov/sb/docs/sb-BoilerEdiGuidelines.pdf</u>.

(b) The department's 10663-E inspection form may be used in lieu of the electronic data interchange system where approved in advance by the department.

Note: The Department forms required in this chapter are available for a nominal fee at telephone 800-DOC-SALES or Contact Through Relay, or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at www.dsps.wi.gov, through links to Safety and Buildings Division forms.

(2) (a) A verification that a periodic inspection has been performed shall be posted on or near the inspected item.

SECTION 54. SPS 341.23 (3) (a) is amended to read:

SPS 341.23 (3) (a) An internal inspection is not possible because of the construction of the vessel. In these cases the external inspection shall be reported to the department in the same manner as an internal inspection. The report shall be marked external, and the reason for making an external inspection instead of an internal shall be given; or.

SECTION 55. SPS 341.24 (1) (a) 2. and (2) are amended to read:

SPS 341.24 (1) (a) 2. An owner <u>or user</u> of a boiler or pressure vessel installed at a one- or 2-family dwelling unit is not required to apply for a permit to operate as specified in this section.

(2) ISSUANCE. After each <u>initial installation</u> or periodic inspection for boilers and pressure vessels found to be in compliance with this chapter, a permit to operate shall be issued by the department to the owner or user of the boiler or pressure vessel. The department shall issue the permit within 30 business days of determination of compliance.

SECTION 56. SPS 341.27 is amended to read:

SPS 341.27 Application. Except as specified under s. SPS 341.29 (2), the provisions of ss. SPS 341.27 to 341.39 shall apply this subchapter applies to all boilers and pressure vessels existing prior to, or installed on or after March 1, 1988 [the effective date of this rule . . . LEGISLATIVE REFERENCE BUREAU INSERTS DATE].

SECTION 57. SPS 341.28 (3) is amended to read:

SPS 341.28 (3) (a) Except as specified in par. (b), boilers and pressure vessels shall be installed in accordance with the manufacturer's installation specifications:

(b) Clearances shall be maintained around boilers, generators, heaters, tanks and related equipment and appliances to permit inspection, servicing, repair, replacement and visibility of all gauges gages. When boilers are installed or replaced, clearance shall be provided to allow access for inspection, maintenance and repair. Passageways around all sides of boilers shall have an unobstructed width of not less than 18 inches unless otherwise approved by the department or authorized agent.

SECTION 58. SPS 341.28 (3) (b) Notes are renumbered SPS 341.02 (1) (a) Notes and amended to read:

SPS 341.02 (1) (a) **Note:** The Wisconsin Commercial Building Code (WCBC), chapters SPS 61 to 66, <u>likewise applies this chapter to the installation, alteration and repair of boilers and pressure vessels in public buildings</u> and places of employment. The WCBC may have other requirements relating to the installation, alteration or repair of a boiler or pressure vessel, such as requirements relating to enclosures, location, safety controls, combustion air, and venting. The *International Mechanical Code*[®] (IMC) as adopted by reference under the WCBC contains requirements relating to hydronic piping.

Note: Wisconsin Administrative Codes <u>are available at https://docs.legis.wisconsin.gov/code/prefaces/toc.</u> <u>Official copies</u> may be obtained by contacting for a nominal fee at the State Department of Administration, Document Sales and Distribution, P.O. Box 7840, Madison, Wisconsin 53707, telephone <u>608/266-3358, or at</u> <u>https://docs.legis.wisconsin.gov/code/prefaces/toc</u> <u>800-DOC-SALES or Contact Through Relay, or at</u> <u>docsales@doa.state.wi.us</u>.

SECTION 59. SPS 341.29 (1) and (2) (a) are amended to read:

SPS 341.29 (1) GENERAL. Oil-fired, gas-fired and electrically heated electrically heated boilers shall be equipped with primary safety controls, safety limit switches, and burners or electric elements that bear the stamp, monogram or other evidence of compliance with a nationally recognized standard.

(2) (a) *Boilers installed prior to 1957.* Boilers installed prior to January 1, 1957, shall have at least one pressure control for steam boilers or organic fluid heat transfer for organic- or synthetic-fluid heat-transfer systems. Compliance with par. (b) is optional for boilers installed prior to January 1, 1957.

SECTION 60. SPS 341.29 (2) (b) 2. e. is created to read:

SPS 341.29 (2) (b) 2. e. No shut-off valve of any type may be placed in the piping between a boiler and its high-temperature-limit control device.

SECTION 61. SPS 341.30 (1) (a) and (c) and (2) are amended to read:

SPS 341.30 (1) (a) Every automatically-fired automatically fired power boiler which that does not have a full-time attendant and every automatically-fired automatically fired low-pressure steam boiler shall be equipped with an automatic low-water fuel cutoff or other device which will perform a similar function, so located as to automatically cut off the fuel supply when the surface of the water falls to the lowest safe water line.

(c) Boilers which that are manually fired and have a residual heat source shall have a fusible plug installed which will extinguish the fire in the event of low water. Fire doors shall be provided with secure latches on manually fired boilers having fusible plugs.

(2) BOWL DESIGNS. Designs embodying a float and float bowl, or probe control installed in a bowl or chamber externally external to the boiler, shall have a vertical, straightway straight-run, valved drain pipe at the lowest point in the water-equalizing water-equalizing pipe connections, by which the bowl or chamber and the equalizing pipe can be flushed and the device tested.

SECTION 62. SPS 341.31 (1) (b), (2) and (4) (intro.) to (d) are amended to read:

SPS 341.31 (1) (b) The pressure of the blowdown leaving the blowoff equipment may not exceed 5 psi psig.

(2) PIPING AND FITTINGS. The blowoff piping and fittings between the boiler and the blowoff tank shall comply with <u>ANSI/ASME</u> <u>ASME</u> B31.1 or the code in effect at the time of construction.

(4) GENERAL REQUIREMENTS. All blowoff equipment, except centrifugal blowdown separators, shall be fitted with openings to facilitate cleaning and inspection and shall have <u>all of the following</u>:

(a) A pressure gage graduated from 0-50 psi;.

(b) A thermometer well located near the water outlet connection and in contact with the retained water in the $tank_{\frac{1}{2}}$

(c) A gauge gage glass at least $\frac{1}{2}$ inch $\frac{1}{2}$ inch in diameter with the lower connection to the glass at a point about 6 inches below the water line and the upper connection at a point about 6 inches above the water line;

(d) A drain connection of at least 2-inch standard pipe size; and.

SECTION 63. SPS 341.32 (2) is amended to read:

SPS 341.32 (2) GAGE DIAL. The dial of the pressure gage shall be graduated to approximately double the pressure at which the safety valve is set, but may not be less than one and one-half $\frac{11}{2}$ times that pressure.

SECTION 64. SPS 341.33 (intro.) to (3) are renumbered SPS 341.33 (1), (2) (a) to (c), (3) and (4), and SPS 341.33 (1), (2) (title) and (b) and (4), as renumbered, are amended to read:

SPS 341.33 (1) The following requirements in this section shall be used for determining the sizes of safety valves on pressure vessels such as, but not limited to pressure cookers, indirect hot water heaters and equipment in heating systems, which that are supplied through pressure-reducing pressure-reducing stations from boilers carrying a higher steam pressure. Where a pressure reducing pressure-reducing station is supplied from a boiler, the capacity of the safety valves on the low-pressure low-pressure side of the system need not exceed the capacity of the boiler.

(2) (title) REDUCING-STATION REDUCING-STATION CAPACITY.

(b) The critical flow capacity data supplied by the reducing valve manufacturer may be used in place of the above formula to select the required safety valve capacity. The capacity calculations calculated shall be the largest obtainable by internal trim change of the reducing valve.

(3) BYPASS CAPACITY. The following formula shall be used to determine the steam flow rate through the bypass when pressure reducing pressure-reducing stations are arranged with a valved bypass which that also acts as a potential steam source hazard in case the bypass is left open.

(4) SELECTING SAFETY VALVE. The larger of the steam flow rates calculated by the formulas in subs. (1) (2) and (2) (3) shall be used for selecting the safety valve on the low pressure low-pressure side of the system.

SECTION 65. SPS 341.33 (1) (title) is created to read:

SPS 341.33 (1) (title) SIZING SAFETY VALVES.

SECTION 66. SPS 341.36 (2) (title) is repealed.

SECTION 67. SPS 341.36 (2) is renumbered SPS 341.36 and amended to read:

SPS 341.36 Identification of boilers and pressure vessels. Boilers and pressure vessels subject to periodic inspections shall be identified by a registration number supplied by the

department. The registration number shall be affixed to the vessel by a certified inspector at a location which that can be easily viewed.

SECTION 68. SPS 341.37 (3) Note is amended to read:

SPS 341.37 (3) Note: See <u>s. section</u> SPS 341.38 for department reporting requirements for <u>relating to fuel</u> <u>conversions and to</u> modifications to fuel conversions or increase in <u>for increasing</u> heat input.

SECTION 69. SPS 341.38 (1) is repealed and recreated to read:

SPS 341.38 (1) ACCIDENTS. (a) If a component of a boiler or pressure vessel or power piping fails and causes an injury that needs more than first aid treatment, the owner or user shall report the facts involved to the department on form SBD-10787-E within 24 hours after the accident.

(b) After a failure under par. (a), the owner or user may not remove or disturb the boiler or pressure vessel or power piping or any of the components nor permit any such removal or disturbance prior to receiving authorization from the department or first class city, except for the purpose of saving human life or preventing further property damage.

(c) Any accidents under par. (a) that occur during the department's non-business hours shall also be reported to the state division of emergency management.

Note: The address for reporting accidents to the Department is the Safety and Buildings Division, Inspection Support Unit, P.O. Box 7302, Madison, WI 53707-7302; and the fax number is 608-283-7499.

Note: The department can be contacted at 262/548-8617 during normal business hours. The state division of emergency management can be contacted at (800) 943-0003 during non-business hours.

SECTION 70. SPS 341.40 is amended to read:

SPS 341.40 Application. The provisions of ss. SPS 341.40 to 341.48 shall apply This subchapter applies to all boilers and pressure vessels, or components thereof, that are installed on or after the effective date of this section [the effective date of this rule . . . LEGISLATIVE REFERENCE BUREAU INSERTS DATE].

SECTION 71. SPS 341.41 (1) (a) and (b) (intro.) and 1. and (2) (a) are amended to read:

SPS 341.41 (1) (a) Except as provided in par. (b), the installation of any boiler or pressure vessel shall be registered with the department by the installer before the operation of the boiler or pressure vessel. Registration shall be in writing on form SBD-6314 SBD-6314-E.

(b) Registration with the department is not required for <u>any of the following</u>:

1. Boilers and pressure vessels exempted from periodic inspections in s. SPS 341.18; and.

(2) (a) Except as provided in par. (b), the installation of any power piping system shall be registered with the department by the installer before the operation of the piping system. Registration shall be in writing on form SB-5204 SBD-5204-E.

SECTION 72. SPS 341.41 (2) (c) is renumbered SPS 341.41 (2) (b) 5. Note and amended to read:

SPS 341.41 (2) (b) 5. Note: The Section SPS 341.16(2)(c) requires the piping installer shall to notify the department or authorized agent or a certified inspector at least 5 business days prior to the start of construction of the power piping system installation to schedule an inspection. The certified inspector shall be given a minimum of 5 business days notice to arrange for an inspection.

SECTION 73. SPS 341.41 (4) (b) is amended to read:

SPS 341.41 (4) (b) Registration of a solid fuel-fired solid-fuel-fired water-heating appliance installed at a one- and or 2-family dwelling is not required.

SECTION 74. SPS 341.42 (1) is amended to read:

SPS 341.42 (1) ASME Code Compliance. Except as provided in ss. SPS 341.43, 341.44 and to 341.45 and 341.53 (2), boilers and pressure vessels shall be constructed, and installed, operated and maintained in accordance with the ASME code, ASME CSD-1 and the NBIC. Boilers and pressure vessels designed to other national or international standards may be approved if the design has been accepted by a nationally recognized independent third party and the department, or if the standard has been accepted by the department.

SECTION 75. SPS 341.42 (1) Notes [1] and [4] are created to read:

SPS 341.42 (1) Note [1]: Section SPS 341.43 also allows construction of boilers and pressure vessels that do not comply with the ASME code, if they comply with criteria in a variance issued by the Department. As referenced in section SPS 341.05, any such variance must comply with chapter SPS 303, which requires establishing an equivalency that meets the intent of the rule.

Note [4]: Design and construction complying with Canadian standard CSA B51 is accepted by the Department under this section.

SECTION 76. SPS 341.42(2)(a) is amended to read:

SPS 341.42 (2) (a) Except as provided in par. (b), all boilers and pressure vessels, shall be including any that are constructed and installed in accordance with the ASME code or the Canadian standard, CSA B51, and shall have the manufacturer's data report registered with the

National Board and shall bear a National Board number. Copies of the registration shall be provided to the department when requested.

SECTION 77. SPS 341.42 (3) is renumbered SPS 341.42 (3) (a) and amended to read:

SPS 341.42 (3) (a) Pressure vessels for human occupancy shall be constructed and installed in accordance with <u>ANSI/ASME</u> <u>ASME</u> PVHO-1.

SECTION 78. SPS 341.42 (3) (b) and (4) are created to read:

SPS 341.42 (3) (b) Inspection, care, repair, replacement, testing and recertification of PVHO acrylic windows in pressure vessels for human occupancy shall comply with ASME PVHO-2.

(4) COMPRESSED GASES AND CRYOGENIC FLUID VESSESLS. In addition to complying with subs. (1) and (2), vessels and piping and other components for compressed gases and cryogenic fluids, including for gaseous hydrogen and liquefied hydrogen, shall also comply with NFPA 55, except as provided in s. SPS 341.44.

Note: Under section SPS 341.02(1) (b) 3., pressure vessels and piping for gases that are used for fueling purposes, such as for heating appliances or engines, must comply with chapter SPS 340 instead of this chapter.

SECTION 79. SPS 341.44 is amended to read:

SPS 341.44 U.S. department of transportation vessels. Pressure vessels bearing the stamping of the United States department of transportation are not permitted as permanent storage containers, but except they may be used as replaceable service cylinders and as cylinders for storage of compressed natural gas.

SECTION 80. SPS 341.44 Note is repealed.

SECTION 81. SPS 341.45 (1) (a) to (d) and (3) (b) are amended to read:

SPS 341.45 (1) (a) Water heaters and hot water hot-water storage tanks, provided water temperatures do not exceed $210^{\circ}F_{\frac{1}{2}}$.

Note: See ch. SPS 384 for requirements relating to water heaters and hot water hot-water storage tanks.

(b) Vessels for containing water under pressure for domestic supply, including those having an air space for expansion;.

(c) Pressure vessels used for the processing or storage of water at water temperatures not exceeding 210°F. These vessels may contain a steam or hot water coil or heat exchanger, provided

the steam is at or below a pressure of 15 psig and the hot water is at or below a pressure of 160 psig and a temperature of $250^{\circ}F_{\frac{1}{2}}$

(d) Pressure vessels used for water conditioning and filtration; and.

(3) (b) Water heaters and hot water <u>hot-water</u> storage tanks shall be equipped with <u>pressure-combination</u> temperature <u>and pressure</u> relief <u>devices valves</u> in accordance with <u>eh. chs.</u> SPS <u>384</u> <u>381 to 387</u>.

SECTION 82. SPS 341.46 (1) and (2) are amended to read:

SPS 341.46 (1) GENERAL. Power piping shall be installed in accordance with ANSI/ASME ASME B31.1. The use of slip-on flanges shall be limited in applications to no higher than Class 300 primary pressure service rating. Slip-on flanges shall be installed with double fillet welds in accordance with ANSI/ASME ASME B31.1.

(2) BOILER EXTERNAL PIPING. Boiler external piping within the scope of section I of the ASME code shall be installed in accordance with <u>ANSI/ASME</u> <u>ASME</u> B31.1.

SECTION 83. SPS 341.47 (intro.) and (1) to (3) are amended to read:

SPS 341.47 Multi-boiler installations. When hot water hot-water heating boilers are installed in multiples with a common header and a common return, isolation valves may be eliminated between units and the units may be considered as one boiler provided <u>all of the following conditions are met</u>:

(1) OUTPUT LIMIT. No single unit exceeds 500,000 Btu per hour output;

(2) PRESSURE RELIEF. Each unit has a pressure relief device as required by the ASME code, or the common header has a pressure relief device with sufficient relieving capacity for all units in the installation; $\underline{}$

(3) CONTROLS. Each unit has operating controls and safety controls acceptable to the department; and.

SECTION 84. SPS 341.48 and Note are amended to read:

SPS 341.48 Organic Organic- or synthetic fluid heat transfer synthetic-fluid heattransfer systems. Boilers and coil type coil-type heaters which that utilize organic or synthetic thermal fluids as a heat transfer heat-transfer media shall be designed, constructed and installed in accordance with the ASME code. Piping for organic or synthetic thermal fluids used as a heat transfer heat-transfer media and subject to temperatures in excess of 250°F shall be installed in accordance with ANSI/ASME ASME B31.1. **Note:** The Department forms required in this chapter are available for a nominal fee at telephone 800 DOC-SALES or Contact Through Relay, or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at www.dsps.wi.gov, through links to Safety and Buildings Division forms. See sections SPS 341.41 (1) and (2) for requirements relating to registering these installations with the Department.

SECTION 85. SPS 341.49 (3) (a) and (c) are amended to read:

SPS 341.49 (3) (a) A solid fuel-fired <u>solid-fuel-fired</u> water-heating appliance shall be located away from other normally occupied <u>occupiable</u> structures in accordance with the manufacturer's recommendation. If provided, a canopy shall be open on all sides, <u>and</u> constructed of substantially nonflammable materials, and <u>shall may</u> not fully cover the unit.

(c) Automatically fuel-fired <u>Any automatic fuel-feeding system for a solid-fuel-fired</u> water-heating appliance shall use a fuel feed system <u>be</u> designed or approved by the unit manufacturer <u>of the appliance</u>.

SECTION 86. SPS 341.53 is renumbered SPS 341.53 (1) and amended to read:

SPS 341.53 (1) <u>GENERAL</u>. The provisions of ss. SPS 341.53 to 341.57 shall apply <u>This</u> subchapter applies to all existing nuclear power plants and to all nuclear power plants constructed facilities existing on or after March 1, 1988 [the effective date of this rule . . . LEGISLATIVE REFERENCE BUREAU INSERTS DATE].

SECTION 87. SPS 341.53 (2) and Note are created to read:

SPS 341.53 (2) NRC REQUIREMENTS. Construction, installation, operation, alterations and repairs for nuclear facility components that are regulated by the NRC shall comply with all applicable NRC regulations.

Note: See 10 CFR 50.55a to 50.57 for applicable NRC regulations.

SECTION 88. SPS 341.54 (1) and Note are amended to read:

SPS 341.54 (1) OWNER REPORT OWNER-REPORT FILING BEFORE OPERATION. The owner or user of any nuclear class pressure vessel within the scope of ASME code section III applicable NRC regulations, except those vessels exempted from periodic inspections in s. SPS 341.18, shall file a copy of <u>ASME</u> form N-3, <u>ASME data report as required by the NRC</u>, with the department before operating the pressure vessel.

Note: Form N-3, <u>Owner's Data Report for Nuclear Power Plant Components</u>, is available from the American Society of Mechanical Engineers (<u>ASME</u>), at P.O. Box 2300, Fairfield, NJ 07007-2300, or telephone 800/843-2763 extension 555, or www.asme.org.

SECTION 89. SPS 341.55 (1) is renumbered SPS 341.55 (1) (a) and amended to read:

SPS 341.55 (1) (a) The owner or user shall file with the department an in-service inspection plan as required by section XI of the ASME code the NRC. The department shall be notified at least 10 business days prior to all planned shutdowns which include in-service inspections.

SECTION 90. SPS 341.55 (1) (a) (title) and (b) are created to read:

SPS 341.55 (1) (a) (title) *Inspection plan.*

(b) *Code of record*. In-service inspections shall comply with all applicable NRC regulations.

Note: Under 10 CFR 50.55a(g)(4), in-service inspections conducted during successive 120-month inspection intervals generally must comply with the requirements of Section XI of the latest edition and addenda of the ASME Code that were incorporated by reference in 10 CFR 50.55a 12 months before the start of the 120-month inspection interval.

SECTION 91. SPS 341.55 (2) is amended to read:

SPS 341.55 (2) STATEMENT OF **INSPECTION SERVICE** <u>INSPECTION-SERVICE</u> CONTRACT. The owner or user shall file a statement with the department indicating possession of an arrangement with a certified inspector to provide inspection services under section XI of the ASME code <u>applicable NRC regulations</u>. The statement shall include the name and address of the certified inspector.

SECTION 92. SPS 341.55 (3) (a) (title) and (b) are repealed.

SECTION 93. SPS 341.55 (3) (a) is renumbered SPS 341.55 (3) and amended to read:

SPS 341.55 (3) IN-SERVICE INSPECTION REPORT. Except as specified in par. (b), within <u>Within</u> 90 calendar days after each refueling outage, the owner or user shall submit to the department a copy of form NIS-1, owner's data report for the in-service inspection, describing the inspections performed under section XI of the ASME code form accepted by the NRC.

SECTION 94. SPS 341.55 (3) Note is amended to read:

SPS 341.55 (3) Note: Forms The in-service inspection forms accepted by the NRC include NIS-1, Owner's Report for Inservice Inspections; and OAR-1, Owner's Activity Report and NIS-2A. They are available at <u>http://bpvinspector.com/Section_XI/Section_XI.htm and may be available</u> from the American Society of Mechanical Engineers (ASME) at P.O. Box 2300, Fairfield, NJ 07007-2300, or telephone 800/843-2763, or www.asme.org. See s. SPS 341.10 for ASME address and contact information. SECTION 95. SPS 341.55 (4) is renumbered is SPS 341.55 (4) (a) and amended to read:

SPS 341.55 (4) FREQUENCY OF INSPECTION. (a) Pressure vessels <u>and low-pressure</u> <u>steam or hot-water heating boilers</u> located within a nuclear containment may be inspected as part of the in-service inspection. The Except as provided in s. SPS 341.18, these vessels <u>and boilers</u> shall be inspected at least once every 36 months <u>by a certified inspector</u>, and these inspections <u>shall be reported to the department on form 10663-E</u>. If operating conditions require, longer periods not to exceed 3 months between inspections may be approved by the department upon receipt of a written request for an extension.

SECTION 96. SPS 341.55 (4) (b) and Notes are created to read:

SPS 341.55 (4) (b) Power boilers located within a nuclear containment may be inspected as part of the in-service inspection. Except as provided in s. SPS 341.18, these boilers shall be inspected at least once every 12 months by a certified inspector, and these inspections shall be reported to the department on form 10663-E.

Note: Section SPS 341.17 (5) prescribes the steps for extending the period between inspections.

Note: The Department forms required in this chapter are available for a nominal fee at telephone 800-DOC-SALES or Contact Through Relay, or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at www.dsps.wi.gov, through links to Safety and Buildings Division forms.

SECTION 97. SPS 341.56 (1) (title) and (2) are repealed.

SECTION 98. SPS 341.56 (1) is renumbered SPS 341.56 and amended to read:

SPS 341.56 Welded repairs and alterations. Except as specified in sub. (2), the <u>The</u> owner or the owner's agent <u>user</u> shall furnish the department, within 90 calendar days of a refueling outage, a record of all repairs and alterations in accordance with ASME section XI, NIS-2 <u>NRC regulations</u>, or the National Board Inspection Code, with the NBIC and forms R-1, R-2, and NR-1, as applicable, when any ASME stamped component within the scope of ASME code, section XI the NRC regulations is repaired by welding. If used, the National Board <u>NBIC</u> "R" or "NR-1" forms shall be registered with the National Board in accordance with the <u>National Board</u> Inspection Code <u>NBIC</u> requirements.

SECTION 99. SPS 341.56 Note is amended to read:

SPS 341.56 Note: <u>The ASME repair forms accepted by the NRC include NIS-2, Owner's Report for</u> <u>Repair/Replacement Activity; and NIS-2A, Repair/Replacement Certification Record. They are available at</u> <u>http://bpvinspector.com/Section_XI/Section_XI.htm and may be available from the American Society of Mechanical</u> <u>Engineers (ASME) at P.O. Box 2300, Fairfield, NJ 07007-2300, or telephone 800/843-2763, or www.asme.org.</u> Copies of the National Board forms are available from the National Board, <u>at 1055 Crupper Avenue</u>, <u>Columbus</u>, <u>OH 43229-1183</u>, <u>or telephone 614/888-8320</u>, <u>or www.nationalboard.org</u>. <u>See s. SPS 341.10 for the National Board address and contact information</u>.</u>

SECTION 100. SPS 341.57 and 341.60 are amended to read:

SPS 341.57 Report of incidents. The owner or the owner's agent <u>user</u> shall report to the department any incident involving pressure-retaining components <u>that are</u> within the scope of section XI of the ASME code which requires notification the NRC regulations, if the incident must <u>be reported</u> to the <u>U.S. nuclear regulatory commission NRC</u>. The report shall be filed coincident with the report to the <u>U.S. nuclear regulatory commission NRC</u>.

SPS 341.60 General requirements. Welded repairs, repair parts or alterations to any boiler or pressure vessel or their fittings, settings or appurtenances shall comply with the requirements of ANSI/NB-23 <u>NBIC</u>.

SECTION 101. SPS 341.62 (title) is amended to read:

SPS 341.62 (title) Reports and stamping.

SECTION 102. SPS 341.62 (1) is renumbered SPS 341.62 (1) (a) and amended to read:

SPS 341.62 (1) (a) Anyone performing repairs or alterations under the National Board "R" stamp program shall register the repairs and alterations with the National Board on the appropriate <u>NBIC</u> "R" forms.

SECTION 103. SPS 341.62 (1) (b) is created to read:

SPS 341.62 (1) (b) 1. Stamping of or attaching a nameplate to a repaired or altered pressure-retaining item under NBIC part 3 section 5.7 shall be completed and then verified by a certified inspector before the NBIC "R" form is signed by the inspector.

2. Any stamping or attaching of a nameplate under this section shall be in accordance with the NBIC, except as provided in subd. 3.

3. If the stamping or attaching cannot be placed in accordance with the NBIC, the substitute placement shall be described on the appropriate NBIC "R" form, and the description shall be verified by the inspector.

SECTION 104. SPS 341.62 (1) Note and (2) (a) are renumbered SPS 341.62 (2) (b) Note and (2) (a) 1. and amended to read:

SPS 341.62 (2) (b) Note: See s. SPS 341.10 for the National Board address Copies of the National Board forms are available from the National Board, at 1055 Crupper Avenue, Columbus, OH 43229-1183, or telephone 614/888-8320, or www.nationalboard.org.

(a) 1. Anyone performing routine repairs as defined in <u>ANSI/NB-23</u> <u>the NBIC</u> shall register the repairs with the National Board on <u>NBIC</u> form R-1 and shall <u>stamp or</u> attach a nameplate to the repaired object <u>item</u>.

SECTION 105. SPS 341.62 (2) (a) 2. and 3. are created to read:

SPS 341.62 (2) (a) 2. Any stamping or attaching of a nameplate under this section shall be in accordance with the NBIC, and shall be completed and then verified by the certified inspector before the inspector signs the NBIC R-1 form, except as provided in subd. 3.

3. If the stamping or attaching cannot be placed in accordance with the NBIC, the substitute placement shall be described on the NBIC R-1 form, and the description shall be verified by the inspector.

SECTION 106. SPS 341.63 (1) Note, (2) and (3) are amended to read:

SPS 341.63 (1) Note: Information regarding the use of riveted patches is available from the department and may be found in Wisconsin Administrative Code chapters Ind 41–42, Boiler and Pressure Vessel Code, Register, May 1974, No. 221.

(2) MATERIALS FOR RIVETED PATCHES. Patch material shall meet the applicable requirements of ANSI/NB-23 the NBIC.

(3) PRESSURE TEST. The certified inspector may require a pressure test, as specified in ANSI/NB-23 the NBIC, after completion of a riveted repair.

SECTION 107. SPS 341.64 (1) (a), (3) (intro.) and (4) (a) are amended to read:

SPS 341.64 (1) (a) "Repair of a safety valve or safety relief valve" means the replacement, re-machining or cleaning of any critical part; lapping of seat and disc or any other operation which that may affect the flow passage, capacity, function or pressure retaining pressure-retaining integrity; and disassembly, re-assembly and adjustments which affect the safety valve or safety relief valve function.

(3) (intro.) AUTHORIZED REPAIRS. Repairs to <u>Repair of a</u> safety valves and <u>valve or</u> safety relief valves valve shall be performed by an organization in possession of one or more of the following:

(4) (a) When <u>repair of</u> a safety valve or safety relief valve is <u>repaired</u> <u>occurs</u>, a metal repair nameplate stamped with the information required by par. (b) shall be welded or otherwise permanently attached to the valve either above, adjacent to or below the original stamping. On small valves, a metal tag showing the repair nameplate information may be securely attached to the repaired valve.

SECTION 108. SPS 341.70 is amended to read:

SPS 341.70 Application. Sections SPS 341.70 to 341.76 apply <u>This subchapter applies</u> to secondhand boilers and secondhand pressure vessels.

SECTION 109. SPS 341.73 is amended to read:

SPS 341.73 Lap seam boilers. Secondhand boilers which have lap seam construction and which are larger than 36 inches in diameter shall be limited to a maximum allowable working pressure of not more than 15 pounds per square inch psig.

SECTION 110. SPS 341.75 (1), (2) and Note are amended to read:

SPS 341.75 (1) HYDROSTATIC PRESSURE TEST. Every second hand vessel shall be inspected and given a hydrostatic pressure test at one and one half $1\frac{1}{2}$ times the maximum allowable working pressure at its new point of installation location before it is placed in operation. The test shall be witnessed by a certified inspector.

(2) ALTERNATIVE TESTS. When the certified inspector determines that a hydrostatic test at one and one half $1\frac{1}{2}$ times the maximum allowable working pressure is not possible or desirable, the certified inspector may accept alternative means to determine if the vessel is safe for its intended use.

Note: Where water is used in a hydrostatic test, the temperature of the water should not be less than 70°F and the maximum temperature during inspection should not exceed 120°F. If a test is conducted at 1-1/2 1/2 times the maximum allowable working pressure (MAWP) and the owner specifies a temperature higher than 120°F, the pressure should be reduced to the MAWP and the temperature should be reduced to 120°F for the close examination.

SECTION 111. SPS 341.90 is amended to read:

SPS 341.90 Application. The provisions of ss. SPS 341.90 to 341.92 apply <u>This</u> subchapter applies to all historical boilers in operation for demonstration purposes at fairs, museums, steam shows, historical attractions or any other locations frequented by the public.

SECTION 112. SPS 341.91 (title) and (1) are amended to read:

SPS 341.91 (title) **Inspection** <u>General</u> requirements. (1) Historical boilers shall be inspected in accordance with the requirements of NBIC ANSI/NB-23, Part part 2 section 6-Supplement supplement 2, Historical Boilers.

SECTION 113. SPS 341.92 (title), (1) (c) Note and (2) (a) are amended to read:

SPS 341.92 (title) Testing, and maintenance and out-of-state boilers.

(1) (c) Note: The Department forms required in this chapter are owner or user may use the NBIC form C-1: Initial Boiler Certification Report. The form is available for a nominal fee at telephone 800-DOC-SALES or Contact Through Relay, or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at www.dsps.wi.gov, through links to Safety and Buildings Division forms.

(2) (a) The owner or user of an out-of-state historical boiler shall provide ultrasonic thickness test and pressure calculation pressure-calculation documentation in accordance with ANSI/NB-23, Part NBIC part 2, section 6-Supplement supplement 2, Historical Boilers.

SECTION 114. SPS 341.93 is created to read:

SPS 341.93 Interruption of inspection cycle. If an inspection cycle under NBIC part 2 section 6 S2.7.3.2 is interrupted by delaying a required inspection for more than 1 year, the subsequent inspection cycle shall restart from the beginning of the sequence in NBIC part 2 section 6 S2.7.3., which is the initial inspection under NBIC part 2 section 6 S2.7.3.1.

SECTION 115. 1. Wherever the phrase "solid fuel-fired water-heating appliance" occurs in chapter SPS 341, insert a hyphen after "solid."

2. In each of the following sections, change "which" to "that:" SPS 341.04 (8), 341.16 (2) (b) 3., 341.18 (1) (a) and (k), 341.19 (2) (a), 341.34 (2) (c), 341.35, 341.37 (2), 341.41 (2) (b) 3., 341.55 (1), and 341.74.

3. Wherever the phrase "low pressure" occurs in chapter SPS 341, insert a hyphen after "low."

4. Wherever the phrase "automatically-fired" occurs in chapter SPS 341, delete the hyphen.

5. Wherever the phrase "hot water heating boiler" occurs in chapter SPS 341, insert a hyphen after "hot."

6. Wherever the phrase "hot water supply boiler" occurs in chapter SPS 341, insert a hyphen after "hot."

7. Wherever the phrase "hot water storage tank" occurs in chapter SPS 341, insert a hyphen after "hot."

8. Wherever "SBD-6314" occurs in chapter SPS 341, add "-E" at the end.

9. Wherever "^o F" occurs in chapter SPS 341, delete the space before "F."

SECTION 116. SPS 341 Appendix is repealed and recreated to read:

[NOTE TO LEGISLATIVE REFERENCE BUREAU: The Appendix material for this section is included at the end of this document.]

SECTION 117. SPS 345.31 (2) (d) is created to read:

SPS 345.31 (2) (d) Within 5 business days of completing the installations and inspections under par. (b) or (c), a copy of the completed SBD-5204-E form shall be filed with the authorized agent or the department, unless additional time is granted by the authorized agent or the department.

Note: The address for submitting forms to the Department is the Safety and Buildings Division, Inspection Support Unit, P.O. Box 7302, Madison, WI 53707-7302; and the fax number is 608-283-7499.

SECTION 118. SPS 345 Appendix is repealed.

[NOTE TO LEGISLATIVE REFERENCE BUREAU: The material on the following pages is for the chapter SPS 341 Appendix.]

(END)

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall become effective on the first day of the month commencing after the date of publication in the Wisconsin administrative register.

File reference: Comm 41/rules LR 1ac