

South Carolina Department of Labor, Licensing and Regulation South Carolina Boiler Safety Program

110 Centerview Dr. • Columbia • SC • 29210 P.O. Box 11329 • Columbia • SC 29211-1329 Phone: 803-896-4686 • contact.clb@llr.sc.gov • Fax: 803-896-4814 llr.sc.gov/boil

A. New Boiler Installation

1. Beginning January 1, 2006, any new boiler installed and operated in this state, unless otherwise exempted as described in section E in this document, must be designed and constructed in accordance with the ASME Code or a nationally recognized code of construction (International Mechanical Code). Any new boiler installed in this state **must be marked in accordance with the code of construction and must be registered with the National Board of Boiler and Pressure Vessel Inspectors** (614-888-0750).

B. Inspections

- 1. Beginning January 1, 2006, each boiler in current use in this state that is not exempt from registration and regular inspections (see section E below) must be thoroughly inspected as to their installation and condition. Owners and operators of all boilers must have a special inspector file with the department evidence of timely inspection as provided in Title 41, Chapter 14, of the of the 1976 Code of Laws of South Carolina, as amended. The department will accept boiler inspections. Owners should contact their insurance provider or an independent special inspector to conduct the inspection. The special inspector will make all arrangements for the initial registration and inspection and for subsequent inspections. The special inspector will submit the inspection report to the department. An invoice for the boiler registration fee or subsequent inspection fee will be sent to the owner by the department.
- 2. Annually, an inspection must be conducted on **power boilers and high pressure, high temperature water boilers** and this inspection must be an internal inspection; however, if it is not possible to perform an internal inspection, the inspection must be as complete an inspection as possible. The boiler must also be externally inspected while under pressure, if possible.
- 3. **Biennially** an inspection must be conducted on **low-pressure steam or vapor heating boilers** and an internal inspection must be conducted every four years where installation permits.
- 4. **Biennially** an inspection must be conducted **on hot water heating or hot water supply boilers** and an internal inspection must be conducted at the discretion of the inspector.
- 5. Special inspectors should submit initial and subsequent inspection reports on-line using the department's boiler web site for inspections, <u>https://scboiler.llronline.com</u> or by electronic interface (done by insurance companies or PRAESES data base). The boiler owner must have a special inspector submit an initial registration/inspection report to the Boiler Safety Program by May 31, 2007. Boiler inspection reports performed by special inspectors on or after April 2, 2006, may be submitted to the department on line beginning June 1, 2006, provided the inspector has attached a department boiler registration tag number to the boiler. All initial boiler registration/ inspection reports must be submitted to the department within 90 days of the inspection. A grace period of two months beyond the last annual or biennial inspection may lapse between certificate inspections.

C. Special Inspectors and Inspection Costs:

- Applicants for credentials as South Carolina special inspectors to perform boiler inspections must complete department Document 205, Boiler Inspector Certification Application. The document is on the department's web site under the Boiler Safety Program. Each special inspector must be currently commissioned with National Board of Boiler and Pressure Vessel Inspectors or have been tested from another state for boiler inspections with a current commission from that state. Upon submission of a valid application, the department will issue a certification as a special inspector to inspect regulated boilers within the State of South Carolina. Upon receipt of the state boiler inspector certificate, the special inspector will be given a user ID and a password to register boilers on line utilizing the department's web site.
- 2. The initial registration and subsequent inspection fees are \$25.00 for each regulated boiler. Checks or money orders shall be made payable to the Boiler Safety Program.

D. Enforcement

- 1. Any person or entity that fails to comply with the provisions of Chapter 14 or the regulations promulgated pursuant to this chapter may be assessed a civil penalty of not more than five thousand dollars for each violation.
- 2. Any person or entity that fails to timely comply after written notice by the department of a violation is subject to a penalty of up to one hundred dollars per day for such noncompliance.

E. Boilers Exempt From Registration and Inspection

- 1. Boilers that are located on farms and used solely for agricultural or horticultural purposes.
- 2. Heating boilers that are located in private residences or in apartment houses of less than six family units.
- 3. All pressure vessels are exempt from regulation under this chapter.
- 4. Boilers under federal control or under regulations of Title 49 of the Code of Federal Regulations, Parts 192 and 193.
- 5. Hot water supply boilers equipped with ASME-National Board approved safety relief valves which are directly fired with oil, gas, or electricity when none of the following limitations are exceeded: heat input of 200,000 BTU per hour; water temperature of 210 degrees Fahrenheit; nominal water-containing capacity of 120 gallons.

F. Boiler Owners That Must File for Initial Boiler Registration and Must Provide Routine Inspection Reports to the Department.

- 1. Boilers in the care, custody, and control of research facilities and used solely for research purposes which require one or more details of non code construction or which involve destruction or reduced life expectancy of those vessels.
- 2. Boilers operated and maintained for the production and generation of electricity.
- 3. Boilers operated and maintained as part of a manufacturing process.
- 4. Boilers that are subject to OSHA standards of compliance.
- 5. Boilers operated and maintained by a public utility or the Public Service Authority including, but not limited to, boilers operated and maintained for the production of electricity.
- 6. Boilers located in structures in which the public has access.
- 7. Apartment houses with six or more units.

G. THE FOLLOWING TYPES OF BOILERS REQUIRE REGISTRATION AND INSPECTION:

1. Type of Boiler: requires annual inspection Power Boiler (P) (over 15 psig)

High Pressure, High Temperature Water Boiler (HP/HT) Perform inspection when over 160 psig or if temperature exceeds 250 degrees F.

External inspection performed. External inspection should be conducted under pressure, (IF POSSIBLE).

Internal inspection performed (INSPECTION MUST BE AS COMPLETE AS POSSIBLE). Inspector should submit either an internal or external inspection per year, **not both** within a 12-month period.

(Some boilers may qualify for an alternative THREE YEAR INSPECTION cycle, see Regulation 71-9102(B)(1).

2. Type of Boiler: requires biennial inspection

Low Pressure Steam Boiler or Vapor Heating Boiler (LPS) (VP) (over 15 psig)

External inspection performed.

Internal inspection performed every four years (WHERE INSTALLATION PERMITS). Submit one type of inspection per year, not both inspections within a 12-month period.

3. Type of Boiler: requires biennial inspection

Hot Water (or other heated medium) Heating Boiler (HWH) when exceeding 200,000 BTU per hour, or when exceeding a water temperature of 210 F, or nominal water-containing capacity EXCEEDING 120 Gallons.

Hot Water (or other heated medium) Supply Boiler (HWS) when exceeding 200,000 BTU per hour, or when exceeding a water temperature of 210 F, or nominal water-containing capacity EXCEEDING 120 Gallons.

External inspection performed.

INTERNAL INSPECTION MAY BE PERFORMED AT THE DISCRECTION OF THE INSPECTOR. Submit one type of inspection per year, not both inspections within a 12-month period.

H. INFORMATION REQUIRED FOR EACH BOILER INSPECTION:

- 1. Age of boiler
- 2. Boiler dimensions (cast iron boiler)
- 3. Capacity of boiler
- 4. Date of last boiler inspection
- 5. Maximum pressure of boiler
- 6. Location of boiler
- 7. Type of boiler
- 8. Use of Boiler
- 9. Location of boiler in the building

IF A PROPERTY OWNER IS INSTALLING A NEW BOILER AND THE TOTAL COST OF THE INSTALLATION EXCEEDS \$5,000, THE OWNER MUST HIRE A PROPERLY LICENSED GENERAL OR MECHANICAL CONTRACTOR HOLDING A BOILER OR HEATING CLASSIFICATION. ANY REPAIR WORK EXCEEDING \$5,000 REQUIRES HIRING A PROPERLY LICENSED GENERAL OR MECHANICAL CONTRACTOR.