WAC 296-104-302 Installation—What control and limit devices are required on automatically fired hot water heating, hot water supply boilers, coil type hot water heating boilers, low pressure steam boilers, and HLW potable water heaters after June 1989? In addition to those requirements listed in WAC 296-104-300, the following are also required:

(1) All automatically fired hot water heating, hot water supply boilers shall be equipped with:

(a) Two high temperature limit controls, the highest of which shall be provided with a manual reset when heat input is greater than 400,000 Btu/hr (117 kW).

(b) One low-water fuel cutoff with a manual reset device and independent of the feed water controller.

(c) For installations after December 2004, a means shall be provided for testing the operation of hot water heating boiler low-water fuel cutoff(s) without resorting to draining the entire system. Such means shall not render the device(s) inoperable. If the means temporarily isolates the device from the boiler during testing, it shall automatically return to its normal position.

(2) For coil type hot water boilers with heat input greater than 400,000 Btu/hr (117 kW) a low-water flow limit control installed in the circulating water line may be used instead of a low-water fuel cutoff when forced circulation is required to prevent overheating of the tubes.

(3) Automatically fired low pressure steam boilers shall be equipped with:

(a) Two high steam pressure limit controls, the highest of which shall be provided with a manual reset.

(b) Two low-water fuel cutoffs, one of which shall be provided with a manual reset device and independent of the feed water controller.

(4) HLW potable water heaters:

(a) Two temperature limit controls, one being a high-limit temperature control that will automatically cut off the fuel supply.

(b) Heaters with input greater than 400,000 Btu/hr (117 kW) installed after January 1, 2018, shall comply with all items in subsection (6) of this section.

(5) All controls and limit devices shall be tested or verified by means acceptable by the jurisdiction.

(6) For installations after December 2004, all automatically fired boilers with input greater than 400,000 Btu/hr, including electric boilers with input greater than 117 kW, shall have a manually operated remote shutdown switch or circuit breaker. When an existing remote shutdown switch exists, all boilers may be connected to the existing switch to allow for the remote shutdown of all boilers in the room. When an additional boiler is added to the room where an existing remote shutdown switch does not exist, all boilers meeting the input requirements should be added to the new remote shutdown switch. Activation of the emergency shutdown switch or circuit breaker shall immediately shut off the fuel or energy supply and initiate the boiler shutdown sequence in accordance with manufacturer's recommendations where applicable. The shutdown switch should be located just outside the boiler room door and marked for easy identification. Consideration should be given to the type and location of the switch to safeguard against tampering. If the boiler room door is on the building exterior, the switch should be located just inside the door. If there is

more than one door to the boiler room, there should be a switch located at each door.

[Statutory Authority: Chapter 70.79 RCW. WSR 20-06-058, § 296-104-302, filed 3/3/20, effective 4/3/20. Statutory Authority: RCW 70.79.030, 70.79.040, 70.79.150, 70.79.290, 70.79.330, and 70.79.350. WSR 08-24-072, § 296-104-302, filed 12/1/08, effective 1/1/09; WSR 05-22-092, § 296-104-302, filed 11/1/05, effective 1/1/06. Statutory Authority: Chapter 70.79 RCW. WSR 04-21-069, § 296-104-302, filed 10/19/04, effective 1/1/05.]