



Department of Veterans Affairs – Office of Construction & Facilities Management

## **CONSULTING SUPPORT SERVICE (003C5)**

### **Technical Topics**

#### **Checklist for Testing Boiler/Burner Safety Devices**

April 5, 2013

1. A VHA Directive 2008-062 requires that boiler/burner safety devices and burner control interlocks be periodically inspected. This inspection is very important because it verifies that the critical safety devices are properly operational.
2. The VA Office of Construction & Facilities Management has a checklist for boiler/burner safety and interlock devices, which has been used on new boiler plant projects. This checklist could be useful for the periodic checking of those devices on existing boilers.
3. The checklist is available for download in Microsoft Word format. It should be noted that not all of the safety devices are present on all boilers/ burners. For instance, fuel oil temperature interlocks are not present on burners that operate on unheated oil.
4. For more information, contact the Consulting Support Service (003C5), Doug Ryan at (202) 632-5519.

**DEPARTMENT OF VETERANS AFFAIRS  
BOILER SAFETY DEVICES - OPERATION CHECK LIST**

HOSPITAL \_\_\_\_\_ PROJECT NO. \_\_\_\_\_ DATE \_\_\_\_\_ BOILER NO. \_\_\_\_\_  
 BOILER MAKE AND MODEL \_\_\_\_\_  
 BURNER MAKE AND MODEL \_\_\_\_\_  
 TECHNICIAN AND COMPANY \_\_\_\_\_  
 VA REPRESENTATIVE \_\_\_\_\_

<u>Item</u>	<u>OK</u>	<u>Not OK</u>	<u>Set Point - Remarks</u>
Low Water Cutoff	[ ]	[ ]	_____
Aux. Low Water Cutoff	[ ]	[ ]	_____
High Water Alarm	[ ]	[ ]	_____
Low Water Alarm	[ ]	[ ]	_____
Low Water Cutoff Shunt Switch	[ ]	[ ]	_____
Aux. Low Water Cutoff Shunt Switch	[ ]	[ ]	_____
High Steam Press. Cutout - Recycle	[ ]	[ ]	_____
High Steam Press. Cutout - Non-Recycle	[ ]	[ ]	_____
Steam Safety Valve No. 1 - Pop	[ ]	[ ]	_____
Blowdown	[ ]	[ ]	_____
Steam Safety Valve No. 2 - Pop	[ ]	[ ]	_____
Blowdown	[ ]	[ ]	_____
Steam Safety Valve No. 3 - Pop	[ ]	[ ]	_____
Blowdown	[ ]	[ ]	_____
Steam Safety Valve No. 4 - Pop	[ ]	[ ]	_____
Blowdown	[ ]	[ ]	_____
<u>Main Gas</u>			
High Pressure Cutoff	[ ]	[ ]	_____
Low Pressure Cutoff	[ ]	[ ]	_____
Safety Shut-Off Valves Proof of Closure	[ ]	[ ]	_____
Leak Test Safety Shut-Off Valves	[ ]	[ ]	_____
<u>Oil</u>			
High Pressure Cutoff	[ ]	[ ]	_____
Low Pressure Cutoff	[ ]	[ ]	_____
High Temperature Cutoff (Heated Oil)	[ ]	[ ]	_____
Low Temperature Cutoff (Heated Oil)	[ ]	[ ]	_____
Low Atomizing Pressure	[ ]	[ ]	_____
Low Atomizing/Oil Differential Pressure	[ ]	[ ]	_____
Oil Burner Position Switch	[ ]	[ ]	_____
Safety Shut-Off Valves Proof of Closure	[ ]	[ ]	_____
Leak Test Safety Shut-Off Valves	[ ]	[ ]	_____
Cold Start/Steam Atomizing Burners	[ ]	[ ]	_____
LP Gas Ignitor Operation	[ ]	[ ]	_____
<u>Ignitor (Pilot)</u>			
High Gas Pressure	[ ]	[ ]	_____
Leak Test Safety Shut-Off Valves	[ ]	[ ]	_____
Forced Draft Motor Interlock	[ ]	[ ]	_____
F. D. Damper Open Wide for Purge	[ ]	[ ]	_____
Outlet Damper Open Wide for Purge	[ ]	[ ]	_____
Purge Air Flow Interlock	[ ]	[ ]	_____
Purge Timing	[ ]	[ ]	_____
Ignition Timing	[ ]	[ ]	_____
Low Fire Position Interlock	[ ]	[ ]	_____
Combustion Air Flow Interlock	[ ]	[ ]	_____
Main Flame Out - Time to Close Valves	[ ]	[ ]	_____
Ignition Flame Out - Time to Close Valves	[ ]	[ ]	_____
Minimum Ignitor Flame Test	[ ]	[ ]	_____
Scanner Not Sensing Ignition Spark	[ ]	[ ]	_____
Control Air Pressure Interlock	[ ]	[ ]	_____
Sound Level - High Fire	[ ]	[ ]	_____
Fan Motor Amps	[ ]	[ ]	_____
Low Oxygen Alarm	[ ]	[ ]	_____
Boiler Soot Blower Operation and Alignment	[ ]	[ ]	_____
Economizer Soot Blower Operation	[ ]	[ ]	_____
_____	[ ]	[ ]	_____
_____	[ ]	[ ]	_____