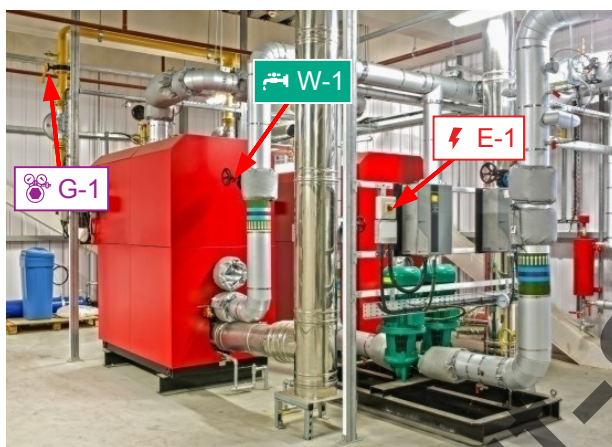


ID#: 1234	Facility: Good Hope - Boiler Room	Location: Boiler Mechanical Room 234
Created: 9/23/2016	Description: Hot Water Boiler #2	
Revised: 9/23/2016		

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Lockout Points

Note: Thermal energy and burn hazard. Ensure heat has dissipated before proceeding. Piping systems can store energy hydraulically. Ensure pressures are isolated and/or have been relieved before proceeding.



Lockout Steps

Step #	Action	Info	Verification
1 Electrical E-1 480V	The E-1 Disconnect is located on the North side of the machine. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt restart at all control panels.
2 Water W-1 Heating Water Return	The W-1 Gate Valve is located on the North side of the machine. Turn Gate Valve to the off position and lock out. Use a Gate valve lockout device.		Verify pressure has bled off.
3 Gas G-1 Natural Gas	The G-1 Butterfly Valve is located on the East side of the machine. Turn Valve to the off position and lock out. Use a Butterfly Valve Lockout		Verify pressure has bled off.

Lockout Tagout Procedure

Purpose: To protect authorized employees against unexpected or unplanned activation of equipment or energy while servicing equipment.

Scope: Utilize this procedure for all scheduled PM shutdowns, any maintenance task that requires you to place your body in harms way of the equipment, or if you have to leave the area while the equipment is in service.

Enforcement: **Failure to properly follow lockout-tagout procedure may result in corrective action.**

SHUTDOWN, LOCK, TAG & TEST SEQUENCE

#	STEP	DESCRIPTION
1	<i>Notify Employees</i>	Notify all affected employees that servicing or maintenance is required on a machine or equipment, and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
2	<i>Review Lockout Procedure</i>	The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
3	<i>Perform Machine Stop</i>	If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.). Reference machine operating procedure for normal shutdown.
4	<i>Isolate Energy</i>	Follow graphical lockout-tagout procedure from top to bottom to de-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s). NOTE: It may be necessary to dissipate the non-lockable energy sources before isolating the lockable energy sources. (i.e. lower the machine to lowest position before locking out.)
5	<i>Lockout Energy</i>	Lock out & tagout as required the energy isolating device(s) with assigned individual lock(s) and tag(s).
6	<i>Dissipate Energy</i>	Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, as well as air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
7	<i>Attempt Restart</i>	Ensure that the equipment is disconnected from the energy sources by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating controls or by testing to make certain the equipment will not operate. Caution: Return operating controls to neutral or "off" position after verifying the isolation of the equipment.

RESTORE TO SERVICE SEQUENCE

#	STEP	DESCRIPTION
1	<i>Check Machine</i>	Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
2	<i>Check Area</i>	Check the work area to ensure that all employees have been safely positioned or removed from the area.
3	<i>Verify Machine</i>	Verify that the controls are in neutral.
4	<i>Remove Lockout</i>	Remove the locks, tags and lockout devices and re-energize the machine or equipment. In reverse order, follow all of the steps from the visual lockout-tagout procedure found on the previous page. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.
5	<i>Notify Employees</i>	Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.