

AO Smith Water Heater #1 Shut Down Process Energy Source(s) Electric – Gas

Energy Control Procedure

St Cloud Public Schools - Clearview School - Boiler room

Equipment: water heater #1 **Manufacturer**: AO SMITH

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Step 1

Notify affected employees of shut down (operators, area personnel)



Step 2

Turn off machine using accepted procedure (operator)

Step 3

Electrical panel E6 in Receiving Area

• Turn off Breaker # 17

Step 4

Ball Valve (Gas)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 5

Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

Restoring the water heater #1

- 1. Make sure work area is clear of equipment and personnel and ready for restarting of the equipment.
- 2. Verify controls are in the off or neutral position.
- 3. Remove locks, tags and lockout devices and return control device to the "on" position.
- 4. Notify affected employees that equipment will be restarted.
- 5. Restart equipment using regular operating procedures.



AO Smith Water Heater#2 Shut Down Process Energy Source(s) Electric – Gas

Energy Control Procedure

St Cloud Public Schools - Clearview School - Boiler room

Equipment: water heater#2 **Manufacturer**: AO SMITH

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Step 1

Notify affected employees of shut down (operators, area personnel)



Step 2

Turn off machine using accepted procedure (operator)

Step 3

Electrical panel E6 in Receiving Area

• Turn off Breaker # 17

Step 4

Ball Valve (Gas)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 5

Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

Restoring the water heater #2

- 1. Make sure work area is clear of equipment and personnel and ready for restarting of the equipment.
- 2. Verify controls are in the off or neutral position.
- 3. Remove locks, tags and lockout devices and return control device to the "on" position.
- 4. Notify affected employees that equipment will be restarted.
- 5. Restart equipment using regular operating procedures.



Fulton **Boiler #1 Shut Down Process Energy Source(s)** Electric – Gas

Energy Control Procedure

St Cloud Public Schools - Clearview School - Boiler room

Equipment: Boiler #1 Manufacturer: Fulton

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the

maintenance leader.

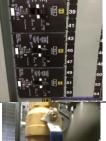
Step 1

Notify affected employees of shut down (operators, area personnel)



Step 2

Turn off machine using accepted procedure (operator)



Step 3

Electrical panel HP-O-1 in Receiving Area

Turn off Breaker # 43,45,47

Step 4

Ball Valve (Gas)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 5

Ball Valve (hot water)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 6

Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

Restoring the Boiler #1

- 1. Make sure work area is clear of equipment and personnel and ready for restarting of the equipment.
- Verify controls are in the off or neutral position. 2.
- Remove locks, tags and lockout devices and return control device to the "on" position.
- Notify affected employees that equipment will be restarted. 4.
- Restart equipment using regular operating procedures.



Fulton
Boiler #2 Shut Down Process
Energy Source(s) Electric – Gas

Energy Control Procedure

St Cloud Public Schools - Clearview School - Boiler room

Equipment: Boiler #2 **Manufacturer**: Fulton

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to

hazard

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tags out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Step 1

Notify affected employees of shut down (operators, area personnel)



Step 2

Turn off machine using accepted procedure (operator)



Step 3

Electrical panel HP-O-1 in Receiving Area

• Turn off Breaker # 49,51,53



Step 4

Ball Valve (Gas)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 5

Ball Valve (hot water)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 6

Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

Restoring the Boiler #2

- 1. Make sure work area is clear of equipment and personnel and ready for restarting of the equipment.
- 2. Verify controls are in the off or neutral position.
- 3. Remove locks, tags and lockout devices and return control device to the "on" position.
- 4. Notify affected employees that equipment will be restarted.
- 5. Restart equipment using regular operating procedures.



Hatco Booster Heater Shut Down Process Energy Source(s) Electric – Gas

Energy Control Procedure

St Cloud Public Schools - Clearview School - Kitchen

Equipment: booster heater **Manufacturer**: Hatco

Scope: This scope covers any servicing or maintenance of the equipment that may expose the maintenance person(s) to

hazard.

Purpose: To provide specific guidance to authorized personnel on how to de-energize the equipment, to prevent the unexpected start-up or release of energy that could result in injury or death to employee or authorized others.

Authorization: Authorized employees trained in lockout & tag out procedures are to install lockout & tag out devices in accordance with company procedure. Lockout and tag out devices will only be removed by the installer or the maintenance leader.

Compliance: Failure to comply with established procedure will result in disciplinary action or termination.

Step 1

Notify affected employees of shut down (operators, area personnel)

Step 2

Turn off machine using accepted procedure (operator)

Step 3

Electrical panel E5RT in Receiving Area

• Turn off Breaker # 14

Step 4

Ball Valve (Gas)

- Turn off valve
- Attach ball valve lock out device then tag and lock

Step 5

Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

Restoring the booster heater

- 1. Make sure work area is clear of equipment and personnel and ready for restarting of the equipment.
- 2. Verify controls are in the off or neutral position.
- 3. Remove locks, tags and lockout devices and return control device to the "on" position.
- 4. Notify affected employees that equipment will be restarted.
- 5. Restart equipment using regular operating procedures.

Building: Clearview Elementary Boiler Room

Machine: Air Compressor - Quincy

- Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
- If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Air pressure regulator on unit

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Air pressure regulator on unit



Isolating Device Location 1

Panel E6-Right, breaker #11



Isolating Device Location 2

Pressure release valve on unit

- 4. Lockout the energy isolating device(s) with assigned individual locks.
- 5. Dissipate residual energy: Apply lockout device to source of electricity, bleed air from tank and lines
- 6. Verify that equipment is disconnected from the energy source (s) Attempt to start, check pressure gauge Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Air Compressor to Service

- 1. Notify affected employees that maintenance has finished and lock and tags will be removed.
- 2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
- 3. Verify that the controls are in neutral or off.
- 4. Remove the lockout devices and re-energize the Electric/pneumatic
- 5. Restart the equipment.



Building: Clearview Elementary Boiler Room

Machine: Cooler Compressor

- Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
- If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat on unit

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat on unit



Isolating Device Location 1

Knife switch next to unit



No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit (internal)

- 4. Lockout the energy isolating device(s) with assigned individual locks.
- 5. Dissipate residual energy: **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**
- 6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Cooler Compressor to Service

- 1. Notify affected employees that maintenance has finished and lock and tags will be removed.
- Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
- 3. Verify that the controls are in neutral or off.
- 4. Remove the lockout devices and re-energize the **Electric/pneumatic**
- 5. Restart the equipment.



Building: Clearview Elementary Boiler Room

Machine: Freezer Compressor

- Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
- If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat on unit

3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat on unit



Isolating Device Location 1

Knife switch next to unit



No Picture Available

Isolating Device Location 2

Refrigerant capture port on unit
(internal)

- 4. Lockout the energy isolating device(s) with assigned individual locks.
- 5. Dissipate residual energy: SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST
- 6. Verify that equipment is disconnected from the energy source (s) **SERVICED ONLY BY CERTIFIED REFRIGERATION SPECIALIST**

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Freezer Compressor to Service

- 1. Notify affected employees that maintenance has finished and lock and tags will be removed.
- Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
- 3. Verify that the controls are in neutral or off.
- 4. Remove the lockout devices and re-energize the Electric/pneumatic
- 5. Restart the equipment.



Building: Clearview Elementary Maintenance Garage

Machine: Unit Heater

- Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
- If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat next to unit

Turn off the (Electric/natural gas) energy sources by placing energy isolating devices in the off position.



Operating Control Location

Thermostat next to unit



Isolating Device Location 1

Toggle switch next to unit



Isolating Device Location 2

Ball valve on natural gas pipeline supplying unit

- 4. Lockout the energy isolating device(s) with assigned individual locks.
- 5. Dissipate residual energy: Apply lockout device to source of electricity and natural gas, allow unit to cool
- 6. Verify that equipment is disconnected from the energy source (s) <u>Attempt to start</u>.
 Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Restoring Unit Heater to Service

- 1. Notify affected employees that maintenance has finished and lock and tags will be removed.
- 2. Check the machine/equipment and the immediate area around the machine/equipment to ensure that nonessential items have been removed and that employees have been notified of the startup.
- 3. Verify that the controls are in neutral or off.
- 4. Remove the lockout devices and re-energize the Electric/natural gas
- 5. Restart the equipment.

