# HTP
## Hot Water Heater Shut Down Process

**Energy Source(s)** Electric – Gas

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Notify affected employees of shut down (operators, area personnel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Turn off machine using accepted procedure (operator)</td>
</tr>
<tr>
<td>Step 3</td>
<td>Electrical panel next to unit</td>
</tr>
<tr>
<td></td>
<td>• Turn off Breaker #4</td>
</tr>
<tr>
<td>Step 4</td>
<td>Ball Valve (Gas)</td>
</tr>
<tr>
<td></td>
<td>• Turn off valve</td>
</tr>
<tr>
<td></td>
<td>• Attach ball valve lock out device then tag and lock</td>
</tr>
<tr>
<td>Step 5</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Restoring the Hot water 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.

---

**Energy Control Procedure**

St Cloud Public Schools – Lincoln School – Old boiler Room

**Equipment:** Hot water heater

**Manufacturer:** HTP

**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.
Lockout Tagout Specific Procedure

Building: Lincoln Elementary Exterior Building Portable
Machine: HVAC Unit - Bard South

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.
   Operating Control Location: Thermostat in band room
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.
   Operating Control Location
   Thermostat in band room
   Isolating Device Location 1
   Panel in band room, breaker #2, 4
   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 HVAC Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:
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.
Lockout Tagout Specific Procedure

Building: Lincoln Elementary Exterior Building Portable
Machine: HVAC Unit - Bard North

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.
   Operating Control Location: Thermostat in music room
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.
   Isolating Device Location 1: Panel in hand room, breaker #2, 4
   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 HVAC Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:
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.
Lockout Tagout Specific Procedure

Building: Lincoln Elementary Receiving Room
Machine: Freezer Compressor

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.
   Operating Control Location: Thermostat on freezer
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.

Operating Control Location  | Isolating Device Location 1 | Isolating Device Location 2
Thermostat on freezer        | Knife switch next to unit   | 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

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:
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.
**Lockout Tagout Specific Procedure**

**Building:** Lincoln Elementary Receiving Room  
**Machine:** Cooler Compressor

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.  
   **Operating Control Location:** Thermostat in cooler  
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.

   ![Operating Control Location](image1.png)  
   ![Isolating Device Location 1](image2.png)  
   ![Isolating Device Location 2](image3.png)

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**

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:

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.**

© IEA 2007
Lockout Tagout Specific Procedure

Building: Lincoln Elementary Roof
Machine: Air Conditioning Unit

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.
   Operating Control Location: Thermostat in principal’s office
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.
   Operating Control Location: Thermostat in principal’s office
   Isolating Device Location 1: Pull out breaker next to unit
   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 Air Conditioning Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:
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.
Lockout Tagout Specific Procedure

Building: Lincoln Elementary Roof
Machine: Air Conditioning Unit

1. Notify affected employees that the machine/equipment will be shut down and locked/tagged out.
2. If the machine/equipment is operating, shut it down by the normal stopping procedure.
   **Operating Control Location:** Thermostat in server room
3. Turn off the (Electric/pneumatic) energy sources by placing energy isolating devices in the off position.

   ![Operating Control Location](image)
   ![Isolating Device Location 1](image)
   ![Isolating Device Location 2](image)

   - Thermostat in server room
   - Toggle switch on unit
   - 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 Air Conditioning Unit to Service

When the servicing or maintenance is completed, and the machine/equipment is ready to be returned to normal operating condition, the following steps shall be taken:
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.**

© IEA 2007