

# HTP Hot Water Heater Shut Down Process Energy Source(s) Electric – Gas

#### **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.

#### Step 1

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



Turn off machine using accepted procedure (operator)

#### Step 3

Electrical panel next to unit

• Turn off Breaker #4

#### Step 4

Ball Valve (Gas)

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

#### Step 5

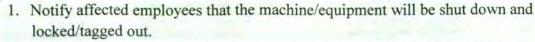
Attempt to start machine; make sure that it CANNOT be started. Verify no energy is present in panel at line side of disconnect switch by testing with multi meter or voltage detector.

#### **Restoring the 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.

Building: Lincoln Elementary Exterior Building Portable

Machine: HVAC Unit - Bard South



2. If the machine/equipment is operating, shut it down by the normal stopping procedure.

Operating Control Location: Thermostat in band room

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



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
- Verify that equipment is disconnected from the energy source (s) <u>SERVICED ONLY BY CERTIFIED</u> <u>REFRIGERATION SPECIALIST</u>

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

### **Restoring HVAC Unit 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: Lincoln Elementary Exterior Building Portable

Machine: HVAC Unit - Bard North

- 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 in music room

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



Operating Control Location

Thermostat in music room



Isolating Device Location 1

Panel in band room, breaker #2, 4



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 HVAC Unit 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: Lincoln Elementary Receiving 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 freezer

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



Operating Control Location

Thermostat on freezer



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: Lincoln Elementary Receiving 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 in cooler

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



Operating Control Location

Thermostat in cooler



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: Lincoln Elementary Roof
Machine: Air Conditioning Unit

- 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 in principal's office

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



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
- Verify that equipment is disconnected from the energy source (s) <u>SERVICED ONLY BY CERTIFIED</u> <u>REFRIGERATION SPECIALIST</u>

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

### **Restoring Air Conditioning Unit 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: Lincoln Elementary Roof
Machine: Air Conditioning Unit

- 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 in server room

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



Operating Control Location

Thermostat in server room



Isolating Device Location 1

Toggle switch on 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**
- Verify that equipment is disconnected from the energy source (s) <u>SERVICED ONLY BY CERTIFIED</u> <u>REFRIGERATION SPECIALIST</u>

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

### **Restoring Air Conditioning Unit to Service**

- 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.

