

**CERTIFICATION OF WORK  
PREVENTIVE MAINTENANCE**

(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID/Building: PA171 Date of Visit: 7/16/19

Contractor Personnel on Site:

- |                     |          |
|---------------------|----------|
| 1. <u>SCOTT K</u>   | 3. _____ |
| 2. <u>DOMINIC S</u> | 4. _____ |

**Work Performed:**

**Preventive Maintenance** - Services Completed (Annual, Quarterly, Monthly, equipment identification, etc.)

- |                    |                                    |
|--------------------|------------------------------------|
| 1. <u>WO# 9185</u> | <u>(EXHAUST FANS)</u>              |
| 2. <u>WO# 9267</u> | <u>(PUMPS)</u>                     |
| 3. <u>WO# 9343</u> | <u>(OVERHEAD VEHICLE EXHAUSTS)</u> |
| 4. <u>WO# 9388</u> | <u>(UNIT HEATERS)</u>              |
| 5. _____           | _____                              |

**CERTIFICATION OF WORK**

To be signed by the Contractor:

Print Name: SCOTT KENDERS Date: 7/16/19

Signed: Scott Kenders

To be signed by Facility Manager:

By signing the Certification of Work, the said government representative signature does not constitute acceptance of any work performed by the contractor, it only acknowledges that the contractor was on-site during the identified timeline:

Print Name/Rank: Karin Hoover WCO9 Date: 20190716

Signed: [Signature]

E-Mail: \_\_\_\_\_

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** UNIT HEATER, ELECTRIC

SITE AND BLDG #: Pa 171

MECHANIC SIGNATURE: 

DATE: 7-16-19

LOCATION/RM #: 1D WO# 9388 ASSET # 4189

START TIME: 9:10

FINISH TIME: 9:20

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS  (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
		SPECIAL INSTRUCTIONS		
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	✓		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check heater coils and associated piping for leaks or corrosion.	✓		
2	Clean heating coil. Brush vacuum where accessible.	✓		
3	Inspect wiring and electrical controls for loose connections, charred, frayed or broken insulation, evidence of short circuiting, wrong size fuses, circuit breakers, or switches, and other electrical deficiencies. Tighten any loose connections.	✓		
4	Inspect fan for bent blades, unbalance, excessive noise and vibration.	✓		
5	Check motor and fan shaft bearings for noise, vibration, overheating; lubricate bearings.	✓		
6	Verify proper control by modulating the thermostat through complete cycle.	✓		
7	Inspect unit for proper operation.	✓		
8	Inspect unit for overall condition and recommend for replacement or other needed repairs.	✓		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** UNIT HEATER, ELECTRIC

SITE AND BLDG #: Pal71MECHANIC SIGNATURE: DATE: 7-16-19LOCATION/RM #: 114 WO# G388 ASSET # 4493START TIME: 9:10FINISH TIME: 9:20

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	Check heater coils and associated piping for leaks or corrosion.	<input checked="" type="checkbox"/>		
2	Clean heating coil. Brush vacuum where accessible.	<input checked="" type="checkbox"/>		
3	Inspect wiring and electrical controls for loose connections, charred, frayed or broken insulation, evidence of short circuiting, wrong size fuses, circuit breakers, or switches, and other electrical deficiencies. Tighten any loose connections.	<input checked="" type="checkbox"/>		
4	Inspect fan for bent blades, unbalance, excessive noise and vibration.	<input checked="" type="checkbox"/>		
5	Check motor and fan shaft bearings for noise, vibration, overheating; lubricate bearings.	<input checked="" type="checkbox"/>		
6	Verify proper control by modulating the thermostat through complete cycle.	<input checked="" type="checkbox"/>		
7	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
8	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** UNIT HEATER, ELECTRIC

SITE AND BLDG #: Pa171

MECHANIC SIGNATURE: 

DATE: 7-6-19

LOCATION/RM #: 112 WO# 9388 ASSET # 4493

START TIME: 9:15

FINISH TIME: 9:10

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ACTIONS (IF TASK COMPLETE IS CHECKED NO. PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	Check heater coils and associated piping for leaks or corrosion.	<input checked="" type="checkbox"/>		
2	Clean heating coil. Brush vacuum where accessible.	<input checked="" type="checkbox"/>		Heating Needs replaced
3	Inspect wiring and electrical controls for loose connections, charred, frayed or broken insulation, evidence of short circuiting, wrong size fuses, circuit breakers, or switches, and other electrical deficiencies. Tighten any loose connections.	<input checked="" type="checkbox"/>		
4	Inspect fan for bent blades, unbalance, excessive noise and vibration.	<input checked="" type="checkbox"/>		
5	Check motor and fan shaft bearings for noise, vibration, overheating; lubricate bearings.	<input checked="" type="checkbox"/>		
6	Verify proper control by modulating the thermostat through complete cycle.	<input checked="" type="checkbox"/>		
7	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
8	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician  
Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **UNIT HEATER, INFRARED, RADIANT, GAS**

SITE AND BLDG #: Pa 171

MECHANIC  
SIGNATURE: 

DATE: 7-16-19

LOCATION/RM #: 116 WO# 9358 ASSET # 4184

START TIME: 9

FINISH TIME: 9:10

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	For gas/oil heaters: 1. Remove access panels if applicable. 2. Check the fire box liner or refractory for cracks and leaks. 3. Check all gas lines for leaks. Repair as needed.	<input checked="" type="checkbox"/>		
2	Clean dirt from heater, vacuuming is preferred.	<input checked="" type="checkbox"/>		
3	Check operation of gas valve.	<input checked="" type="checkbox"/>		
4	Check for gas leaks.	<input checked="" type="checkbox"/>		
5	Check operation of thermostat.	<input checked="" type="checkbox"/>		
6	If applicable, replace primary air intake filter.	<input checked="" type="checkbox"/>		
7	As needed, clean spark electrode and reset gap, replace if necessary.	<input checked="" type="checkbox"/>		
8	Inspect flue pipe and connections.	<input checked="" type="checkbox"/>		
9	If applicable, inspect and clean outside air blower and blower intake.	<input checked="" type="checkbox"/>		
10	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
11	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.  
 To be performed by: HVAC Technician  
 Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **UNIT HEATER, INFRARED, RADIANT, GAS**

SITE AND BLDG #:

~~105A~~ Pa171MECHANIC  
SIGNATURE:

DATE: 7-16-19

LOCATION/RM #: 118

WO# 9388

ASSET # 47247

START TIME: 8:45

FINISH TIME: 9

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	For gas/oil heaters: 1. Remove access panels if applicable. 2. Check the fire box liner or refractory for cracks and leaks. 3. Check all gas lines for leaks. Repair as needed.	<input checked="" type="checkbox"/>		
2	Clean dirt from heater, vacuuming is preferred.	<input checked="" type="checkbox"/>		
3	Check operation of gas valve.	<input checked="" type="checkbox"/>		
4	Check for gas leaks.	<input checked="" type="checkbox"/>		
5	Check operation of thermostat.	<input checked="" type="checkbox"/>		
6	If applicable, replace primary air intake filter.	<input checked="" type="checkbox"/>		
7	As needed, clean spark electrode and reset gap, replace if necessary.	<input checked="" type="checkbox"/>		
8	Inspect flue pipe and connections.	<input checked="" type="checkbox"/>		
9	If applicable, inspect and clean outside air blower and blower intake.	<input checked="" type="checkbox"/>		
10	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
11	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.  
 To be performed by: HVAC Technician  
 Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **UNIT HEATER, INFRARED, RADIANT, GAS**

SITE AND BLDG #: Pg 171MECHANIC SIGNATURE: DATE: 7-16-19LOCATION/RM #: 114 WO# 9388 ASSET # 4296START TIME: 8:30FINISH TIME: 8:45

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	For gas/oil heaters: 1. Remove access panels if applicable. 2. Check the fire box liner or refractory for cracks and leaks. 3. Check all gas lines for leaks. Repair as needed.	<input checked="" type="checkbox"/>		
2	Clean dirt from heater, vacuuming is preferred.	<input checked="" type="checkbox"/>		
3	Check operation of gas valve.	<input checked="" type="checkbox"/>		
4	Check for gas leaks.	<input checked="" type="checkbox"/>		
5	Check operation of thermostat.	<input checked="" type="checkbox"/>		
6	If applicable, replace primary air intake filter.	<input checked="" type="checkbox"/>		
7	As needed, clean spark electrode and reset gap, replace if necessary.	<input checked="" type="checkbox"/>		
8	Inspect flue pipe and connections.	<input checked="" type="checkbox"/>		
9	If applicable, inspect and clean outside air blower and blower intake.	<input checked="" type="checkbox"/>		
10	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
11	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.  
 To be performed by: HVAC Technician  
 Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **UNIT HEATER, INFRA-RED, RADIANT, GAS**

SITE AND BLDG #: B-171MECHANIC  
SIGNATURE: DATE: 7-16-19LOCATION/RM #: 118 WO# 9388 ASSET # 4231START TIME: 8FINISH TIME: 8:15

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		SPECIAL INSTRUCTIONS	NOTES/ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO		
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>			
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>			
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>					
1	For gas/oil heaters: 1. Remove access panels if applicable. 2. Check the fire box liner or refractory for cracks and leaks. 3. Check all gas lines for leaks. Repair as needed.	<input checked="" type="checkbox"/>			
2	Clean dirt from heater, vacuuming is preferred.	<input checked="" type="checkbox"/>			
3	Check operation of gas valve.	<input checked="" type="checkbox"/>			
4	Check for gas leaks.	<input checked="" type="checkbox"/>			
5	Check operation of thermostat.	<input checked="" type="checkbox"/>			
6	If applicable, replace primary air intake filter.	<input checked="" type="checkbox"/>			
7	As needed, clean spark electrode and reset gap, replace if necessary.	<input checked="" type="checkbox"/>			
8	Inspect flue pipe and connections.	<input checked="" type="checkbox"/>			
9	If applicable, inspect and clean outside air blower and blower intake.	<input checked="" type="checkbox"/>			
10	Inspect unit for proper operation.	<input checked="" type="checkbox"/>			
11	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>			

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

Additional Notes:



# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **UNIT HEATER, INFRARED, RADIANT, GAS**

SITE AND BLDG #: Pal71MECHANIC SIGNATURE: DATE: 7-16-19LOCATION/RM #: W8 WO# 9388 ASSET # 4232START TIME: 8:15FINISH TIME: 8:30

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)
		YES	NO	
1	In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.	<input checked="" type="checkbox"/>		
2	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>		
<b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b>				
1	For gas/oil heaters: 1. Remove access panels if applicable. 2. Check the fire box liner or refractory for cracks and leaks. 3. Check all gas lines for leaks. Repair as needed.	<input checked="" type="checkbox"/>		
2	Clean dirt from heater. Vacuuming is preferred.	<input checked="" type="checkbox"/>		
3	Check operation of gas valve.	<input checked="" type="checkbox"/>		
4	Check for gas leaks.	<input checked="" type="checkbox"/>		
5	Check operation of thermostat.	<input checked="" type="checkbox"/>		
6	If applicable, replace primary air intake filter.	<input checked="" type="checkbox"/>		NK
7	As needed, clean spark electrode and reset gap, replace if necessary.	<input checked="" type="checkbox"/>		
8	Inspect flue pipe and connections.	<input checked="" type="checkbox"/>		
9	If applicable, inspect and clean outside air blower and blower intake.	<input checked="" type="checkbox"/>		NA
10	Inspect unit for proper operation.	<input checked="" type="checkbox"/>		
11	Inspect unit for overall condition and recommend for replacement or other needed repairs.	<input checked="" type="checkbox"/>		

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.  
 To be performed by: HVAC Technician  
 Additional Notes: