

**CERTIFICATION OF WORK
PREVENTIVE MAINTENANCE**

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

FACID/Building: PA071 Date of Visit: 5/22/19

Contractor Personnel on Site:

1. Scott K 3. _____
2. _____ 4. _____

Work Performed:

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

1. WO # 8502 FILTERS
2. WO # 8767 INSPECTIONS
3. _____
4. _____
5. _____

CERTIFICATION OF WORK

To be signed by the Contractor:

Print Name: Scott Kenders Date: 5/22/19

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: Al Maysni Date: 5/22/19

Signed: Al Maysni

E-Mail: _____

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

AIR HANDLER

SITE AND BLDG #: *PA171*

MECHANIC SIGNATURE: *SK*

DATE: *5/27/19*

LOCATION/RM#: *MECH* **WO#** *8767* **ASSET #** *3075*

START TIME: *11* **FINISH TIME:** *11:30*

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS
		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.	✓		
2	Remove power at Drive or at Breaker Panel. Verify with tester or meter that power has been removed. Install lock out tag out if servicing alone or in confined space for safety precautions.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Check fan blades and moving parts for cracks and excessive wear.	✓		
2	Check running motor temperatures on all three phases (record in note column) no more than 1.1, 1.2, and 1.3 amp draws.	✓		1.1 <u>6.1</u> 1.2 <u>6.4</u> 1.3 <u>6.2</u>
3	Tighten all electrical connectors/lugs to proper torque.	✓		
4	If unit is a multi-zone air handler, then check each individual zone damper and associated controls.	✓		
5	Check bearing collar set screws on fan shaft to make sure they are tight.	✓		
6	Check filters for dirt accumulations, replace as necessary. Check belt, repair or replace as necessary.	✓		
7	Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.	✓		
8	Lubricate mechanical bearings and connections sparingly.	✓		
9	Clean coils by brushing, blowing, vacuuming, or pressure washing.	✓		
10	Check coils for leaking, tightness of fittings.	✓		
11	Use fin comb to straighten coil fins.	✓		
12	If applicable, clean strainer (annually).	N/A		
13	Flush and clean condensate pans and drains, remove all rust, prepare metal and paint. Hose down coils and drain pans and wash with an appropriate EPA approved solution, approved solution. Treat condensate pans with an EPA approved biocide.	✓		

CHECK POINT	CHECKPOINT DESCRIPTION	TASK COMPLETE		NOTES/ ACTIONS (Tasks complete in this table are administrative)
		YES	NO	
14	Check belts for wear and cracks, adjust tension or alignment. Replace belts when necessary. Multi-belt drives shall only be replaced with matched sets.	✓		
15	Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.	✓		
16	Check and test freezestat for proper operation	✓		
17	Vacuum interior of unit.	✓		
18	Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.	✓		
19	Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant.	✓		
20	Clean up work area	✓		
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
MAKE UP AIR UNIT - HEATING/COOLING

SITE AND BLDG #: 7A171

MECHANIC
SIGNATURE: SK

DATE: 5/22/19

LOCATION/RM #: GARAGE WO# 8767 ASSET # 3434

START TIME: 945

FINISH TIME: 1020

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.	✓		
2	Schedule shutdown with operating personnel.	✓		
3	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 thermostat settings to ensure the cooling and heating system is operating correctly.	✓		
2	Tighten all electrical connections and measure voltage and current on motors.	✓		
3	Check filters and clean or replace as necessary.	✓		
4	Lubricate all moving parts.	✓		
5	Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode).	✓		
6	Check controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to assure the system starts, operates, and shuts off properly.	✓		
7	Clean evaporator and condenser coil conditioning coils.	✓		
8	Clean and adjust blower components to provide proper system airflow.	✓		
9	Check all gas (or oil) connections, gas pressure, burner combustion and heat exchanger.	✓		

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:

DISCONNECT LEFT OFF TO UNIT. FOREMAN ~~OR~~ ONSITE DOES NOT WANT THIS UNIT TO RUN. UNIT IS NOT INTERLOCKED ~~OR~~ WITH VEHICLE EXHAUST

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

MAKE UP AIR UNIT - HEATING/COOLING

HVAC

SITE AND BLDG #: OUTSIDE **WO#:** 8767 **ASSET #:** 33463

MECHANIC SIGNATURE: SK **DATE:** 5/22/19

LOCATION/RM #: OUTSIDE **WO#:** 8767 **ASSET #:** 33463 **START TIME:** 6:30 **FINISH TIME:** 9:45

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.	✓		
2	Schedule shutdown with operating personnel.	✓		
3	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 thermostat settings to ensure the cooling and heating systems are operating correctly.	✓		
2	Tighten all electrical connections and measure voltage and current on motors.	✓		
3	Check filters and clean or replace as necessary.	✓		
4	Lubricate all moving parts.	✓		
5	Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode).	✓		
6	Check controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to assure the system starts, operates, and shuts off properly.	✓		
7	Clean evaporator and condenser air conditioning coils.	✓		
8	Clean and adjust blower components to provide proper system airflow.	✓		
9	Check all gas (or oil) connections, gas pressure, burner combustion and heat exchanger.	✓		

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
MAKE UP AIR UNIT - HEATING/COOLING

SITE AND BLDG #: Q4171

**MECHANIC
SIGNATURE:** SK

DATE: 5/22/19

LOCATION/RM #: BACK AREA **WO#** 8767 **ASSET #** 3430

START TIME: 16 20 **FINISH TIME:** 11

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.	✓		
2	Schedule shutdown with operating personnel.	✓		
3	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 thermostat settings to ensure the cooling and heating systems operating correctly.	✓		
2	Tighten all electrical connections and measure voltage and current on motors.	✓		
3	Check filters and clean or replace as necessary.	✓		
4	Lubricate all moving parts.	✓		
5	Check and inspect the condensate drain in your central air conditioner, furnace and/or heat pump (when in cooling mode).	✓		
6	Check controls of the system to ensure proper and safe operation. Check the starting cycle of the equipment to assure the system starts, operates, and shuts off properly.	✓		
7	Clean evaporator and condenser air conditioning coils.	✓		
8	Clean and adjust blower components to provide proper system airflow.	✓		
9	Check all gas (or oil) connections, gas pressure, burner combustion and heat exchanger.	✓		

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

DEHUMIDIFIER

SITE AND BLDG #: Reactor 171 **MECHANIC SIGNATURE:** SK **DATE:** 5/22/19

LOCATION/RM #: Reactor 171 **ASSET #** 5055 **START TIME:** 8 15 **FINISH TIME:** 8 25

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.	✓		
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 water inlet and outlet for any leaks, repair as needed.	✓		
2	Clean and/or replace filter as needed.	✓		
3	If applicable, check hours per usage, replace tanks's as needed.	✓		

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: General Maintenance Worker

Additional Notes:

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST
OUTDOOR CONDENSING UNIT

SITE AND BLDG #: OUTSIDE **WO#:** 8167

MECHANIC SIGNATURE: SK

DATE: 5/22/19

LOCATION/RM #: OUTSIDE **WO#:** 8167 **ASSET #:** 3330

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.	✓		
2	Schedule outage of unit with personnel in area the unit serves.	✓		
3	Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	✓		
4	If disposal of the equipment is required, follow regulations concerning removal of refrigerants and disposal of the unit.	✓		
TO BE PERFORMED AT EACH INSPECTION SERVICE				
1	Remove debris from air screen and clean underneath unit.	✓		
2	Wash coil with coil cleaning solution - Rinse Thoroughly	✓		
3	Straighten fin tubes with fin comb, as needed.	✓		
4	Check electrical connections for tightness.	✓		
5	Check mounting base for tightness.	✓		
6	Inspect fans for bent blades, unbalance, excessive noise and vibrations.	✓		
7	Inspect all piping for leaks and tighten loose connections.	✓		
8	Check wires at condenser electrical fused safety switches for tightness and burned insulation. Repair as necessary.	✓		
9	Check supply air temperature to ensure unit is operating properly. If possible record room temperature.	✓		
10	Inspect unit for overall condition and recommend for replacement or other needed repairs.	✓		
11	Clean up work area.	✓		

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.

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST

HUMIDIFIER

SITE AND BLDG #: PA171

MECHANIC SIGNATURE: SK **DATE:** 5/22/19

LOCATION/RM #: MFLCH **WO#** 8767 **ASSET #** 5059

START TIME: 8:30 **FINISH 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.	✓		
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 water inlet and outlet for any leaks, repair as needed.	✓		
2	Clean and/or replace filter as needed.		✓	
3	If applicable, check hours per usage, replace tank(s) as needed.	✓		

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: General Maintenance Worker

Additional Notes:

WATER FLOW SENSOR AND HEATER PROBES NEED TO BE REPLACED.