

**PREVENTIVE MAINTENANCE CERTIFICATION OF WORK**  
(To be completed by the Contractor and saved in the Contractor's CMMS)

FACID Building: *Gaithersburg MD 20878* Date of Visit: *12/4/18*

Contractor Personnel on Site:

1. *Patrick Donovan* 4.  
5. \_\_\_\_\_  
6. \_\_\_\_\_

**Work Performed:**

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

1. List Work *6779 + 6780*  
2. *Baseboard radiators, Grease Trap, Hot Water pumps.*  
*Vehicle Exhaust System*  
3. \_\_\_\_\_

**CERTIFICATION OF WORK**

To be signed by the Contractor:

Print Name: *Patrick Donovan* Date: *12/4/18*  
Signed: *[Signature]*

To be signed by Facility Manager or Government Official

I certify that the above named individuals representing the Contractor arrived on site and to the best of my knowledge, completed the stated work listed:

Print Name Rank: *Glen L. Umbarger Jr. GS-13* Date: *12/4/18*  
Signed: *[Signature]*  
E-Mail: *glen.umbarger@nrel.gov*

**PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST**  
**RADIANT BASEBOARDS/CONVECTORS (STEAM, HOT WATER, OR ELECTRIC)**

**SITE AND BLDG #:** 5a Threshing MDOB3      **LOCATION/RM #:** Threshing #1 **WO#** 6779      **ASSET #** See notes  
**MECHANIC SIGNATURE:** John D. D.      **DATE:** 12/4/18  
**START TIME:** 11:30      **FINISH TIME:** 3:00

<b>CHECK POINT</b>	<b>CHECKPOINT DESCRIPTION</b>	<b>TASK COMPLETE</b>		<b>NOTES/ ACTIONS (IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION)</b>
		<b>YES</b>	<b>NO</b>	
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"/>	<input type="checkbox"/>	
2	Follow lock out/tag out procedures at all times. De-energize or discharge all by hydraulic, electrical, mechanical, or thermal energy prior to beginning work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
1	Check radiator valve for free turning and seating. Check packing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Several difficult to access / all turn and seat
2	Remove covers or wall panels. Note: Extreme care must be taken when removing marble or granite wall panels. These panels are extremely heavy and very fragile.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	all good
3	Check housing, braces, supports, hangers, and hardware for signs of deterioration or damage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	good
4	Check temperature or flow controls, shutoff valves, vents and traps for proper operation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	good
5	If radiator has automatic temperature regulating valve, remove valve cover and remove dirt by vacuuming.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	good
6	For hot water radiators, check air bleed valve	<input checked="" type="checkbox"/>	<input type="checkbox"/>	done
7	Wire brush and treat with rust inhibitor all rusted areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	done
8	Check coils, piping, and fin material for damage, leaks or looseness. Straighten finned material as necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	good no leaks
9	Vacuum out finned tube area and interior housing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	done
10	Clean and replace covers or wall panels as required. Clean work area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	done all good

**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:

*Asset # 1992 #01-#02 ✓ good*  
*1993 #01-#05 ✓ good*

*1994 #01-#05 ✓ good*

**PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST**  
**CIRCULATING AND BOOSTER PUMPS**

**SITE AND BLDG #:** Gaithersburg MD 20878

**LOCATION/RM #:** Boiler Room **WO#** 6174 **ASSET #** 1642 **#01 & #02**

**MECHANIC SIGNATURE:** D. D. Brown

**DATE:** 12/1/18

**START TIME:** 9:30

**FINISH TIME:** 10:45

CHECK POINT	CHECKPOINT DESCRIPTION	MANUFACTURER		NOTES/ADDITIONS
		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"/>	<input 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"/>	<input type="checkbox"/>	
3	It is generally not a good idea to tamper with pumps using mechanical seals if they are otherwise performing properly. Since mechanical seals can cost as much as the pump, it is usually not cost effective to risk damaging the seal by performing an annual internal inspection of the pump.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Skewed &amp; dulled blade. Read tag</i>
<b>RECOMMENDED MAINTENANCE SERVICES</b>				
1	Lubricate pump and motor bearings as per manufacturer's specifications.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>Scuffed rings</i>
2	Bearings require lubrication atleast annually.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>No leaks visible</i>
3	Inspect couplings and check for any pump seal leaks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In line pumps. all seals good</i>
4	Check motor mounts and vibration pads	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>all everything tight</i>
5	Tighten all pump flanges.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>In line pumps</i>
6	Visually check pump alignment and coupling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Inspect electrical connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>All tight</i>

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To be performed by: General Maintenance Worker

**Additional Notes:**