

Title V Inspection and Maintenance (I&M) Plan

Inspection and Maintenance Plan for Title V

2020

File 8.26.9.3

Violation of I&M Plan
to do and in current year (and/or document SAP completion c
Requirement is Met
White items ongoing
For the yellow items we need to determine if a maintenance plan is needed, or if other means of tracking is appropriate.
Orange items are inspected weekly during a Operator Driven Reliability (ODR) inspection route. If any of the inspected units do not meet proper operating conditions during the weekly inspection a Work Order will be issued to correct the problem. To meet compliance with the Inspection and Maintenance Plan a minimum of one route will need to be completed annually.

Area	Air Cleaning Equipment	Required Preventative Maintenance	Functional Location PM is written to	Frequency of Work	Who Performs the Work	Maintenance Plan Numbers/Recordkeeping	COMMENTS for certification	
Woodyard	#1 Chipper Cyclone	1. Inspect equipment for wear	EM-WY1-CNVS-CHIPPR-CY1440690	Annually	Maintenance	8196		
	#2 Chipper Cyclone		EM-WY1-CNVS-CHIPPR-CY1440680			17908		
	#1 Chip Reclaim Cyclone		EM-WY1-CNVS-PURCHS-CY1444125			8197		
	#2 Chip Reclaim Cyclone		EM-WY1-CNVS-PURCHS-CY1444135			8198		
	#1A Air Density Separator Cyclone		EM-WY1-SCRN-ADSSYS-CY1444555			8201		
	#2A Air Density Separator Cyclone		EM-WY1-SCRN-ADSSYS-CY1444340			8199		
	#1B Air Density Separator Cyclone		EM-WY1-SCRN-ADSSYS-CY1444660			8202		
	#2B Air Density Separator Cyclone		EM-WY1-SCRN-ADSSYS-CY1444450			8200		
	Reclaim, Chipper, and ADS Cyclones	2. Visible emissions check		Weekly during operation	1st helper	Checklist		
RMP Mill	Chip Silo Cyclone Chip Surge Bin Cyclone	1. Inspect equipment for wear	EM-RMP-REFS-CPSILO-CY6141000	Annually	Mechanical Maintenance	18103		
			EM-RMP-REFS-CPSILO-CY6141690			18104		
		2. Visible emissions check		Weekly during operation	1st helper	Checklist		
Bleach Plant Scrubbers EM-PMK-BLH6-SCRUBR-SB2543300		1. Inspect packing for scaling and supports for failure. Inspect shower bars and nozzles. Flush out sump tanks.	EM-PMK-BLH6-SCRUBR-SB2543300	Annually	Day supervisor and crew	17909		
			EM-PMK-BLH6-SCRUBR-SB2543320			17910		
		2. Check level switch on both recycle scrubber tanks (25-LIX-0911 & 25-LX-0921). Calibrate level transmitters. Make sure differential pressure lines across packing are not plugged.	EM-PMK-BLH6-250911	Annually	E&I Maintenance	54899		
			EM-PMK-BLH6-250921			54981		
			EM-PMK-BLH6-250916			54900		
			EM-PMK-BLH6-250926			54982		
			3. PM #1 recirculation pump (checked weekly) (E-KM-SCB1-1ET-1N)	EM-PMK-BLH6-SCRUBR-PU2543310	Annually	Mechanical Maintenance		
			4. PM #2 recirculation pump (checked weekly) (E-KM-SCB1-1ET-1N)	EM-PMK-BLH6-SCRUBR-PU2543330	Annually	Mechanical Maintenance		
			5. PM #3 recirculation pump	EM-PMK-BLH6-SCRUBR-PU2543360	Once every 3 years	Mechanical Maintenance	17931	
			6. PM bleach plant roof fan (discharge of scrubber) (working on route) (E-KM-ROOFFANS-2ET-XX)	EM-PMK-BLH6-SCRUBR-FN2543165	Annually	Mechanical Maintenance		
			7. Verify #1 and #2 scrubber ORP measurement	EM-BGS-AR06-BLDG48	Quarterly	E&I Maintenance	62089	L:\Local Initiatives\Are
			8. Verify calibration of No. 2 scrubber recirc pump	EM-PMK-BLH6-250922	Annually	E&I Maintenance	63854	
			9. Verify calibration of No. 1 scrubber recirc pump	EM-PMK-BLH6-250912	Annually	E&I Maintenance	63853	
	CIO2 Tail Gas Scrubber	1. PM the vent scrubber fan (checked weekly) (E-KM-GEN-1ET-2N-ODR)	EM-PMK-CHEM-CLO2GN-FN1841220	Annually	Mechanical Maintenance			
		2. PM the vent scrubber	EM-PMK-CHEM-CLO2GN-SB1841180	Once every 5 years	Mechanical Maintenance	6986		
		1. Inspect the slaker scrubber and vent piping for build-up	EM-CRC-LKN1-SLAKER-FN2942210	As required	Lime Kiln Utility			

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Kraft Mill	Slaker Scrubber EM-CRC-LKN1-SLAKER-SB2942200	2. PM the scrubber exhaust fan (checked weekly)(E-LK-HOTO-OPR-1N)	EM-PMK-AIRP-SLSCRB-FN2942210	Annually	Mechanical Maintenance		
		3. PM Slaker Scrubber Flow Meter	EM-PMK-AIRP-290600	Annually	E&I Maintenance	57689	
	Lime Kiln and Scrubber EM-CRC-LKN1-SCRUBR-SB3340445 EM-CRC-LKN1-SCRUBR-SB3340446	1. Inspect refractory, inspect chain section, inspect burner	EM-CRC-LKN1-KILNSY-MZ2940270	Annually	Day supervisor	17936	
		2.a. Calibrate and clean scrubber flow valve.	EM-PMK-AIRP-290434	Annually	E&I Maintenance	55010	
		2.b. Calibrate scrubber throat damper.	EM-CRC-LKN1-330399			55007	
		2.c. Calibrate scrubber throat differential pressure.	EM-CRC-LKN1-330398			54850	
		2.d. Calibrate the scrubber sump level and control valve.	EM-CRC-LKN1-330396			55001	
		3. Clean recirculation lines, mist eliminator, induced draft fan blades, scrubber throat and damper. Shovel out solids that collect in bottom of sump.	EM-PMK-AIRP-LKSCRUB-SB3340445	Annually	Maintenance	17938	
		4. PM the dilution air fan to the lime kiln	EM-CRC-LKN1-FUELSY-BL2942245	Once every 2 years	Mechanical Maintenance	6174	
		5. PM the bearing cooling water pump for the lime kiln bearings	EM-CRC-LKN1-KILNSY-PU2940430	Once every 4 years	Mechanical Maintenance	6186	
		6. PM the auxiliary engine gear reducer	EM-CRC-LKN1-KILNSY-GR2940285	Once every 6 years	Mechanical Maintenance	17937	
		7. PM the NCG booster fan (checked weekly) (E-LK-HOTO-OPR-1N)	EM-CRC-LKN1-FUELSY-FN2942265	Once every 3 years	Mechanical Maintenance		
		8. PM south scrubber circulation pump (checked weekly) (E-LK-MUDB-UTL-5N)	EM-PMK-AIRP-LKSCRUB-PU3340450	Once every 3 years	Mechanical Maintenance		
	9. PM north scrubber circulation pump (checked weekly) (E-LK-MUDB-UTL-5N)	EM-PMK-AIRP-LKSCRUB-PU3340470	Once every 3 years	Maintenance			
	11. PM the Lime Kiln Scrubber Flow Meter	EM-PMK-AIRP-330434	Annually	E&I Maintenance	57691		
	Lime Unloading Silo Baghouse EM-CRC-LKN1-LIMEBN-FL2940472	1. Inspect equipment for wear	EM-CRC-LKN1-LIMEBN-FL2940472	Annually	Lime Kiln Utility	17901	
		2. Visible emissions check		Weekly during operation	Lime Kiln Utility	Checklist	
		3. PM the dP transmitter as needed. The E/I techs typically calibrate to zero & span, rod the pressure taps, & check DCS span	EM-CRC-LKN1-290117	Annually	E&I Maintenance	17131	
		1. PM the #1 blow tank vacuum breaker	EM-PMK-DIGS-220405	Annually	Mechanical Maintenance	7018	
		2. PM the #2 blow tank vacuum breaker	EM-PMK-DIGS-220455	Annually	Mechanical Maintenance	7019	
		3. PM the accumulator vacuum breaker	EM-PMK-AIRP-BLHEAT	Annually	Mechanical Maintenance	6874	
		4. PM the jet condenser pump (checked Weekly) (E-KM-BH1F-2ET-4N)	EM-PMK-AIRP-BLHEAT-PU3340612	Once every 3 years	Mechanical Maintenance		
		5. PM the "A" system condensate pump (checked weekly) (E-KM-BH1F-2ET-4N)	EM-PMK-AIRP-BLHEAT-PU3340659	Once every 5 years	Mechanical Maintenance		
		6. PM the "B" system condensate pump (checked weekly) (E-KM-BH1F-2ET-4N)	EM-PMK-AIRP-BLHEAT-PU3341405	Once every 4 years	Mechanical Maintenance		
		7. PM the "A" system water pump (checked weekly) (E-KM-BH1F-2ET-4N)	EM-PMK-AUXE-WATERS-PU3340667	Once every 5 years	Mechanical Maintenance		
		8. PM the "B" system water pump (checked weekly) (E-KM-BH1F-2ET-4N)	EM-PMK-AUXE-WATERS-PU3341415	Once every 4 years	Mechanical Maintenance		
		Calibrate stripper column level	EM-PMK-AIRP-330212	Annually	E&I Maintenance	61322	
Calibrate stripper condenser outlet temperature		EM-PMK-AIRP-330206	Annually	E&I Maintenance	55043		
Calibrate stripper steam flow		EM-PMK-AIRP-330208	Annually	E&I Maintenance	55021		
Calibrate accumulator top temperature		EM-PMK-AIRP-330713	Annually	E&I Maintenance	55018		
Calibrate accumulator middle temperature		EM-PMK-AIRP-330715	Annually	E&I Maintenance	55018		
Calibrate accumulator bottom temperature	EM-PMK-AIRP-330716	Annually	E&I Maintenance	55018			
Calibrate jet condenser temperature	EM-PMK-AIRP-330101	Annually	E&I Maintenance	55018			

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	Odor Control System, including Thermal Oxidizer and Scrubber EM-PMK-AIRP-INCINR-TO3341900, EM-PMK-AIRP-SO2SYS-SB3342200	Calibrate secondary blowheat condenser temperature	EM-PMK-AIRP-330732	Annually	E&I Maintenance	55018	
		Calibrate primary relief condenser temperature	EM-PMK-AIRP-330739	Annually	E&I Maintenance	55018	
		Calibrate vapor trap outlet temperature	EM-PMK-AIRP-330747	Annually	E&I Maintenance	55018	
		Calibrate jet condenser valves #101 and 104	EM-PMK-AIRP-330104	Annually	E&I Maintenance	55019	
		Check NCG gas valves	EM-PMK-AIRP-330355	Annually	E&I Maintenance	64041	
		PM the pump for water to primary relief condenser (checked weekly) (E-KM-BH1B-2ET-5N)	EM-PMK-AUXE-WATERS-PU3341530	Annually	Mechanical Maintenance		
		PM the water pump for stripper condenser (checked weekly) (E-KM-BH1B-2ET-5N)	EM-PMK-AUXE-WATERS-PU3340804	Annually	Mechanical Maintenance		
		Inspect refractory inside incinerator, secondary air bustle nozzles, NCG burner, and natural gas burner	EM-PMK-AIRP-INCINR-TO3341900	Annually	Day supervisor	8364	
		Calibrate incinerator gas valves	EM-PMK-AIRP-330415	Annually	E&I Maintenance	54980	
		Calibrate incinerator air valves/replace temperature probe	EM-PMK-AIRP-330465	Annually	E&I Maintenance	55047	
		PM the incinerator temperature probes (33-TX-0439, 0465, 0466, 0469)	EM-PMK-AIRP-330439	Annually	E&I Maintenance	55012	
		Calibrate or replace the temperature probe transmitter as needed.	EM-PMK-AIRP-330439	Annually	E&I Maintenance	55012	
		PM the primary air fan (checked weekly) (E-LK-INCI-OPR-5N)	EM-PMK-AIRP-INCINR-FN3341920	Annually	Mechanical Maintenance		
		PM the secondary air fan (checked weekly) (E-LK-INCI-OPR-5N)	EM-PMK-AIRP-INCINR-FN3341925	Annually	Mechanical Maintenance		
		Comparison of 1st and 2nd stage scrubber recirculation loop pH to lab data. Comparison of specific gravity of scrubber recirculation scrubbing medium to lab data. Typically each shift a sample is taken to compare the 1st & 2nd stage pH sensors values to lab values. If there is a significant difference a PM is written for the sensors.	EM-PMK-AIRP-330482 EM-PMK-AIRP-330481 EM-PMK-AIRP-330487	Each weekday	Kiln Utility	Go to the KM Processbook, click on the tab "Sensors" and open the "SO2 Scrubber pH/Density Sensor Vs. Lab" Verify that this data is being collected and entered into PI.	
	Inspect 1st and 2nd stage scrubber sumps for build-up. Inspect trays for scale build-up and orientation. Inspect spray nozzles for build-up. Inspect shroud on inlet to ID fan for corrosion	EM-PMK-AIRP-INCINR-TO3341900	Annually	Day supervisor	8363		
	PM the scrubber ID fan (checked weekly) (E-LK-INCI-OPR-5N)	EM-PMK-AIRP-SO2SYS-FN3342250	Annually	Mechanical Maintenance			
	PM the TO 1st Stage Scrubber Flow Meter	EM-PMK-AIRP-330483	Annually	E&I Maintenance	57684		
	PM the TO 2nd Stage Scrubber Flow Meter	EM-PMK-AIRP-330484	Annually	E&I Maintenance	57685		
	PM the TO Scrubber dP	EM-PMK-AIRP-330437	Annually	E&I Maintenance	57688		
	Soda Ash Storage Tank, EM-PMK-CHEM-SODASH-TK1842300	1. PM the soda ash unloading pump (checked weekly) (E-KM-TRNS-1ET-3N)	EM-PMK-CHEM-SODASH-PU1842325	Annually	Mechanical Maintenance		
2. PM the soda ash pressure blower (checked weekly) (E-KM-TRNS-1ET-3N)		EM-PMK-CHEM-SODASH-BL1842370	Annually	Mechanical Maintenance			
3. PM the soda ash vacuum blower (E-KM-TRNS-1ET-3N)		EM-PMK-CHEM-SODASH-BL1842360	Annually	Mechanical Maintenance			
4. PM the soda ash slurolyzer		EM-PMK-CHEM-SODASH-MR1842320	Annually	Mechanical Maintenance	17940		
Methanol Storage Tank, EM-PMK-CHEM-METHSY-TK1841100	1. PM the methanol tank conservation vent	EM-PMK-CHEM-METHSY-VN1841102	Once every 5 years	Mechanical Maintenance	6995		
BoHo & KM	Condensate Collection & Treatment System	1. Visually inspect for leaks		Monthly	Equipment Tender	KM and BoHo fill out Proficy logsheet LDAR inspection checklist each month.	
		2. PM the stripper column feed tank level indicator 33-LIX-205	EM-PMK-AIRP-330205	Annually	E&I Maintenance	61351	
		3. PM the stripper effluent tank level indicator 33-LX-0712	EM-PMK-AIRP-330712	Annually	E&I Maintenance	61354	
	Brownstock Washer System	1. Visually inspect for leaks		Monthly	Equipment Tender	KM and BoHo fill out Proficy logsheet LDAR inspection checklist each month.	
		1. Excess O2 sensor calibration		Once every 5 years	E&I Maintenance	Need Maintenance Plan	

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	#7 Boiler MACT Tune-up Requirements	1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
		1. Burner inspection - Boiler MACT		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
		1. Optimization of CO emissions 2. Measure CO and O2 levels before and after tune-up		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
	#8 Boiler MACT Tune-up Requirements	1. Excess O2 sensor calibration		Once every 5 year	E&I Maintenance	Need Maintenance Plan		
		1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
		1. Burner inspection - Boiler MACT		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
		1. Optimization of CO emissions 2. Measure CO and O2 levels before and after tune-up		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
	#9 Boiler - Multiclone, and Scrubbers	1. Check primary water supply pump for proper operation and leaks. Check the backup supply pumps and verify ability to start. Check water supply tank and pump discharge piping to scrubber for possible leaks. Check that the scrubber recirculation pumps are running and free from leaks. Check that overflow pots have adequate flow and make flow adjustment if needed. Check that adequate water pressure is being maintained to the inlet and bull nozzles. Check operation of differential pressure measurement loop and clean taps as needed.	EM-PWB-BL09-ASHSYS-DC3340010 EM-PWB-BL09-FLUMES-SB3340975 EM-PWB-BL09-FLUMES-SB3341000 EM-PWB-BL09-FLUGAS		Weekly	Lead Operator & First Equipment Tender	Checklist with SOP	
		2. Dismantle and inspect scrubber supply, backup water supply, and recirculation pumps. Inspect inlet and bull nozzles. Water blast circulation lines and inspect valves. Clean scrubber drains and rotate if necessary (maint. item # 21947)	EM-PWB-BL09-FLUGAS		Annually	Mechanical Maintenance		
		3. Inspect automatic valves and repair as necessary. Repair motor starters as necessary. Inspect scrubber differential pressure transmitter. Calibrate stack temperature switch and transmitter. Calibrate recirculation pressure switches. (maint. Item #23811)	EM-PWB-BL09-FLUGAS		Annually	E&I Maintenance	16281	
		4. Check #2 and #3 scrubber flow meter calibration	EM-PWB-BL09-030602		Annually	E&I Maintenance	63735	
		5. Check #2 and #3 scrubber differential pressure transmitter calibrations	EM-PWB-BL09-330800		Annually	E&I Maintenance	63737	
		4. Inspect multiclone dust collector and ash handling equipment and conduct related repairs as necessary (maint. Item #24982)	EM-PWB-BL09-ASHSYS-DC3340010		Annually	Mechanical Maintenance	16281	
		#9 Boiler - Operating Load	1. Calibrate steam flow transmitter	EM-PWB-BL09-030115	Annual during outage	E&I Maintenance	63736	
		#9 Boiler - O2 Trim	1. Calibrate excess air O2 monitor	EM-PWB-BL09-030111	Annual during outage	E&I Maintenance	63741	
#9 Boiler Wood Residue Surge Bin Cyclone	1. Inspect internal cyclone equipment for wear and make repairs as needed (maint item #21937)	EM-PWB-BL09-BARKFL-CY0340155	Annually	Mechanical Maintenance	16281			
EM-PWB-BL09-BARKFL-CY0340155	2. Visible emissions check		Weekly during operation	Lead Operator & 2nd Assistant Operator	Checklist with SOP (same as the weekly walkdown)			
#11 Boiler Multiclone and Electrostatic Precipitator EM-PWB-BL11-DRYASH-VA6844108 EM-PWB-BL11-PRECIP-PR6844250	1. Check that operating lights on the control panels indicate that the TR sets are on. Verify air conditioning/temperature in the TR control room is ok. Check that TR currents and voltages are in proper operating ranges. Walkdown rafter drives and check for apparent mechanical problems. Inspect TR sets for leaking coolant. Check that precipitator ash rotary valves, screw conveyors, and drag conveyors are operating properly. Check precipitator ash hoppers for possible pluggage. Inspect inlet filters for precipitator heater/blower fan. Check that the insulator compartment heater/blower units are functioning properly. Check multiclone dust collector rotary valves, sand classifiers, and ash conveyors for proper operation.			Weekly	Lead Operator & 2nd Assistant Operator	Checklist		
	2. Remove flyash buildup in all parts of precipitator. (maint. Item #9179)			Annually during outage	Maintenance	8628		

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Boilerhouse		3. Inspect and clean or replace bushing and insulators. Inspect and clean TR control sets. Check spacing between discharge electrode wires and collection plates. (maint. item #21883)		Annually during outage	E&I Maintenance	13351		
		4. Replace faulty elements and controls on heater/blower units. Replace all filters and fan belts on blower/heater units. Clean and inspect rapper drive control cabinets. Repair rappers if required. Adjust rapping frequencies/strategy for optimum performance if necessary. Replace gear oil for rapper drives. Inspect general integrity of precipitator shell and ductwork. (maint. item #21883)		Annually during outage	Mechanical Maintenance	13351		
		5. Inspect and repair all conveyors. Inspect multiclone dust collector and ash handling equipment and conduct related repairs as needed. (maint. Item #23812)		Annually during outage	Mechanical Maintenance	8628		
		#11 Boiler Operating Load	1. Calibrate steam flow transmitter (maint. Item 14144)	EM-PBW-BL11-68813	Annual during outage	E&I Maintenance	13351	
		#11 Boiler O2 Trim	1. Calibrate east, west, and center excess air O2 monitors	EM-PBW-BL11-680408	Annual during outage	E&I Maintenance	53281	
		#7 Boiler MACT Tune-up Requirements	1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Inspect air-to-fuel ratio control system for proper function and calibration. Calibrate Excess O2 sensor		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Burner inspection - Boiler MACT		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Optimization of CO emissions 2. Measure CO and O2 levels before and after tune-up		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
		#9 Boiler MACT Tune-up Requirements	1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
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		#8 Boiler MACT Tune-up Requirements	1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Inspect air-to-fuel ratio control system for proper function and calibration. Calibrate Excess O2 sensor	EM-PWB-BL08-130135	Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Burner inspection - Boiler MACT		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
			1. Optimization of CO emissions 2. Measure CO and O2 levels before and after tune-up		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
		#11 Boiler MACT Tune-up Requirements	1. Flame pattern inspection		Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed	
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	1. Optimization of CO emissions 2. Measure CO and O2 levels before and after tune-up			Once every 5 years	Boilerhouse Management	Contact Boilerhouse Business Unit Manager to ensure this is completed		
	#11 Boiler, #1 (A) Coal Silo Baghouse	1. Inspect the bag filters and fan system and repair as necessary. (maint. Item #14003)	see below	Annually during outage	Maintenance	8628		
		2. Visible emissions check	EM-PWB-BL11-COALFL-FL7043690 #11 Boiler, #2 (B) Coal Silo Baghouse					

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			EM-PWB-BL11-COALFL-FL7043720 #11 Boiler, #3 (C) Coal Silo Baghouse EM-PWB-BL11-COALFL-FL7043750 #11 Boiler, #2 Ash Silo Baghouse EM-PWB-BL11-DRYASH-FL6845960	Weekly during operation	Lead Operator & 2nd Assistant Operator	Checklist	
	#11 Boiler, #1 Ash Silo Pugmill	1. Inspect the ash mixers and rotary feeders while in operation		Weekly	Ash handlers	Checklist	
	#11 Boiler, #2 Ash Silo Pugmill	2.a. Inspect the boiler ash mixer (maint. Item #9145) 2.b. Inspect the precip ash mixer (maint. Item #9149)	EM-PWB-BL11-DRYASH-MZ6845868 EM-PWB-BL11-DRYASH-MZ6845955	Annually during outage	Mechanical Maintenance	8628	
		3. Inspect the rotary feeders (maint. Item # 21805)	EM-PWB-BL11-DRYASH			8628	
	#10 Recovery Furnace Electrostatic Precipitator	1. Replace resistors, fans, etc. Inspect and clean TR control cabinets. Clean and inspect SIR units. Clean and inspect penthouse HV wiring. (maint item #24052 for completion tracking of maint item #73185)	EM-CRB-BL10-PRECIP-PR5140010	Annually	E&I Maintenance	18065	
		2. Inspect and clean or replace bushings, bus support insulators. Check field alignment. Inspect ductwork.	EM-CRB-BL10-PRECIP-PR5140010	Annually	AirTek Field Service		
		3. Remove flyash buildup in all parts of precipitator. Inspect fan belts. Inspect and repair drag conveyors. (maint. Item # 17415)		Annually	Maintenance personnel, Supervisory personnel, service contractor	14110	
	EM-CRB-BL10-PRECIP-PR5140010	4. Check that the current limits on all TR control sets are in the normal range. Spot check noises made by rappers for uniformity of tapping noises and duration of cycle. Check that rapper pressure is greater than 90 psi and steady. Check that the air lines that feed compressed air to drive rappers are properly connected. Check that all bolts on the top end of rappers are securely fastened. Check that the filters for the shell heater fan are clean and change filters if necessary. Check that the fans for shell heaters and penthouse heaters are running and belts and motors functioning properly. Check that the gauge on the shell heater fan reads between the low and high preset values. Check that the air conditioning is on in the TR control room. Change the shell heater fan filters if necessary.		Weekly	First helper	Checklist	
	Smelt Dissolving Tank Scrubber	1. Water blast to remove scale and thoroughly clean scrubber interior. Inspect scrubber interior and make any necessary repairs. Inspect fan bearings and belts. (maint item #24051)	EM-CRB-BL10-FLUGAS-SB3340431	Annually	Maintenance	14110	
	EM-CRB-BL10-FLUMES-SB3340431	2. Inspect and make any necessary repairs to scrubber differential pressure transmitter. Calibrate differential pressure transmitter. Check the zero on the three Yokogawa Magmeter Flow Tubes on the SDT Scrubber (Fan flow, East duct flow, & West duct flow). The total flow (15-f0303.pe) is a calculation. (maint item #24052 - refers to L:\Local Initiatives\Area 7\E&I PM Spread Sheets\10 BOILER SPREADSHEETS)	EM-CRB-BL10-150316 EM-CRB-BL10-150303 EM-CRB-BL10-150304 EM-CRB-BL10-150305	Annually	E&I Maintenance	18065	
		3. Inspect weak wash supply pressures and make sure they are adjusted properly. Check the scrubber fan motor and belts. Check the scrubber for excessive vibration. Check the scrubber and ducts for leaks. Check that the scrubber differential pressure is in a normal range.		Weekly during operation	First helper	Checklist	

Area	Air Cleaning Equipment	Required Preventative Maintenance	Functional Location PM is written to	Frequency of Work	Who Performs the Work	Maintenance Plan Numbers/Recordkeeping	COMMENTS for certification		
		4. Check that the Motor Status Alarm for the SDT Scrubber Fan is operating correctly.	EM-CRB-BL10-150161	Annually	Environmental Engineer	see comments			
Paper Machines and Coaters	#1 Coater, #1 Starch Silo Baghouse, EM-CP1-RMST-STRSTG-FL4341252	1. Inspect bags at least annually for "soft to hand" condition and uniform tightness of clamps. Replace bags when necessary.	EM-CP1-RMST-STRSTG-FL4341252	Annually	Mechanical Maintenance	18188			
	#1 Coater, #2 Starch Silo Baghouse, EM-CP1-RMST-STRSTG-FL4341282		EM-CP1-RMST-STRSTG-FL4341252	Annually	Mechanical Maintenance	18188			
	#1 Coater, #1 and #2 Starch Day Bins Baghouse, EM-CP1-RMST-STRSTG-FL4341460		EM-CP1-RMST-STRSTG-FL4341252	Annually	E & I Maintenance	18189			
	#1 Coater, #1 and #2 Starch Wet Out Tanks Baghouse, EM-CP1-RMST-WETOUT-FL4341550	4. Visible emissions check		Weekly during operation	Material Handler	Checklist			
	#3 Paper Machine, #1 Starch Silo Baghouse	1. Inspect blowers on top of starch filters. Check bearing freeplay and blower clearance. Change filter bags when necessary, or at least once a year. Verify proper function of pressure/vacuum hatch.	EM-CP3-RMST-STRSTG-FL0842425	Annually	Maintenance	18013			
			EM-CP3-RMST-STRSTG-FL0842525			18014			
			EM-CP3-RMST-STRSTG-FL6642590			18015			
	EM-CP3-RMST-STRSTG-FL0842425	2. Check level transmitter	EM-CP3-RMST-080151	Annually	E&I Maintenance				
	#3 Coater, #2 Starch Silo Baghouse		EM-CP3-RMST-080153			17951			
	EM-CP3-RMST-STRSTG-FL0842525		EM-CP3-RMST-080511			17952			
	#3 Coater, #3 Starch (Cato) Silo Baghouse	3. Visible emissions check		Weekly during operation	Material Handler	Checklist			
	EM-CP3-RMST-STRSTG-FL6642590								
	#4 Coater, #1 Starch Silo Baghouse	1. Inspect blowers on top of starch filters. Check bearing freeplay and blower clearance. Change filter bags when necessary, or at least once a year. Verify proper function of pressure/vacuum hatch.		Annually	Mechanical Maintenance	17959			
						17996			
			2. Check level transmitter			EM-CP4-RMCS-661506	Annually	E&I Maintenance	53453
EM-CP4-RMCS-661507						53454			
EM-CP4-RMST-STRSTG-FL6645694			Weekly during operation	Material Handler	Checklist				
#4 Coater, #2 Starch Silo Baghouse									
EM-CP4-RMST-STRSTG-FL6645762									
#4 Paper Trim Cyclone	1. Inspect internal screen and fan belt, rotor, equipment for wear	EM-A04-MISC-C04TRM-CY6543392	Annually	Mechanical Maintenance	26981				
#4 Paper Trim Guillotine Cyclone		EM-A04-MISC-C04TRM-CY6543394			26982				
#4 Paper Trim Cyclone	2. Visible check of proper operation	EM-A04-MISC-C04TRM-CY6543392	Weekly during operation	Slab pulper operator	Checklist				
#4 Paper Trim Guillotine Cyclone		EM-A04-MISC-C04TRM-CY6543394							
Maintenance Paint Spray Booth	Dry Exhaust Filters	1. Replace the exhaust filters	EM-A05-MSHP-PNTSHP	As needed	Mechanical Maintenance	18258			
RICE MACT Units	1) Lime Kiln Emergency Drive Motor	1. Change oil and filter every 500 hours, or annually, whichever is first 2. Inspect spark plugs, if applicable every 1000 hours, or annually, whichever is first 3. Inspect air cleaner every 1000 hours, or annually, whichever is first 4. Inspect all hoses and belts every 500 hours, or annually, whichever is first, and replace as necessary	1) EM-CRC-LKN1-KILNSY-IC2940295	Annually	Heavy Equipment Truck Shop	61189			
	2) E1 Emergency Lift Pump		2) EM-S01-AUXE-EFFLFT-MZ3540863			61190			
	3) Emergency Fire Water Pump by Water Treatment Building		3) EM-UTL-FSYS-FIREPU-IC0141251,			61251			
	4) Emergency Fire Water Pump by Admin Building		4) EM-UTL-FSYS-FIREPU-IC0141645			61252			
	5) EOC Back-up Generator by Admin Building		5) EM-A01-AUXE-GENERA-GE6749990			61253			
	6) Turbine Turning Gear Back-up generator		6) EM-UTL-TG08-MISCEQ-GE1640025			61424			