ATTACHMENT 4
SHUT DOWN CHECKLIST MSG

UGEF CHEMICALS

TOWER FIELD OPERATOR

OPERATOR NAME & SIGNATURE:			UCL/IBDMS	UCL/IBDMSG/CD/Q/07.0	
DATE OF CHECKS:	Where	Systems	Working With	Target //x	
1. EXTERNALIZED TASKS - to be done last 30 mins BEFORE SHUTDOWN					
Stop re-melt preparation system & agitator	On the floor	Wet scrap			
Clean the solids addition bowl and it's discharge chute walls when instructed by CRO, break any bridging or lumps using the "Inspection Dry scrap hopper & Crutcher Solids addition bowl at Startup & Shutdown" OPL	On the floor	Dry scrap	ICSL	ω	
Steam out & clean wet scrap/re-melt system when told by the CRO.	On the floor	Wet scrap	ICSL	3	
Shutdown the boiler from the Boiler HMI and then power off the boiler panel	On the floor	Boiler			
Record level of water in the Boiler "Treated water tank" in SHOTO booklet and close steam supply valves to the operations	On the floor	Boiler		2	
2. WASH OUT PROCEDURES & PUMPING					
Follow the line washout procedure to clean out the low and high pressure line		Tower Field Op.			
a. Transfer 150kg of water into the Crutcher, agitate at high speed, to completely clean out any residual slurry.	Crutcher	L6 contractor	CRO	N/N	
b. Clean the solids inlet bowl to the crutcher and any deposits of slurry on the crutcher agitator into the water	Pumping	CRO, level 6	CRO	Z	
c. Open the magnetic filter drain valve and the Crutcher auto valve to empty the content of the Crutcher into the pit.	Pumping	Pumping	CRO	w	
Flush the crutcher Transfer line into the Ageing vessel with water from Flushing water pump.	Pumping	Pumping	CRO	Z	
 e. Spray the water through the pumps and nozzles into the tower using the flushing water pump - ensure air injection is on to flush the air injection system 	Pumping	Spray drying	CRO	Z	
f. steam out the ODOS injection head while spraying water	Pumping	Budmud	CRO	10	
g. Spray water through all the nozzles 1-6 to avoid blocked nozzles	Pumping	Spray drying	CRO	15	
h. Open all drains to drain water and left drains open - Ageing vessel, before and after LPP, before HPP, after HPP	Pumping	crutching	NA	10	
i. Open the reitz filter basket and leave open with the basket out	Pumping	guidand	NA	3	
j. Run cooling water through reitz mechanical seal after pump shutdown for 10mins	Pumping	pumping	NA	10	
k. Do general cleaning of area	On the floor	Pumping	NA	UT.	
I. open the Steam valve to ODOS unit and evacuate to drain	Pumping	gumping	NA	5	
m. Steam ALL nozzles until the whistling sound is heared in the nozzle room.	On the floor	Pumping	Nozzle room operator	10	
3. TOWER AREA SYSTEMS SHUTDOWN					
Check Airlift Filter is empty due to risk of blockages on start up (take forch); if not tell CRO to divert to big bag and run fines into big bags	On the floor	Base Powder Handling	Crutcher Panel Op.	th th	
Clean the chules above the Gravity Separator Rotary Valve	On the floor	Base Powder Handling		15	
Inspect and clean the Rotary Valves vanes-GS, Airlift, cyclone; inspect the belts on the Airlift rotary valve vanes for defects	On the floor	Base Powder Handling	Nozzle room operator	30	
Inspect heavies chute, airlift fines return lines and cyclone fines return line and clean if blocked.	On the floor	Base Powder Handling		10	
Clean PWS	On the floor	Base Powder			
		Sunoneu		č	

	W 00 10 1	Date:	Agbady	SOP OWNER		
	100 10 m	Date:	Adebiyi Adedoyin Alawadi dilujide	HOR APPROVAL OA APPROVAL		COMMENTS (last changes highlighted in yellow)
	100 Mal 60	Date:	Daramola Nades	AUTHORISATION		



UGEE CHEMICALS

SHUT DOWN CHECKLIST MSG

ADMIX FIELD OPERATOR

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10 miles					_
OPERATOR NAME & SIGNATURE:			UCL/IBDMSG/CD/Q/07.0	3/CD/Q/07.	0
DATE OF CHECKS:	Where	Systems	Working With	Expected time in	√/×
1. EXTERNALIZED TASKS - to be done last 1 hour BEFORE SHUTDOWN					
Leave admix area empty of RM pallets and with correct house keeping (particular care with PC3, SEA's, Perfumes & Atex RM's)	On the floor	Admix	L24 cleaner	5	
Cover RM dump spots if no BigBag over it. Stretch wrap all dump spot with or without BigBag	On the floor	Admix	Level 24 contractor	2	
2. EXTERNALIZED TASKS - to be done last 30 mins BEFORE SHUTDOWN					
Confirm all RM addition into mixdrum has been completed (through sequential shut down) and Mixing belt 1 & 2 are empty	IMH	Admix	CRO	2	
Completely run-out all Blown Powder from Bin A & Bin B, all BP weigh hoppers and BP weighbelts as reblend buggy	On the floor/HMI	Admix	CRO	10	
Run SEA, AC Base & MCAS LIW feeder on GD(Gravimetric Discharge) mode 20minutes to shutdown	On the floor/HMI	Admix	CRO	20	
Blow off ALL mix drum nozzles confirming no blockages.	IMH	Admix	CRO	NA	
Blow off perfume mix drum supply lines.	IMH	Admix	NA	5	
When last re-blend buggy comes out of BFS, de-activate current formula & stop admix.	IMH	Admix	CRO	NA	
Close exit valve of perfume tank being used in last formula	IMH	Admix	NA	2	
2. ADMIX SHUT DOWN					
Evacuate AC base containment	On the floor	Admix	ICSL	30	
Run out the reminant inside SEA LIW hopper via the Diverter scrap line	On the floor	Admix	ICSL	10	
Switch off MCC room panels breakers - MDP & breakers, CVC panel, UPS panel, CP41, Air heater panel, HPP panel, Airlift panel, Exhaust fan panel .RVSO Panel.Panel 121.Panel 181 and Perfume panel.	On the floor	Admix			
Check that admix filter is empty by tapping to get hollow sound and free of fines due to risk of blockages on start up (take torch); if not tell CRO to empty it to buggy through entire system	On the floor		Level 24 contractor		
Check admix filter rotary valve chain to be at base condition (Not broken)	On the floor		Level 24 contractor		
Stop cooling tower fan and circulation pump and close the return valve (if applicable).	On the floor	Utilities			
COMMENTS (last changes highlighted in yellow)					
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gbadu/Lawtence Adebiyi Adedoyin	-	Daramola Nadeeb	nola Nadeeb		
Date: /W ST NT Date: 11 102 2022	Date:	1410			



START UP CHECKLIST MSG TEAM LEADER

UGEE CHEMICALS

DATE OF CHECKS: Have checked and verified that all startup activities for CRO, TR, Admix & Satlab has been Follow the Pumping warm up and startup MSG Job Aid 083.02 to clean the low and high pressure slurry lines Check the FHC production plan, MSG 24hrs plan and share respective actions with the Check that the team is appropriately staffed and backups are triggered if necessary Confirm tower cone indicator is green on SCADA, it is cleaned and free to rotate Confirm level of EW base is sufficient to startup OPERATOR NAME & SIGNATURE: Open steam supply valve to the line, drain condensate at the ODOS by steaming the ODOS Communicate action on any outage in team setup to the line leader Take actions on any issue that may arise from Sartup and communicate to line manager. 1. START UP SYSTEMS 2. TEAM SET UP COMMENTS (last changes highlighted in yellow) On the floor On the floor Pumping On the floor On the floor On the floor On the floor Pumping RV base Where Crutching Systems Tower with Crutcher Panel Op. On HMI Staging area ICSL Working With SOP No. UCL/IBDMSG/CD/Q/07.0 Target time | Seasonal | V/x | Comments/Improvements to reduce human effort 5

Date:		
Agbadu Lawrence		SOP OWNER
Date: 11 72 2022		QA APPROVAL
Adebiyi Adedoyin Date: 1 02 2022	ST	HSE APPROVAL
Nadeeb Daramola Date:	Thumand !	AUTHORISATION

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UGEE CHEMICALS

ATTACHMENT 4 START UP CHECKLIST MSG CRO OPERATOR

OPERATOR NAME & SIGNATURE:			No. UCL/IBDMSG		7.	Page 22 of 24	
DATE OF CHECKS:	Where	Systems	Working With	Time (mins)	√/x		
1. START UP SYSTEMS							
Follow the generator Startup and shutdown job aid to start the F&HC generator and all relevant panels as stated in the Tower SU & SD SOP	Lv 0	Utilities					
Switch ON the UPS, Servers, Control room PCs, and launch the factory talk program, SQL server and Transaction Manager	Control room	IT	Admix runner	15			
Confirm that the right admix recipe is loaded on the Admix page of the SCADA	HMI	IT	Satlab operator	2			
Switch on the BFMS server and launch the BFM application	Control room	BFMS					
Furn on ODOS panel	Pumping floor			5			
Start the sulphate carbonate fan and double flap discharger	Control room	Crutching		2			
Start the rotoclone fan	Control room			2			
Start the diesel loading pump (if running airheater or boiler on diesel)	Control room	Tower		2			
Start the tower ancilliary systems (cyclone screw and rotary valve, airlift screw and otary valve, GS rotary valve, PWS flapper and belt)	Control room	Tower	_	1			
Start all material transfers to silos (HLAS, Caustic & Silicate)	HMI	Crutching	Tower runner	5			-
Start high pressure compressor for air injection	HMI	Crutching	Tower runner	2			
Start admix fan from scada and verify it is running from the VFD panel on Level 12.	HMI	Filter	Admix runner	2			
Make sure enzymes dust control systme is ON	HMI	Filter	Admix runner	2			
Check that there is zero content inside the Crutcher before crutching and empty	Crutcher floor	Crutching					
content if any Check that there is no material build up/make inside the bulk solid materials			Level 6 Excel	5			
nopper on the Crutcher and clear if any Check that there is no material build up/make inside the dry scrap, carbonate and	Crutcher floor	Crutching	Level 6 Excel	5			
sulphate screw discharge chutes and clear if any	Crutcher floor	Crutching	Level 6 Excel	5			
Check that there is no accumulation on the crutcher agitator and clean if any	Crutcher floor	Crutching	Level 6 Excel	5			
Check that BP bins and weigh hoppers are empty and run out powder into the buggies if							
necessary	HMI	Admix	BFS Excel	2			_
Confirm admix filter hopper is empty	HMI	Admix	Hygiene, Admix runner	20			
Start droptank agitator	HMI	Pumping					-
2. PREPARE CRUTCHER BATCHES							
Check pre-requisites are established: - Steam pressure & Air injection compressed air pressure - Raw materials in the silos and day tank have enough material	НМІ	Crutching		2			
Confirm crutcher recipe Set Remelt Setpoint to zero during remelt preparation	HMI	Crutching		2			
Make the first crutcher batch - Use CMM calculator to confirm amount of water to be used in first batch - Ensure level 6 contractor monitors and confirms every material is dosed over recipe - PM electrical is on hand to troubleshoot any electrical issues 2. TOWER WARM UP (in parallel)	НМІ	Crutching	Level 6 Excel PM Electrical	20			
Check rotary valves of cyclones are working without issues and no blockages on chutes/ducts	HMI	BP Handling	Tower runner	5			
Begins Tower and Saacke Burner Start Up Procedure (<u>auto with confirmation of</u> every step):	HMI	BP Handling					
Start up exhaust fan	HMI	BP Handling		1			
Start up of airlift fan & purge	HMI	BP Handling		1			
Start the air heater	HMI	BP Handling	Satlab	15			
Divert air heater to stack and pre-heat the tower until exhaust temperature is at east 90degC and inlet temperature is at least 170degC	HMI	BP Handling		10			
Start the tower belt after air heater is on	HMI	BP Handling		2			
Continue preparing crutcher batches while air heater is starting up	HMI	Crutching					
3. PUMPING WARMING UP & SET UP							
follow the Pumping warm up and startup MSG Job Aid 083.02 to clean the low and high pressure slurry lines	HMI	Pumping	Tower runner	5			
Close all nozzle valves left open on shutdown for draining	HMI (if auto)	Pumping	Tower runner	2			
Close the HPL drain valve after the HPP once pumping warmup is completed 4. TOWER START UP PROCEDURE		Pumping	Tower runner	2			
Confirm tower is already warmed up (exhaust temperature above 85°C)	HMI	BP Handling	Team leader	2			
Check that the tower belt and rest of BP handling equipment is started Start spraying with one nozzle and ramp up gradually based on BP moisture and	HMI	BP Handling	Tower runner	2			
start spraying with one nozzie and ramp up gradually based on BP moisture and lensity. Ensure level 24 ICSL on the floor to clear PWS ake CatSO3 sample; record ODOS differential temperature & injection ratio	HMI	BP Handling	Satlab	15			
	HMI	BP Handling	Satlab	3			
5. ADMIX READINESS	LINAL O +L						
Empty weigh belt hopper	HMI & on the	Admix	Admix runner	2			•/1
7-000 (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0) (4-0)	floor	Admix		3			-
Blow off mix drum nozzles confirming no blockages. Check that all day bins and LIW have sufficient materials- check hopper weighs	HMI	Admix	Admix runner	3			-
nd refill any feeder with low levels	HMI	Admix	Admix runner	3			
Complete Admix feeders sequence run by running all LIWs for 1 minute each; ensure mixdrum is running & feeder deviation <1%	HMI	Admix	Admix runner	3			
Run all LIW feeders refill system from the scada to ensure no refill faults at start up	HMI	Admix	Admix runner	5			
		10-					

SOP OWNER

Agbadu Lawrence
Date:

QA APPROVAL

Adebiyi Adedbyia

Date:

Nadeeb Daramola
Date:

Date:

Date:

COMMENTS (last changes highlighted in yellow)



UGEE CHEMICALS

TOWER FIELD OPERATOR

OPERATOR NAME & SIGNATURE:		S d d C s	SOP No LICI /IRDMSG/CD/O/07 0	70/070	01-10-10-10-10-10-10-10-10-10-10-10-10-1
DATE OF CHECKS:	Where	Systems Systems	Working With	Target time	√/x
1. PUMPING WARMING UP & READINESS					
Open the main process water valve	Process water tank	Pumping	000000000000000000000000000000000000000	3	
Switch on boiler panel, the boiler, check that water levels across boiler room vessels are okay	Boiler	Utilities		2	
Switch on MSG air compressor and the air dryer, Confirm compressor valves are opened	Compresso r shed	Utilities		4	
Check air injection compressor is on; confirm oil level is within VC and that room extraction fan is on	Air injection shed	Utilities		ω	
Check that the solids addition bowl is empty. Break any lumps and discharge using the "Inspection Dry scrap hopper & Crutcher Solids addition bowl at Startup & Shutdown" OPL	On the floor	Crutching	Level 6 ICSL	ſΛ	
Install Rietz basket and close it	On the floor	Pumping		10	
Check that the level of water in the decantation tank is within visual control; Start HPP Oil pump & HPP cooling water pump; Confirm water flow to the plungers.	On the floor	Pumping	CRO	2	
Start Rietz water pump; check mech seal cooling water pressure & flow reading.	On the floor	Pumping	CRO	5	4
Close all Normally closed manual valves (Crutcher, drop tank, LPP head, LPL before & after reitz, HPP end flange, HPL drain valves).	On the floor	Pumping		5	
2. TOWER AREA SYSTEMS READINESS					
Check that Airlift Filter is Empty (tap using a mallet), Airlift screw & Rotary valve is free of accumulations & clean if otherwise	On the floor	BP Handling		5	
Check that there is no blockage in Gravity Separator chutes above Rotary Valves	On the floor	BP Handling		5	
Check that there is no blockage above Rotary Valves: GS, Cyclone, Admix filter	On the floor	BP Handling		10	
Check that there is no blockage on the cyclone and Airlift return lines to bag	On the floor	BP Handling		10	
Check that the PWS belt is cleaned	On the floor	BP Handling		5	
Check that the BOT belt is cleaned	On the floor	BP Handling			
Clean BOT infrared senor	On the floor	BP Handling		U	
3. OTHER					
Confirm functionality of harrode scanner for suphate and parhonate on 1.12	On the	ritching	G	ת	
Commit directionality of pareode scarnier for supriate and carbonate on L12	TIOOF	Crutching		o	

COMMENTS (last changes highlighted in yellow)

Date: Agbadu Lawrence SOP OWNER QA APPROVAL

Alayode Olujide

Date: 1119 2007 Adebiyi Adedbyin 2022 Nadeeb Daramola HSE APPROVAL

AUTHORISATION



START UP CHECKLIST MSG

UGEE CHEMICALS

ADMIX FIELD OPERATOR

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OPERATOR NAME & SIGNATURE:			SOP	SOP No. UCL/IBDMSG/CD/Q/07.0	OMSG/C	D/Q/07.0
DATE OF CHECKS:	CPS?	Where	Systems	Working	Target	V/x
1. START UP SYSTEMS				20101	mile	
Switch turn on MCC room panels breakers - MDP & breakers, CVC panel, UPS panel, CP41, Air heater panel, HPP panel, Airlift panel, Exhaust fan panel Air injection panel boiler panel	Yes	MCC room		CRO	ڻ ا	
Switch ON L6 Panel (RVSO Panel, Crutcher panel)	Yes	Level 6			2	
Switch on level 12 panel(Paneel 121,Perfume skid panel,NI skid panel)		Level 12			2	
Switch on level 18 panel		Level 18			5	
Confirm NI heater is on	Yes	Level 12			5	
Confirm functionality of barcode scanners in L24		Level 24			5	
Confirm enzymes dust controls fan and rotary valve are ON		Level 24	Filter		51	
2. ADMIX READINESS						
Open valve of required perfume day tank (manual Valve labelled Green)		On the floor or HMI		CRO	2	
Confirm perfumes lines,RVSO and NI lines are pressurized (6bar)		On the floor		CRO	10	
Refill SEA LIW Hopper and start the LIW feeder		On the floor/HMI		CRO	5	
Confirm that there are no trips on the lightning and socket breakers. Visibly check that all the insectocutor bulbs are powered		On the floor	E&1		10	
Confirm that mettler toledo display on level 18 panel is showing the weights of the weighing hoppers		On the floor			2	
Switch ON OP12 & Verify that all parameters are correct compared with OP12 programmable centerline sheet making sure there are no failure modes active		On the floor	E&1		15	
Unlock all LIW loadcells					15	
Conduct Static calibration check on the weigh belt 1 & 2		On the floor	Admix		15	
Load RM according to production schedule brands		On the floor	Admix		5	
Run all LIW feeders for 1 minute each from the OP12 panel (ensure mixdrum is running)		On the floor	Admix	CRO	5	
Run all LIW feeders refill system from the scada to ensure no refill faults at start up		HMI & on the floor		CRO	5	
Clear Enzyme accumulation on vibratory tray and Run from Cotrol room		HMI & on the floor		CRO	5	
Empty BP weigh belt weighhoppers		HMI & on the floor		CRO	10	
Open valve of required perfume day tank (manual Valve labelled Green)		On the floor or HMI		CRO	5	
Check BFS hopper is empty & free of lumps; break if necessary, confirm that the density station line valve is responding to push botton		On the floor		BFS contractors	10	
Admix DCS cleaning - Run the mix drum and belt from the control room		Control Room			5	
Communicate to Buggy operators DCS powder will be dosed. Place empty buggy in the buggy filling station		Buggy floor			2	
Clear blockage and caked powder in the DCS tower into the particular buggy at the filling station		Level 30			15	
Communicate to CRO blockage is completely cleared and powder evacuated		Control Room			2	
			-	-		1

Date: Agbadu Lawrence SOP OWNER Alawode Oldjide QA APPROVAL Adebiyi Adedoxin Date: イージー プーシン HSE APPROVAL Nadeeb Daramola Date: () AUTHORISATION

COMMENTS (last changes highlighted in yellow)



UGEE CHEMICALS

START UP CHECKLIST MSG

SATLAB PERSONNEL OR OTHER OPERATOR AVAILABLE

				Page 24 of 24	Page 24 of 24	4
DATE OF CHECKS:	CPS?	Where	Systems	Working With	Target	\\x
1. START UP SYSTEMS						
Switch ON satlab PC		Control room			ω	
Open air heater fuel source valves (diesel or gas) and swap air heater to the required fuel source		Air heater	Tower		_	
Confirm inlet gas pressure (if running on gas) or diesel tank has been refilled (if running on diesel)		Air heater	Tower	CRO	_	
Start the air heater		Air heater	Tower	CRO	51	
Start up the BFMS server and launch the BFM application		Buggy Filling Station		CRO	ω	
Check for buggies greater than two days on storage from the production date and tag them as "reblend"	ď.	Buggy Filling Station		BFS ICSL	4	
Download Admix Production Recipe and verify with the BPR		Control room		CRO	ω	
OTHER TASKS						
Inspect and clean the CMM sampling point on the Ageing vessel line		On the floor	Crutching		5	
Appearance check for startup buggy		On the floor	BFS	BFS ICSL	5	
Check and confirm translation of BPR values on scada (match the admix and tower recepie on SCADA and BPR)	A and	On the floor	Control room	CRO	10	
Comments (last changes highlighted in yellow)	in yellow)					
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Agbadu Lawrence Alawode Objide Date: [1] 02 3 27	Adebiyi Adedoyin Date:	dovin ST 737	Nad Date:	Nadeeb Daramola	nola	



SHUT DOWN CHECKLIST MSG SATLAB LEADER

RATOR NAME & SIGNATI

OPERATOR NAME & SIGNATURE:				UCL/IBD	MSG/CD/Q	07.0 P	/IBDMSG/CD/Q/07.0 Page 19 of 24
DATE OF CHECKS:	Where	Systems	Working With	Expected time (mins)	Seasonal	×/×	
Check Airlift Filter is empty due to risk of blockages on start up (take torch); if not tell CRO	On the floor	Base Powder	Base Powder Crutcher Panel				
to divert to big bag and run fines into big bags	Oil die llooi	Handling	Op.	2		L	
Clean the chutes above the Gravity Congretor Dotan, Valve	On the floor	Base Powder					
Clean the chates above the Clavity Cabanato Inciany valve	OII GIE HOOI	Handling		Üh			
Clean DIVIS	On the floor	Base Powder					
Cicari	OH CHE HOOF	Handling		10			
Clean the Density station (Inerior and exterior)	On the floor	Base Powder					
Clean the Delisity station(interior and exterior)	OH CHE HOOF	Handling		10			
Clean the sampling point for CMM and the sampling cup	On the floor	Crutching		10			

Date: Workn.	Agbadu Lawrence	SOP OWNER			
Date: 1 07 822	Adebiyi Adedoyin	HSE APPROVAL			
CLOC/20 11 :spec	Alawode Olujide	GA APROVAL			
Date: (4 02/102	Daramola Nadeeb	AUTHORISATION			



UGEE CHEMICALS

SHUT DOWN CHECKLIST MSG
TEAM LEADER

OPERATOR NAME & SIGNATURE:			UCL/IBDN	UCL/IBDMSG/CD/Q/07.0		Page 18 of 24
DATE OF CHECKS:	Where	Systems	Working With	Expected time (mins)	×/×	
Close main process water valve into the operation	On the floor	Utilities	AN	5		
Clean tower belt drum free of make up	On the floor	BP handling	ICSL	30		
Clean the airlift from level 0 to level 6	On the floor	BP handling	ICSL	20		
Check the tower belt for charred powder and clean if applicable	On the floor	BP handling	CRO, ICSL	5		
Follow the washout procedure of LP and HP lines for a for long shutdown Job aid no:065.03 to steam out the high pressure line	On the floor Pumping	Pumping	CRO	15		
Makes sure all roles are staffed for shutdown	On the floor		NA	NA		
Manages and provides resources to solve any issue during shut down process	On the floor	,	NA	NA		
Have checked and verified that all shutdown activities for CRO, TR, Admix & Sattab has been done						

Date: (146) /7~	Date: 14 Febrara Date:	Date: 11 03 7072	Agbady Lawrence Date: W.m.n.
AUTHORISATION	QA APPROVAL		SOPOWNER
4			
	ignignied in yellow)	COMMEN 13 (last changes highlighted in yellow)	



SHUT DOWN CHECKLIST MSG **ATTACHMENT 4**

CRO OPERATOR

OPERATOR NAME & SIGNATURE

Stop Pumps, motors, filters & Agitators
Switch OFF all PC'S, screens, and apllicable panels in control room 1&2

5. AIR HEATER SHUTDOWN Run Exhaust fan to cool the tower to exhaust temperature of 55degC as shown on QW Stop admix dust controls except enzyme dust control which must be left ON (stop fan, leave 2 minutes, stop compressed air for DATE OF CHECKS: Close the manual valve before crutcher steam feeding system Stop all core equipment from tower belt to BFS bags, wait 2 mins and then stop the rotary valve) Stop all transfers from silos/day tanks Stop crutcher & drop tank rotoclone Stop airlift air conditioner chiller pump (if applicable) Clean the tower cone cleaner ring with a scrapper i urn off main gas supply valve Stop high pressure compressor for air injection Stop crutcher and droptank agitators nsure dry scrap screw is completely empty at shut down Ensure remelt vessel is completely empty at shut down ncrease usage of dry scrap for the last two crutcher batches while still adhering to the reblend matrix witch off Burner on Air Heater HMI Run cooling water through reitz mechanical seal after pump shutdown for 10mins 3. SHUT DOWN OF SYSTEMS ollow the line washout procedure to clean out the low and high pressure line . Spray the water through the pumps and nozzles into the tower using the flushing water pump - ensure air injection is on to flush Clean the solids inlet bowl to the crutcher and any deposits of slurry on the crutcher agitator into the water Open the reitz filter basket and leave open with the basket out Open all drains to drain water and left drains open - Ageing vessel, before and after LPP, before HPP, after HPP Spray water through all the nozzles 1-6 to avoid blocked nozzles steam out the ODOS injection head while spraying water Open the magnetic filter drain valve and the Crutcher auto valve to empty the content of the Crutcher into the pit. Flush the crutcher Transfer line into the Ageing vessel with water from Flushing water pump. Transfer 150kg of water into the Crutcher, agitate at high speed, to completely clean out any residual slurry EXTERNALIZED TASKS - to be done last 30 mins BEFORE SHUTDOWN 6. SHUT DOWN OF SYSTEMS 2. WASH OUT PROCEDURES COMMENTS (last changes highlighted in yellow) HMI & On the floor HMI & On the floor HMI & On the floor Control room 1&2 HMI, pump floor HMI, pump floor HMI, pump floor HMI, pump floor On the floor On the floor HMI, level On the floor HMI, level 0 Level 6 Where IMH MM MM Z Z M Z Z Z IMH M MH M MH MH Several Filter Air Heater Transfers Air Heater Spraying Spraying All Making Crutcher Airlift/Util crutcher Crutcher Dry scrap Dry scrap Pumping Pumping Pumping Pumping Remelt Systems lower runner lower runner Tower runner Level 6 contractor Tower runner contractor lower runner, level 6 Tower runner ower runner Working With UCL/IBDMSG/CD/Q/07.0 Target time NA 10 X Z Z X Z NA A NA N A 15 1/x Page 16 of 24

Authoris Viet Colling Date: 10/07/2017 Pate: 10/07/10/2	Agbady Lawrence Adebiyi Adedoyin Date: USU M. Date: 11 07 307	
AUT	Alaway Date: 1100	
	Darge	