

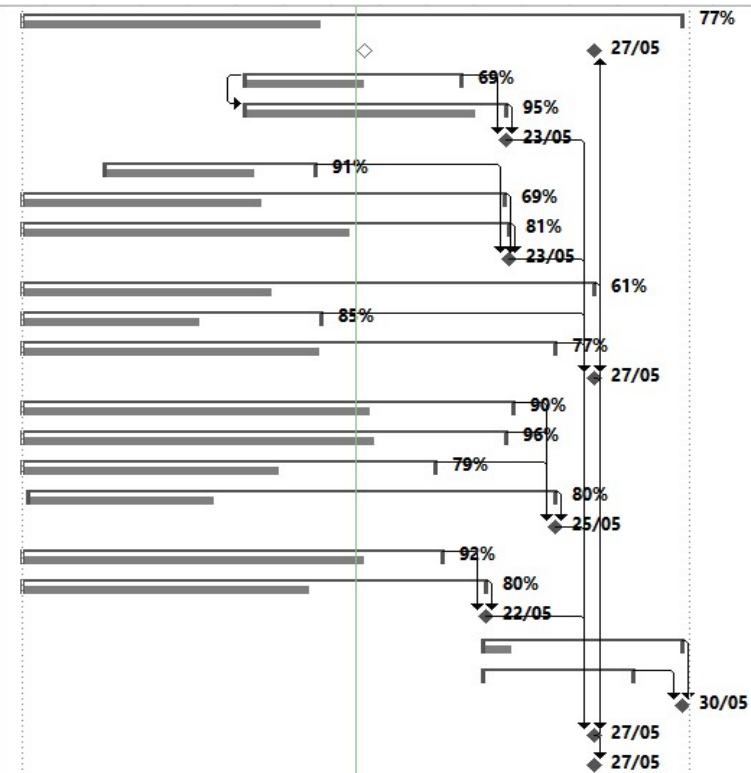


Botswana Ash (Pty) Ltd

SODA ASH PLANT DASHBOARD

SHUTDOWN PLAN 2023 - SODA ASH PLANT

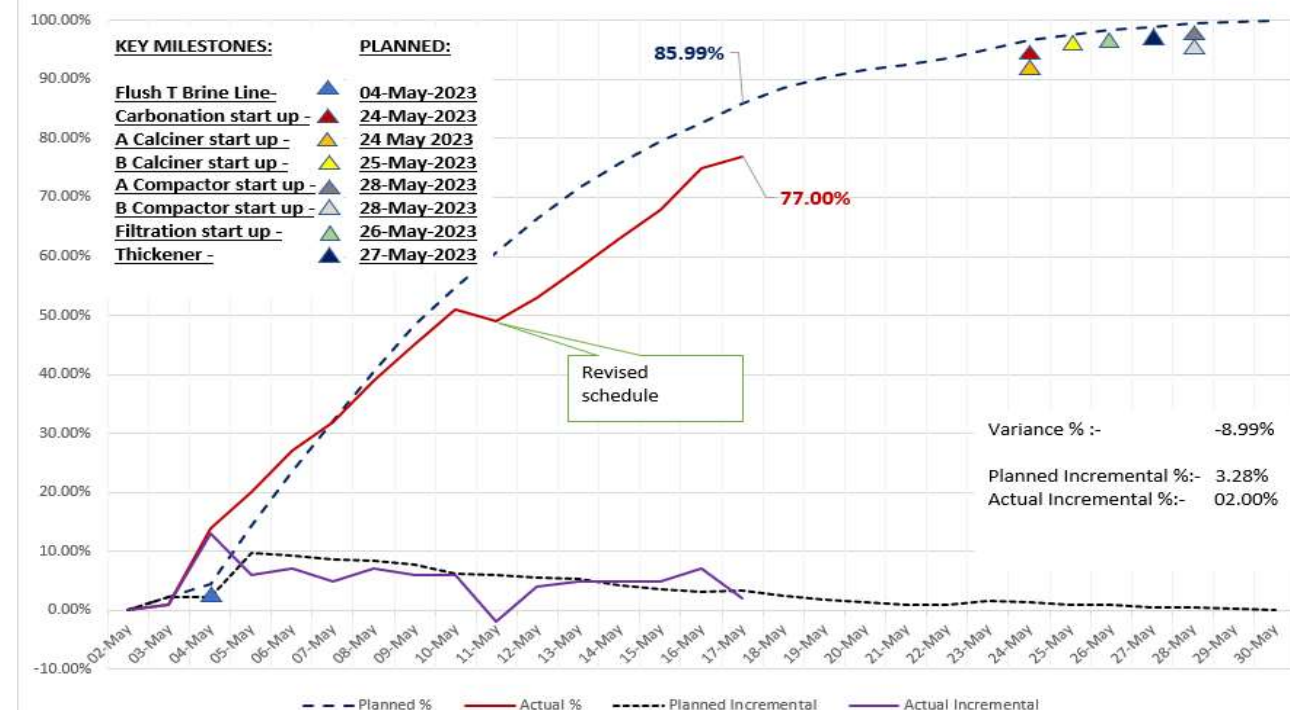
PROJECT FINISH	293.25 hrs	77%
POTABLE & BRACKISH WATER SUPPLY	97 hrs	69%
FIRE HYDRANT SYSTEM	115.5 hrs	95%
Water Plant Maintenance Complete	0 hrs	0%
HOT WASH WATER SYSTEM	91 hrs	91%
CARBONATION	210.25 hrs	69%
CRYSTALLISATION	214.25 hrs	81%
Carbonation Maintenance Complete	0 hrs	0%
BICARBONATE THICKENING	252 hrs	61%
BICARBONATE FILTRATION - A LINE	294.75 hrs	85%
BICARBONATE FILTRATION - B LINE	233.5 hrs	77%
Thickening and Filtration Maintenance Complete	0 hrs	0%
CALCINER - A LINE	217.5 hrs	90%
CALCINER - B LINE	211.5 hrs	96%
CALCINER GAS TREATMENT - A LINE	180 hrs	79%
CALCINER GAS TREATMENT - B LINE	233 hrs	80%
Calcining Maintenance Complete	0 hrs	0%
COMPACTION - A LINE	187.25 hrs	92%
COMPACTION - B LINE	204.25 hrs	80%
Compaction Maintenance Complete	0 hrs	0%
DENSE SODA ASH STORAGE	92.25 hrs	9%
DENSE SODA ASH BAGGING	69.5 hrs	0%
Ash Bagging and Storage Maintenance Complete	0 hrs	0%
SHUTDOWN MAINTENANCE COMPLETE	0 hrs	0%
PLANT START-UP PLAN	0 hrs	0%



SODA ASH PLANT KEY MILESTONES	PLANNED	FORECAST	Variance	DAYS TO COMPLETION	TOP 5 RISKS	
HOT WASH WATER SYSTEM	15-May-23	18-May-23	-3.47	10	1) B Compactor gearbox repairs 2) Thickener concrete repairs & relining 3) Sec Carbo Gearbox repairs 4) Motors away for repairs 5) Possible rework	
CARBONATION	23-May-23	28-May-23	-5.00			
BICARBONATE THICKENING	27-May-23	26-May-23	1.00			
BICARBONATE FILTRATION - A LINE	15-May-23	19-May-23	-4.21			
CALCINER - A LINE	23-May-23	20-May-23	3.00			
COMPACTION - A LINE	20-May-23	19-May-23	1.00			
Soda Ash Plant operational	30-May-23	30-May-23	0.00			
PLANT SUB-AREA:	Planned	Actual	Variance	Planned % Increment	Actual % Increment	Risk
SHUTDOWN 2023 - SODA ASH	85.99%	77.00%	-8.99%	3.28%	2.00%	
POTABLE & BRACKISH WATER SUPPLY	87.52%	95.00%	7.48%	7.41%	1.00%	
FIRE HYDRANT SYSTEM	87.69%	69.00%	-18.69%	11.71%	1.00%	
HOT WASH WATER SYSTEM	100.00%	91.00%	-9.00%	0.00%	6.00%	
CARBONATION	90.99%	69.00%	-21.99%	4.43%	1.00%	
CRYSTALLISATION	84.97%	81.00%	-3.97%	5.46%	0.00%	
BICARBONATE THICKENING	67.34%	61.00%	-6.34%	2.19%	2.00%	
BICARBONATE FILTRATION - A LINE	100.00%	85.00%	-15.00%	0.00%	2.00%	
BICARBONATE FILTRATION - B LINE	82.03%	77.00%	-5.03%	2.96%	4.00%	
CALCINER - A LINE	92.65%	90.00%	-2.65%	2.89%	3.00%	
CALCINER - B LINE	94.54%	96.00%	1.46%	2.70%	2.00%	
CALCINER GAS TREATMENT - A LINE	96.86%	79.00%	-17.86%	1.45%	0.00%	
CALCINER GAS TREATMENT - B LINE	87.41%	80.00%	-7.41%	0.00%	0.00%	
COMPACTION - A LINE	95.45%	93.00%	-2.45%	3.38%	0.00%	
COMPACTION - B LINE	94.06%	80.00%	-14.06%	4.27%	5.00%	
DENSE SODA ASH STORAGE	0.00%	9.00%	9.00%	0.00%	8.00%	
DENSE SODA ASH BAGGING	0.00%	0.00%	0.00%	0.00%	0.00%	



BOTSWANA - BOTASH REFURBISHMENT PROJECT 2023 - SODA ASH PLANT - Update:- 17 May 2023 - Rev 02



LOOK AHEAD SCOPE OF WORKS (L/L)	POSSIBLE RISKS	MITIGATIONS ON RISKS
HWW Circulation lines - replace		
Thickner S.O.W	Revised S.O.W after Inspections	Double shift (C/Path)
Hot Wash Pumps		
HWW Instrumentation works		
Carbonation Feed heaters - cleaning		
A,B,C & D Sand Filters		
Carbonation Feed tank		
A Bicarbonate Belt Conveyor - Replace	Belt delivery	Low risk
Cloth Wash tank - relocate manhole		
Cloth Wash Pumps - Inspect		
Filtration pumps - overhaul	Workshop machining	Prioritise work load
Seal Water Heat Exchanger - Repair	Repairs in S.A. - turnaround time	ETA tba.
Vacuum Pumps - Inspection		
Electrical maint - Pumps	Motor repairs - outside Vendors	Prioritise work load
Bicarb Filtration air receivers - Clean		
Belt Filters - Struct, change to S/Steel		
B Belt Filters - check bearings / ripple skirting		
Replace slide gates		
Bitterns pumps		
Filter Feed pumps	Workshop machining	Prioritise work load
E & I Works		
Repair Fibre glass pipelines		