

## Main Stack 1

Monitoring Location No: 1  
 Monitoring Type: Continuous  
 Sample Type: Air  
 Description: Exit point from Stack 1 to atmosphere

Opacity						
Period: 6 Minutes		Limit: 20.00 %				
Start Time	End Time	Cause	Operational State	Explanation	Corrective Action	Max Reading
02/02/25 17:12	02/02/25 17:18	Lime Kiln B	Lime Kiln B Un Scheduled Start-up/Shut-down	Kiln B shut down to shoot a ring at the back end of the Kiln causing the Exceedance	Ring formation shot out and Kiln restarted and stabilized.	21.40
03/02/25 17:54	03/02/25 18:12	Lime Kiln B	Equipment Issue/Failure	Kiln B tripped on flame scanner fault, exceedance was during the purge time.	Kiln restarted and stabilized.	37.09
10/02/25 00:12	10/02/25 00:54	Recovery Boiler A	Equipment Issue/Failure	RBA tripped due to severe lightning in the area, both ESP's down causing the exceedance.	RBA Restarted and stabilized.	65.09
10/02/25 01:24	10/02/25 01:36	Recovery Boiler A	RB A Un Scheduled Start-up/Shut-down	RBA tripped due to severe lightning in the area, both ESP's down causing the exceedance.	RBA Restarted and stabilized.	82.28
10/02/25 20:54	10/02/25 22:18	Recovery Boiler A	Equipment Issue/Failure	RBA tripped due to lightning strikes, both Kilns were stopped as well followed by a Mill shut down	Boiler was started and stabilized	85.11
10/02/25 23:06	10/02/25 23:24	Power Boiler	Equipment Issue/Failure	Boiler tripped due to lightning strikes in the area	Boiler restarted and stabilized	33.08
11/02/25 01:48	11/02/25 02:06	Power Boiler	Equipment Issue/Failure	Power boiler tripped due to low drum level caused by process upsets.	Boiler restarted and stabilized.	41.80
11/02/25 02:12	11/02/25 02:24	Power Boiler	Equipment Issue/Failure	Power boiler tripped due to low drum level caused by process upsets.	Boiler restarted and stabilized.	45.86
12/02/25 17:12	12/02/25 17:24	Lime Kiln B ESP	Equipment Issue/Failure	ESP Tripped due to a high CO spike caused from cleaning the lime feed chute.	ESP restarted after plant stabilized.	45.37
15/02/25 17:18	15/02/25 17:24	Lime Kiln B ESP	Equipment Issue/Failure	Kiln Fields 1 & 2 dropped off but not tripping, still caused an opacity exceedance.	Monitoring	21.48

20/02/25 15:00	20/02/25 15:12	Lime Kiln B ESP	Equipment Issue/Failure	We had ESP fields 1 & 2 dropping off again momentarily without tripping causing the exceedance	Notified Electrical department to investigate the cause of these fields dropping off.	29.67
21/02/25 11:00	21/02/25 11:06	Lime Kiln A	Equipment Issue/Failure	Shooting a ring formation in the back of the Kiln generating lots of dust causing the exceedance.	Ring removed and plant stabilized.	24.06
21/02/25 20:24	21/02/25 20:30	Lime Kiln A	Equipment Issue/Failure	Group Instrumentation was working on the CO probe (BLOCKED DURING MAINT.) and operations saw the O2 going very low and stopped the ESP to protect the process and equipment	CO Probe was reinstalled and process stabilized, ESP restarted.	35.62
25/02/25 11:30	25/02/25 11:36	Lime Kiln A	Equipment Issue/Failure	While calibrating the Lime Density Tx, a faulty value input caused the Kiln to trip.	Calibration completed and Kiln restarted and stabilized.	60.17
27/02/25 04:00	27/02/25 04:06	Power Boiler EP	Normal (Steady State)	Soot-blowing the Power boiler causing ash buildup to dislodge and overload the ESP which caused the exceedance.	Soot blowing completed and conditions returned to normal.	23.17

Sulphur Dioxide (SO2)      Period: 60 Minutes      Limit: 250.00 mg/Nm3						
Start Time	End Time	Cause	Operational State	Explanation	Corrective Action	Max Reading
01/02/25 20:00	01/02/25 21:00	Recovery Boiler A	Equipment Issue/Failure	NCG to Recovery Boiler flame arrester seems to be blocking and require frequent steaming out, this cause gasses to be diverted to the Power boiler.	We will divert the gasses to the Power boiler tonight, steam the system and early morning Tuesday add Zymeflow following the removal of the flame arrester for HP Cleaning.	267.92
01/02/25 22:00	02/02/25 00:00	Recovery Boiler A	Equipment Issue/Failure	NCG to Recovery Boiler flame arrester seems to be blocking and require frequent steaming out, this cause gasses to be diverted to the Power boiler.	We will divert the gasses to the Power boiler tonight, steam the system and early morning Tuesday add Zymeflow following the removal of the flame arrester for HP Cleaning.	404.62
06/02/25 06:00	06/02/25 16:00	Recovery Boiler A	Equipment Issue/Failure	Planned shut on RBA, NCG/SOG Gasses diverted to Power Boiler.	Shut completed and gasses diverted back to RBA	462.94
10/02/25 00:00	10/02/25 02:00	Recovery Boiler A	Equipment Issue/Failure	RBA tripped last night with severe lightning in the area and NCG/SOG diverted to the Power Boiler.	Recovery Boiler started up and Gasses diverted back to RBA	624.67

## Power Boiler

**Monitoring Location No:** 3  
**Monitoring Type:** Continuous  
**Sample Type:** Air  
**Description:** Discharge duct downstream of Power Boiler prior to junction with Stack 1

Carbon Monoxide (CO)		Period: 60 Minutes	Limit: 140.00 mg/Nm3			
Start Time	End Time	Cause	Operational State	Explanation	Corrective Action	Max Reading
10/02/25 22:00	10/02/25 23:00	Power Boiler	Equipment Issue/Failure	Power Boiler tripped due to lightning strikes, and 2 times due to steam drum low level upsets, CO exceeded with fuel firing upsets	Boiler stabilized	141.97
11/02/25 00:00	11/02/25 01:00	Power Boiler	Equipment Issue/Failure	Power Boiler tripped due to low steam drum level; CO exceeded with starting of solid fuel.	Boiler restarted and stabilized	173.67
11/02/25 02:00	11/02/25 03:00	Power Boiler	Equipment Issue/Failure	Power Boiler tripped due to low steam drum level; CO exceeded with starting of solid fuel.	Boiler restarted and stabilized	233.74

## Main Stack 2

**Monitoring Location No:** 22  
**Monitoring Type:** Continuous  
**Sample Type:** Air  
**Description:** Exit point from Stack 2 to atmosphere

Opacity		Period: 6 Minutes	Limit: 20.00 %			
Start Time	End Time	Cause	Operational State	Explanation	Corrective Action	Max Reading
01/02/25 16:18	01/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	25.84
02/02/25 16:18	02/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.13
03/02/25 16:18	03/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.56
04/02/25 16:18	04/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	26.58
05/02/25 16:18	05/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.00

06/02/25 16:18	06/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	25.10
07/02/25 16:18	07/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	24.71
08/02/25 16:18	08/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	24.14
09/02/25 16:18	09/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	22.69
10/02/25 16:18	10/02/25 16:24	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	21.36
14/02/25 02:42	14/02/25 02:48	Recovery Boiler B ESP1	Equipment Issue/Failure	ESP1 Field 3 and ESP field 1 kept tripping during heavy rainfall	Multiple restarts of the 2 fields eventually got them going and opacity was normalized	24.43
14/02/25 02:54	14/02/25 03:06	Recovery Boiler B ESP1	Equipment Issue/Failure	ESP1 Field 3 and ESP field 1 kept tripping during heavy rainfall	Multiple restarts of the 2 fields eventually got them going and opacity was normalized	89.30
14/02/25 16:12	14/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	20.85
15/02/25 16:12	15/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	22.81
16/02/25 16:12	16/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.56
17/02/25 16:12	17/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	24.11
18/02/25 16:12	18/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.51
19/02/25 16:12	19/02/25 16:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A The reason for the time changes is that every time the maintainers cycle the power off the time reset to that time	24.78
19/02/25 17:12	19/02/25 17:18	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A The reason for the time changes is that every time the maintainers cycle the power off the time reset to that time	23.78
20/02/25 09:30	20/02/25 09:36	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A The reason for the time changes is that every time the maintainers cycle the power off the time reset to that time	21.57
24/02/25 09:24	24/02/25 09:30	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	21.02
25/02/25 09:24	25/02/25 09:30	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	21.80
27/02/25 09:24	27/02/25 09:30	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.14
28/02/25 09:24	28/02/25 09:30	Auto Zero Span Verification	Normal (Steady State)	Auto Calibration	N/A	23.14

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