

Reporting Period: 1/07/2024 - 1/07/2025 Environment Protection Licence No: 10232

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	
06/07/24 12:06	06/07/24 12:24:	Lime Kiln B ESP	Equipment Issue/Failure	Opacity exceedances caused by high CO spikes tripping the ESP.	Times on exceedances longer than usual, it was discovered this morning ID fan control was running in Auto mode thus the slower reaction time, this control mode should be E1 which will have a quicker response to low O2 in the flue gas, this was corrected this morning.	56.24	
06/07/24 22:12	06/07/24 22:24:	Lime Kiln B ESP	Equipment Issue/Failure	Opacity exceedances caused by high CO spikes tripping the ESP.	Times on exceedances longer than usual, it was discovered this morning ID fan control was running in Auto mode thus the slower reaction time, this control mode should be E1 which will have a quicker response to low O2 in the flue gas, this was corrected this morning.	65.21	
07/07/24 17:00	07/07/24 17:18:	Lime Kiln B ESP	Equipment Issue/Failure	Opacity exceedances caused by high CO spikes tripping the ESP.	Times on exceedances longer than usual, it was discovered this morning ID fan control was running in Auto mode thus the slower reaction time, this control mode should be E1 which will have a quicker response to low O2 in the flue gas, this was corrected this morning.	50.95	
10/07/24 08:48	10/07/24 09:00:	Recovery Boiler A ESP1	Equipment Issue/Failure	ESP Field 1 tripped	No apparent fault found, unit was reset and started, ongoing monitoring.	30.83	
14/07/24 04:42	14/07/24 04:48:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP Field 1 tripped due to ash hopper 1 full and blocked in the outlet and shorting out the first field.	Continuously blowing back into hopper outlet and transporting ash also hammering outlet vibration plates to get ash flowing to hopper for removal.	22.66	

14/07/24	16:30	14/07/24	16:36:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP Field 1 tripped due to ash hopper 1 full and blocked in the outlet and shorting out the first field.	Continuously blowing back into hopper outlet and transporting ash also hammering outlet vibration plates to get ash flowing to hopper for removal.	27.48
14/07/24	16:42	14/07/24	16:48:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP Field 1 tripped due to ash hopper 1 full and blocked in the outlet and shorting out the first field.	Continuously blowing back into hopper outlet and transporting ash also hammering outlet vibration plates to get ash flowing to hopper for removal.	21.44
15/07/24	16:18	15/07/24	16:24:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	20.72
15/07/24	16:36	15/07/24	16:48:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	22.30
16/07/24	03:48	16/07/24	03:54:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	20.04
16/07/24	04:18	16/07/24	04:24:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	26.08
16/07/24	15:54	16/07/24	16:00:	Power Boiler EP	Equipment Issue/Failure	ESP Field 1 down due to a short caused by sand buildup in the plates, soot blowing causes the ID fan to increase and disturb the ash causing the exceedance.	Soot blowing completed and opacity returned to normal, will have to shut boiler to clean ash hopper on field 1.	24.50
16/07/24	16:12	16/07/24	16:18:	Power Boiler EP	Equipment Issue/Failure	ESP Field 1 down due to a short caused by sand buildup in the plates, soot blowing causes the ID fan to increase and disturb the ash causing the exceedance.	Soot blowing completed and opacity returned to normal, will have to shut boiler to clean ash hopper on field 1.	23.89
18/07/24	02:36	18/07/24	02:42:	Lime Kiln A	Equipment Issue/Failure	Process upset caused exceedance.	Process stabilized and being monitored.	28.80
18/07/24	05:12	18/07/24	05:48:	Lime Kiln A	Equipment Issue/Failure	Kiln A Gas was turned off leading to a high CO spike tripping the ESP, the ID fan was not reduced for some time after the ESP was shut down causing the excessive time of the exceedance.	Plant was shut down for maintenance and ID fan should have been reduced accordingly. Will review shut down with persons involved.	35.46
18/07/24	07:18	18/07/24	07:24:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	20.31
18/07/24	16:12	18/07/24	16:18:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	22.89
19/07/24	03:30	19/07/24	03:42:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	56.68

19/07/24 04:06	19/07/24 04:12:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	20.30
20/07/24 05:18	20/07/24 05:24:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	22.04
20/07/24 05:30	20/07/24 05:36:	Power Boiler EP	Equipment Issue/Failure	Power Boiler ESP field 1 out of service due to ash buildup in the hopper causing a short in the plates.	Still working on trying to empty the hopper.	26.54
04/08/24 15:18	04/08/24 15:48:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B had a big CO Spike causing the ESP to trip, Operations could not switch off the AVEVA system in time to prevent the ESP Tripping.	Process was stabilized and Equipment was restarted.	55.74
25/08/24 17:54	25/08/24 18:06:	Recovery Boiler A ESP2	Equipment Issue/Failure	ESP 2 Rotary feeder tripped.	Rotary feeder reset by E&I and started without further issues	89.54
30/08/24 16:12	30/08/24 16:18:	Lime Kiln A	Equipment Issue/Failure	Aveva control system not in sync with process, causing manual control from operators.	Have to fix the control system to eliminate manual control.	27.58
19/09/24 05:36	19/09/24 05:42:	Lime Kiln B	Normal (Steady State)	AVEVA control system still having teething issues that sometimes causes the ID fan to speed up to 100% and causing Opacity exceedances.	Working on system to correct issues.	20.26
25/09/24 22:18	25/09/24 22:30:	Power Boiler	Power Boiler Un Scheduled Start-up/Shut-down	Power Boiler Tripped due to a Drive fault on the ID Fan the exceedances were during the trip and start up.	Boiler restarted and stabilized	24.81
25/09/24 23:18	25/09/24 23:24:	Power Boiler	Power Boiler Un Scheduled Start-up/Shut-down	Power Boiler Tripped due to a Drive fault on the ID Fan the exceedances were during the trip and start up.	Boiler restarted and stabilized	35.54
08/10/24 10:24	08/10/24 10:48:	Power Boiler	Equipment Issue/Failure	Power Boiler tripped due to a faulty solenoid on the feedwater control valve causing the valve to close and trip the boiler on low drum level.	Solenoid replaced and boiler restarted.	42.48
25/10/24 23:36	26/10/24 02:00:	Power Boiler	Power Boiler Un Scheduled Start-up/Shut-down	Power boiler tripped on high drum level	Boiler restarted and stabilized	42.24
27/10/24 13:48	27/10/24 14:00:	Power Boiler	Power Boiler Un Scheduled Start-up/Shut-down	Power Boiler tripped on low drum level causing the exceedance	Boiler restarted and stabilized	35.55
29/10/24 19:30	29/10/24 19:42:	Lime Kiln B	Equipment Issue/Failure	ESP Tripped due to a high CO spike	Equipment restarted and stabilized	35.85
03/11/24 11:18	03/11/24 11:24:	Lime Kiln B ESP	Equipment Issue/Failure	High CO Spike causing ESP to trip	Plant stabilized and equipment restarted.	34.77
03/11/24 19:30	03/11/24 19:36:	Lime Kiln B ESP	Equipment Issue/Failure	High CO Spike causing ESP to trip	Plant stabilized and equipment restarted.	44.79

03/11/24 23:30	03/11/24 23:36:	Lime Kiln B ESP	Equipment Issue/Failure	High CO Spike causing ESP to trip	Plant stabilized and equipment restarted.	49.67
05/11/24 06:18	05/11/24 06:24:	Lime Kiln B	Equipment Issue/Failure	Kiln B tripped due to a high CO Spike	Plant restarted and stabilized after shooting a large ring formation in the Kiln	58.70
06/11/24 18:48	06/11/24 18:54:	Lime Kiln B	Equipment Issue/Failure	Kiln B tripped due to large rocks at the burner taking out the flame.	Rocks removed and Kiln restarted and stabilized	21.74
08/11/24 11:24	08/11/24 11:36:	Lime Kiln B	Equipment Issue/Failure	Kiln tripped due to gas generator tripping.	Fault finding and adjustments made, plant restarted and stabilized.	23.11
10/11/24 14:12	10/11/24 14:18:	Lime Kiln B	Equipment Issue/Failure	Kiln tripped due to lots of rubble in burner area.	Kiln burner end cleared and plant restarted.	50.08
10/11/24 17:36	10/11/24 17:48:	Lime Kiln B ESP	Equipment Issue/Failure	ESP tripped due to high CO	Plant stabilized and ESP restarted.	47.03
11/11/24 07:36	11/11/24 07:48:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP tripped due to a high CO spike.	Plant stabilized and ESP restarted.	37.76
13/11/24 07:48	13/11/24 07:54:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln ESP tripped due to high CO spike	Plant stabilized and ESP restarted.	44.17
13/11/24 13:18	13/11/24 13:30:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln ESP tripped due to high CO spike	Plant stabilized and ESP restarted.	32.92
15/11/24 02:00	15/11/24 02:06:	Lime Kiln B	Equipment Issue/Failure	Kiln B feed screw motor burnt out, shutting the Kiln.	Motor replaced and plant restarted.	28.32
19/11/24 11:12	19/11/24 11:24:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln ESP tripped due to a high CO spike	Plant stabilized and ESP restarted	37.37
01/12/24 19:30	01/12/24 19:36:	Lime Kiln B ESP	Equipment Issue/Failure	ESP tripped causing the exceedance. Reset and started again.	Could not find anything that would cause the trip on the ESP.	21.39
01/12/24 21:06	01/12/24 21:12:	Lime Kiln B ESP	Equipment Issue/Failure	Esp tripped again and would not reset; Maintenance E&I Called out to assist.	After investigation the maintenance team found a loose wire in TB5 connector, this was tightened and the ESP started with no issues, the previous trip at 19:07pm could have been from the same issue.	32.20
02/12/24 11:00	02/12/24 11:06:	Lime Kiln B ESP	Equipment Issue/Failure	Opacity from LKB, ESP tripped on high CO after flushing LM pump.	Plant stabilized and ESP restarted	37.16
04/12/24 13:12	04/12/24 13:18:	Lime Kiln B ESP	Equipment Issue/Failure	Sudden spike on O2 probe (no clear indication why O2 spiked) this caused fan to reduce, system was in auto, this change was not picked up as ops was busy starting Kiln A, O2 continued to drop resulting in a high CO spike tripping the ESP	Plant was stabilized and ESP restarted, further investigation will be done to determine why probe acts this way.	55.69
05/12/24 07:36	05/12/24 07:48:	Lime Kiln B ESP	Equipment Issue/Failure	ESP tripped due to a high CO Spike; this was caused by build-up in the backend collapsing.	Plant stabilized and ESP restarted.	25.09
06/12/24 00:30	06/12/24 00:36:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP tripped due to a high CO spike with plant upset.	Plant Stabilized and ESP restarted.	40.76
06/12/24 11:00	06/12/24 11:12:	Lime Kiln B	Equipment Issue/Failure	Kiln tripped with high CO due to large amounts of rocks / dust coming to the burner end after a large	Rubble cleared and kiln restarted	36.70

						ring broke up in the back.		
09/12/24	14:36	09/12/24	15:06:	Lime Kiln B	Equipment Issue/Failure	Kiln B tripped due to lots of dust and rubble at burner while shooting a ring formation.	Having issues to purge, issues with starting the gas generator.	41.75
09/12/24	15:36	09/12/24	15:48:	Lime Kiln B	Equipment Issue/Failure	Kiln still down with purging issues	Gas generator sorted out and plant started and stabilized.	40.29
18/12/24	04:48	18/12/24	05:00:	Recovery Boiler A ESP1	Equipment Issue/Failure	RBA EP#1 field #3 tripped. Electrician reset and it ran since.	E&I investigated further and found the main incoming contactor as suspicious. It tripped on 80A and is rated to 160A. Plan is to replace the MCB at the next opportunity. Work order raised for this task.	31.99
19/12/24	05:42	19/12/24	05:48:	Lime Kiln B ESP	Equipment Issue/Failure	The ESP tripped on high CO while cleaning the teflon inlet chute	Cleared build up and restart the Kiln	41.82
19/12/24	18:36	19/12/24	18:54:	Lime Kiln B ESP	Equipment Issue/Failure	The ESP tripped on high CO while cleaning the teflon inlet chute	Cleared build up and restart the Kiln. We modified the air lance for cleaning to be more efficient.	27.79
19/12/24	19:00	19/12/24	19:06:	Lime Kiln B ESP	Equipment Issue/Failure	The ESP tripped on high CO while cleaning the teflon inlet chute	Cleared build up and restart the Kiln. We modified the air lance for cleaning to be more efficient.	37.89
20/12/24	06:24	20/12/24	06:36:	Lime Kiln B ESP	Equipment Issue/Failure	While replacing the temperature probe B53TT140A, the BMS was activated and tripped the Kiln.	Replace the probe. test it and restart the Kiln.	53.11
20/12/24	11:54	20/12/24	12:00:	Lime Kiln B ESP	Equipment Issue/Failure	Operator error - typed in the wrong speed reference for the ID fan tripping the ESP.	Speed up the fan and restart the ESP	22.74
25/12/24	04:30	25/12/24	04:42:	Lime Kiln B ESP	Equipment Issue/Failure	The CO unexpectedly took off and tripped the ESP as part of the protection system.	Get the CO back in control by process changes and restart the ESP.	37.28
30/12/24	05:24	30/12/24	05:36:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP tripped due to a high CO spike with plant upset.	Plant stabilized and ESP restarted.	56.13
02/01/25	03:42	02/01/25	03:54:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP Tripped due to a high CO spike caused by cleaning out Feed conveyor 2, O2 dropped away and was not actioned in a timely manner.	Plant stabilized and ESP started	51.43
03/01/25	09:06	03/01/25	09:12:	Lime Kiln A ESP	Equipment Issue/Failure	Kiln ESP Tripped while gas burner pressure was adjusted.	Plant Stabilized and ESP restarted.	25.61
11/01/25	17:48	11/01/25	17:54:	Lime Kiln B	Equipment Issue/Failure	ESP Tripped on high CO when backend was opened for inspection, also shot out some ring formation towards the back end of the Kiln	After inspection and shooting of ring, plant was brought back on production and stabilized.	21.49
15/01/25	16:30	15/01/25	16:42:	Lime Kiln A	Equipment Issue/Failure	Lost O2 after adjusting gas pressure, causing a high CO and ESP trip.	Process stabilized and restarted ESP	36.62
18/01/25	05:42	18/01/25	05:54:	Lime Kiln B ESP	Equipment Issue/Failure	High CO spike caused by Process upset tripped the ESP	Process stabilized and ESP restarted	54.07

					ESP.			
25/01/25	13:48	25/01/25	14:00:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP tripped with a high CO spike caused by cleaning infeed chute.	Plant Stabilized and ESP restarted	33.41
30/01/25	07:12	30/01/25	07:18:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln B ESP tripped as we were cleaning the feed chute	Plant stabilized and ESP restarted	39.86
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
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
02/03/25	09:00	02/03/25	09:12:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln CO very erratic causing the ESP to trip with a high spike	Plant stabilized and ESP restarted.	47.57
04/03/25	18:42	04/03/25	19:00:	Lime Kiln B	Equipment Issue/Failure	Kiln B tripped due to flue gas flow dropping to zero	Plant purged; restarted and Stabilized	33.49
05/03/25	10:42	05/03/25	10:48:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln ID Fan sped up with high CO tripping the ESP	Plant stabilized and ESP restarted	27.71

05/03/25 17:36	05/03/25 17:54:	Lime Kiln B	Equipment Issue/Failure	Kiln tripped when we lost the igniter and flame, having to purge again caused the exceedance	Plant restarted and stabilized	31.93
20/03/25 09:30	20/03/25 09:36:	Lime Kiln B	Equipment Issue/Failure	Lost flue gas flow indication to DCS, resulting in tripping the main flame.	Flue gas Tx cleaned, and Kiln restarted.	23.68
25/03/25 03:06	25/03/25 03:18:	Lime Kiln B ESP	Equipment Issue/Failure	ESP tripped with a high CO spike caused by feed-end issues.	Plant stabilized and ESP restarted, will do some more investigation on the feed end.	53.92
26/03/25 16:06	26/03/25 16:42:	Power Boiler	Equipment Issue/Failure	Power boiler tripped due to a BMS related fault	Boiler restarted and stabilized, fault finding still in progress.	38.36
28/03/25 00:24	28/03/25 00:30:	Lime Kiln B ESP	Equipment Issue/Failure	Shooting out a big ball in the kiln caused the O2 to drop and CO to spike tripping the ESP	Obstruction removed and plant stabilized, ESP restarted.	25.47
13/04/25 04:18	13/04/25 04:24:	Recovery Boiler B	Equipment Issue/Failure	CO Spike when fuel feeder 1 tripped due to a blockage tripping the ESP.	Blockage cleared and boiler stabilized	24.57
22/04/25 12:48	22/04/25 13:06:	Lime Kiln B	Equipment Issue/Failure	Flue gas flow dropped off - Interlock tripped Kiln causing the Opacity exceedance.	Issue raised with E&I Department to investigate, plant restarted and stabilized.	28.11
24/04/25 13:18	24/04/25 13:36:	Lime Kiln B	Equipment Issue/Failure	Kiln Main flame tripped due to low flue gas flow.	E&I Department working on resolving the issue.	36.41
27/04/25 03:00	27/04/25 03:06:	Lime Kiln B ESP	Equipment Issue/Failure	ESP Field 1 current was observed dropping most likely due to a build-up release from the plates causing the exceedance.	Engineering solution under discussion.	26.90
01/05/25 06:54	01/05/25 07:06:	Lime Kiln B ESP	Equipment Issue/Failure	CO increased and ESP's Load reduced, indicating possible loading of plates caused by buildup letting go.	Monitored for a few minutes and ESP loaded up again and returned to normal.	28.00
07/05/25 08:42	07/05/25 08:48:	Lime Kiln B ESP	Equipment Issue/Failure	Kiln tripped on high CO caused while cleaning the backend.	Cleaning completed, equipment restarted and stabilized.	23.03
21/05/25 06:06	21/05/25 06:12:	Lime Kiln B ESP	Equipment Issue/Failure	While switching from the DCS controller to the K360 advanced controller, there was a step change (drop) in the ID fan controller --> high CO--> trip ESP	Speed up the ID fan in manual and restart	41.95
23/05/25 20:30	23/05/25 20:42:	Lime Kiln B	Equipment Issue/Failure	Gas generator on LK B tripped which tripped the kiln. With the restart, we had opacity exceedance.	Investigate the cause of the trip to prevent future occurrences.	21.98
30/05/25 07:00	30/05/25 07:06:	Power Boiler	Normal (Steady State)	The operator was testing the load burners which added more air into the furnace and the draft increased. Usually the test should be very short (<1min), but the operator left the burner in for approx 7 min with the air dampers in manual (which should go to E1 mode if running for longer than 1 min)	Stop the gas burner, communicate to ops team the impact of running the burner test for more than 1 min in MANUAL mode.	27.27

02/06/25 17:48	02/06/25 18:42:	Power Boiler EP	Equipment Issue/Failure	Lost Power Boiler EP1 field 2	Suspected there is bridging that is causing short circuit. Inspecting the bottom cone to look for blockage that builds up into the field. E&I to test circuit, card and controller.	40.46
03/06/25 05:30	03/06/25 05:36:	Power Boiler EP	Equipment Issue/Failure	Power boiler EP field 2 not running. This still works well in normal operation, but causes exceedances during sootblowing.	Complete sootblowing once per shift. Continue investigation on EP field 2.	21.37
03/06/25 16:12	03/06/25 17:00:	Power Boiler EP	Equipment Issue/Failure	Power boiler EP field 2 not running. This still works well in normal operation, but causes exceedances during sootblowing.	Complete sootblowing once per shift. Continue investigation on EP field 2.	37.47
04/06/25 04:24	04/06/25 04:30:	Power Boiler EP	Equipment Issue/Failure	Power boiler EP field 2 not running. This still works well in normal operation, but causes exceedances during sootblowing.	Complete sootblowing once per shift. Continue investigation on EP field 2.	21.64
04/06/25 04:48	04/06/25 04:54:	Power Boiler EP	Equipment Issue/Failure	Power boiler EP field 2 not running. This still works well in normal operation, but causes exceedances during sootblowing.	Complete sootblowing once per shift. Continue investigation on EP field 2.	23.91
04/06/25 15:30	04/06/25 15:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.82
04/06/25 15:54	04/06/25 16:00:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	22.12
05/06/25 04:30	05/06/25 05:00:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	24.85
06/06/25 02:30	06/06/25 02:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.68
06/06/25 02:48	06/06/25 03:00:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.69
07/06/25 04:12	07/06/25 04:18:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	22.03
07/06/25 15:30	07/06/25 15:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.96
08/06/25 00:12	08/06/25 00:18:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.04

08/06/25 08:06	08/06/25 08:12:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	22.05
08/06/25 08:42	08/06/25 08:48:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.88
08/06/25 09:12	08/06/25 09:24:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	26.41
08/06/25 15:18	08/06/25 15:24:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.22
08/06/25 15:48	08/06/25 15:54:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.05
09/06/25 00:30	09/06/25 00:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.17
09/06/25 02:30	09/06/25 02:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.44
09/06/25 07:12	09/06/25 07:18:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.10
09/06/25 09:00	09/06/25 09:06:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	24.14
09/06/25 14:00	09/06/25 14:06:	Lime Kiln B	Equipment Issue/Failure	Kiln upsets with lots of rocks coming down and also a few blockages caused opacity exceedance	Blockages and rocks processed, kiln stabilized, and opacity normalized	20.61
09/06/25 17:54	09/06/25 18:00:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational but have exceedances during soot blowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.06
10/06/25 01:12	10/06/25 01:30:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	27.91
10/06/25 03:18	10/06/25 03:24:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.28
10/06/25 12:18	10/06/25 12:24:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	26.54

10/06/25 12:30	10/06/25 12:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.50
10/06/25 13:48	10/06/25 13:54:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.02
11/06/25 01:24	11/06/25 01:30:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	25.53
11/06/25 02:30	11/06/25 02:42:	Lime Kiln B ESP	Equipment Issue/Failure	Mud Feed chute blocked up, cleaning caused opacity to exceed limit	Chute cleaned and Kiln returned to stable condition.	22.80
11/06/25 03:00	11/06/25 03:06:	Lime Kiln B ESP	Equipment Issue/Failure	Mud Feed chute blocked up, cleaning caused opacity to exceed limit	Chute cleaned and Kiln returned to stable condition.	32.59
11/06/25 14:00	11/06/25 14:06:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	22.23
11/06/25 14:36	11/06/25 14:42:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	34.38
11/06/25 15:36	11/06/25 15:42:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.30
12/06/25 04:24	12/06/25 04:30:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.17
12/06/25 05:00	12/06/25 05:06:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	20.23
12/06/25 14:06	12/06/25 14:12:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.27
12/06/25 14:30	12/06/25 14:36:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	22.69
13/06/25 01:18	13/06/25 01:30:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	21.17
13/06/25 04:30	13/06/25 05:00:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational, but have exceedances during sootblowing.	Multiple actions: See Noggin Hazard / Risk - 261343	25.61

15/06/25 05:12	15/06/25 05:24:	Power Boiler EP	Equipment Issue/Failure	PB EP field 2 short circuit. Normal running is fine with field 1 operational but have exceedances during soot blowing.	Multiple actions: See Noggin Hazard / Risk - 261343	24.16
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Sulphur Dioxide (SO2) **Period:** 60 Minutes **Limit:** 250.00 mg/Nm3

Start Time	End Time	Cause	Operational State	Explanation	Corrective Action	Max Reading
02/08/24 12:00	02/08/24 13:00:	Power Boiler	Equipment Issue/Failure	SOG Burner 3 tripped and SOG gasses was diverted to the Power boiler. operations had some issues to start burner with igniter issues.	Igniter was looked at by the electrical department and they got it going, Gasses was diverted back to the Recovery boiler.	306.95
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

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
25/08/24 23:06	25/08/24 23:12:	Recovery Boiler B ESP1	Equipment Issue/Failure	ESP 1 Field 3 powered down but did not trip causing the Exceedance	Issue still under investigation as there is no clear fault indicating the why the field powered down.	38.35
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
19/03/25 20:54	19/03/25 21:00:	Recovery Boiler B ESP1	Equipment Issue/Failure	Last night during heavy rain SIR unit on the 3rd field were acting weird powering up and down a few times before settling and we did exceed the opacity on ESP1 to the main stack.	Called Electrical Eng to investigate the issue, after the rain event all were back to normal.	30.82