Eskom

Mr. Mcebo Mkhatshwa
Air Quality Officer
Fezile Dabi District Municipality
P.O Box 10
Sasolburg
1947

Date:
19 June 2025

Enquiries:
W de Klerk
Tel +27 16 457 5308

LRP01PLA000 _0464/20250609

Dear Mr. Mkhatshwa

LETHABO POWER STATION EMISSION MONTHLY REPORT FOR MAY 2025

Please find attached Lethabo Power Station emission report for the month of May 2025.

Also attached are the Ambient Air Quality Monitoring Report, Complaints Register and the Fugitive Dust Fallout Monitoring Report for May 2025.

For any additional information please do not hesitate to contact us.

Yours sincerely

Karabo Rakgolela
GENERAL MANAGER

Generation Division
Lethabo Power Station
Viljoensdrif / Deneysville Free State
Private Bag X415 Vereeniging 1930 SA
Tel +27 16 457 5111 Fax +27 16 457 5712 www.eskom.co.za

Eskom Holdings SOC Ltd Reg No 2002/015527/30

Eskom	Report	Lethabo Power Station

Report name: **Lethabo Power Station May 2025 Emission Report**

Reference number: **LRP01PLA000 _0464/20250609**
Document Type: **Report**
Area of Applicability: **Environment**
Report Date: **June-2025**
Classification: **Controlled Disclosure**

Signatures:

Compiled by:
S Zulu
Boiler Engineer
Date: 19/06/2025

Verified by :
W de Klerk
Senior Advisor
Date: 2025 06 19

Reviewed by:
N. Mazibuko
BPE Manager
Date: 2025/06/19

Reviewed by:
pp
C Govinden
PE Manager
Date: 25/06/2025

Reviewed by:
L Nel
C&I Manager
Date: 2025-06-26

Reviewed by:
L Moreoane
Acting Environmental Manager
Date:2025-06-26

Approved by:
H Sewsunker
Techincal Manager
Date: 2025/06/30

Reviewed by:
pp
T. Njapha
Engineering Manager
Date: 2025/06/27

LETHABO POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License FDDM-MET-2011-08-P1

1. RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate May-2025
	Coal	Tons	*2 000 000*	*1 093 956*
	Fuel Oil	Tons	*1 700*	*841.840*
Production Rates	**Product / By-Product Name**	**Units**	**Maximum Production Capacity Permitted**	**Indicative Production Rate May-2025**
	Energy	GWh	*2 834.640*	*1 555.944*
	Ash	Tons	*770 000*	*403 013.239*
	RE Ash	kg/MWh	*Not Specified*	*259.015*

Note: Maximum energy rate is as per the maximum capacity stated in the AEL: [3 810 MW] x 24 hrs x days in Month/1000 to convert to GWh.

2. ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	*0.656 (Standard)*	*0.720*
Ash Content	%	*37.37 (Standard)*	*36.840*

Note: The "standard" is not necessary a limit, but merely a optimum indication, it will fluctuate as the coal quality changes. The Stipulated Range are the Station acceptance test values.

3. EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO_2	NOx
Unit 1	*100*	*2600*	*1100*
Unit 2	*100*	*2600*	*1100*
Unit 3	*100*	*2600*	*1100*
Unit 4	*100*	*2600*	*1100*
Unit 5	*100*	*2600*	*1100*
Unit 6	*50*	*2600*	*1100*

4. ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency May-2025	Technology Type	SO_3 Utlization May-2025
Unit 1	*Electrostatic Precipitator (ESP)*	*93.94%*	*SO_3*	*96.6%*
Unit 2	*Electrostatic Precipitator (ESP)*	*Unit Off-line*	*SO_3*	*Unit Off-line*
Unit 3	*Electrostatic Precipitator (ESP)*	*99.44%*	*SO_3*	*98.1%*
Unit 4	*Electrostatic Precipitator (ESP)*	*99.67%*	*SO_3*	*99.0%*
Unit 5	*Electrostatic Precipitator (ESP)*	*99.74%*	*SO_3*	*100.0%*
Unit 6	*Electrostatic Precipitator (ESP)*	*99.86%*	*SO_3*	*99.0%*

Note: ESP plant does not have bypass mode operation, hence plant 100% Utilised.

5. MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO_2	NO
Unit 1	*67.3*	*97.6*	*97.6*
Unit 2	*OFF*	*OFF*	*OFF*
Unit 3	*98.7*	*98.1*	*98.1*
Unit 4	*99.2*	*97.5*	*97.5*
Unit 5	*98.4*	*97.8*	*97.8*
Unit 6	*99.9*	*98.1*	*98.1*

Note: NOx emissions is measured as NO in PPM. Final NOx value is expressed as total NO_2

6. EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of May 2025

Associated Unit/Stack	PM (tons)	SO_2 (tons)	NO_x (tons)
Unit 1	4 339.8	2 344	1 115
Unit 2	0.0	0	0
Unit 3	470.7	4 106	1 599
Unit 4	258.5	3 779	1 763
Unit 5	*159.6*	*2976*	*1172*
Unit 6	90.5	3 776	1 676
SUM	5 319.2	16 981	7 325

Table 6.2: Operating days in compliance to PM AEL Limit - May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Unit 1	3	1	0	18	19	3 285.7
Unit 2	OFF	OFF	OFF	OFF	OFF	OFF
Unit 3	3	6	0	22	28	213.4
Unit 4	21	5	0	0	5	141.0
Unit 5	22	4	0	0	4	334.7
Unit 6	22	8	0	0	8	47.7
SUM	**71**	**24**	**0**	**40**	**64**	

Table 6.3: Operating days in compliance to SO_2 AEL Limit - May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO_2 (mg/Nm³)
Unit 1	23	0	0	0	0	1 730.8
Unit 2	OFF	OFF	OFF	OFF	OFF	OFF
Unit 3	31	0	0	0	0	1 776.4
Unit 4	27	0	0	0	0	1 964.1
Unit 5	27	0	0	0	0	1 728.4
Unit 6	31	0	0	0	0	1 932.9
SUM	**139**	**0**	**0**	**0**	**0**	

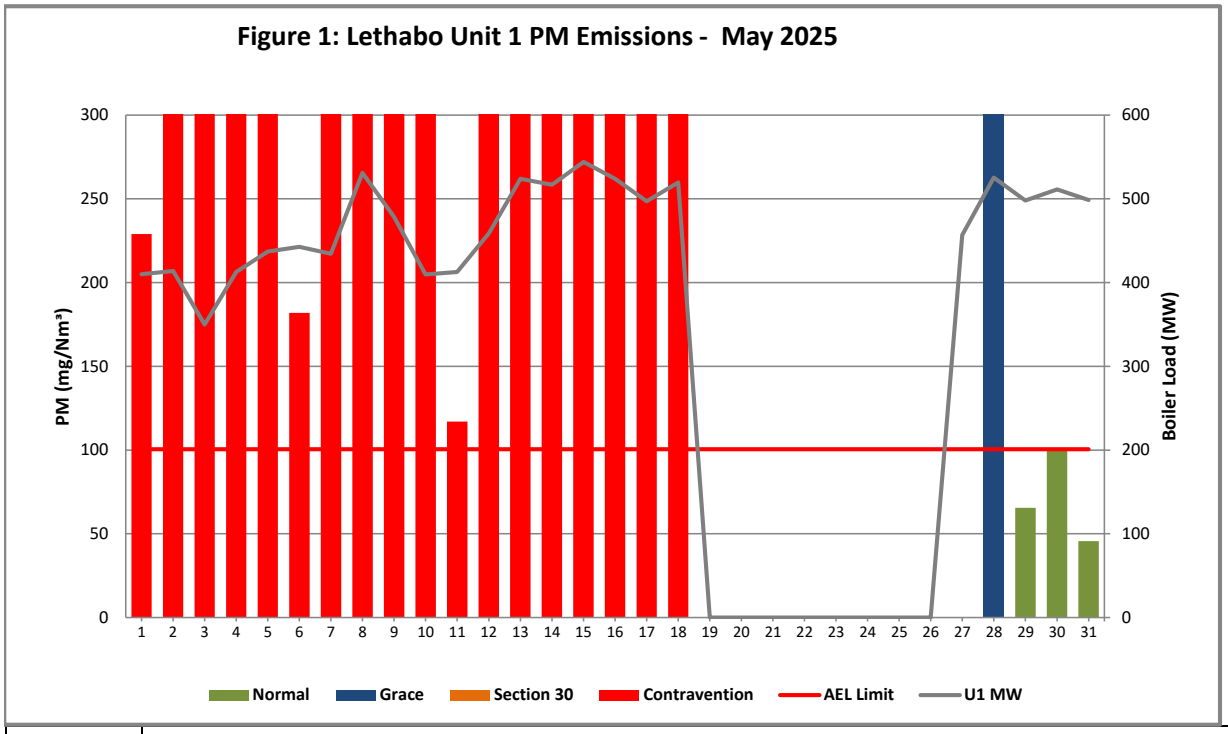
Table 6.4: Operating days in compliance to NOx AEL Limit - May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Unit 1	23	0	0	0	0	812.0
Unit 2	OFF	OFF	OFF	OFF	OFF	OFF
Unit 3	31	0	0	0	0	687.4
Unit 4	27	0	0	0	0	913.5
Unit 5	27	0	0	0	0	680.3
Unit 6	31	0	0	0	0	856.0
SUM	**139**	**0**	**0**	**0**	**0**	

Note: NOx emissions is measured as NO in PPM. Final NOx value is expressed as total NO_2

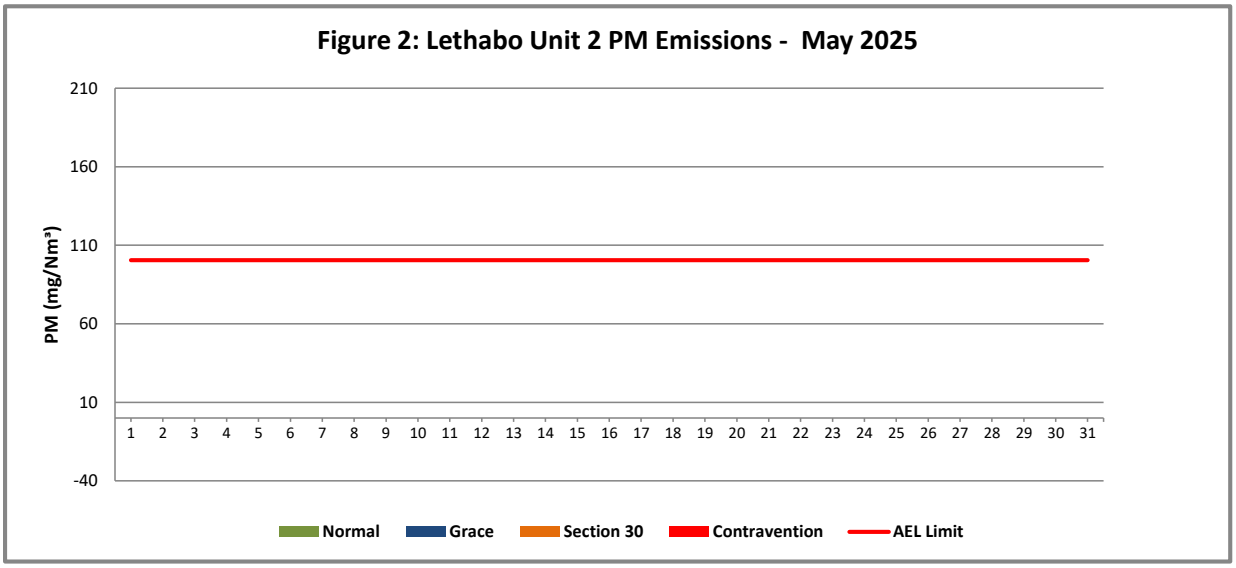
Table 6.5: Legend Description

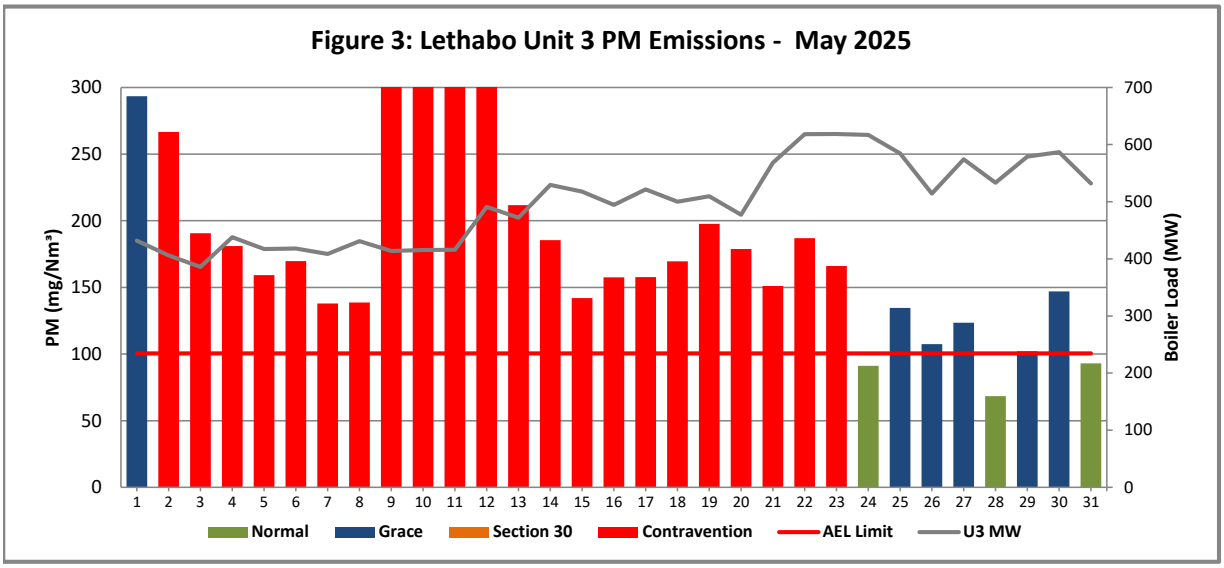
Condition	Colour	Description
Normal	GREEN	Emissions below Emission Limit Value (ELV)
Grace	BLUE	Emissions above the ELV during grace period
Section 30	ORANGE	Emissions above ELV during a NEMA S30 incident
Contravention	RED	Emissions above ELV but outside grace or S30 incident conditions



Reasons:	
Date	**Description**
01-May	Poor ESP casing performance. High hopper levels. DHP issues.
02-May	Poor ESP casing performance. High hopper levels. DHP issues.
03-May	Poor ESP casing performance. High hopper levels. DHP issues.
04-May	Poor ESP casing performance.High hopper levels.
05-May	Poor ESP casing performance.High hopper levels.Manual rapping done.
06-May	Poor ESP casing performance.High hopper levels.
07-May	Poor ESP casing performance. High hopper levels.
08-May	Poor ESP casing performance.High hopper levels.LHI ESP casing outage.
09-May	Poor ESP casing performance.
10-May	Poor ESP casing performance. High hopper levels.
11-May	Poor ESP casing performance.High hopper levels.
12-May	Poor ESP casing performance. High hopper levels.

13-May	Poor ESP casing performance. High hopper levels. LHI Precip casing inlet & outlet dampers closed.
14-May	Poor ESP casing performance. High hopper levels.
15-May	Poor ESP casing performance. High hopper levels.
16-May	Poor ESP casing performance.High hopper levels.
17-May	Poor ESP casing performance.High hopper levels.Chain conveyor tripping.Unit 1 shut down.
18-May	Poor ESP casing performance.High hopper levels.
28-May	The unit synchronised on 2025/05/26 @ 06:15, therefore the emissions need to be below the limit 2025/05/29 @ 06:15 and remain below the limit until 2025/05/30.

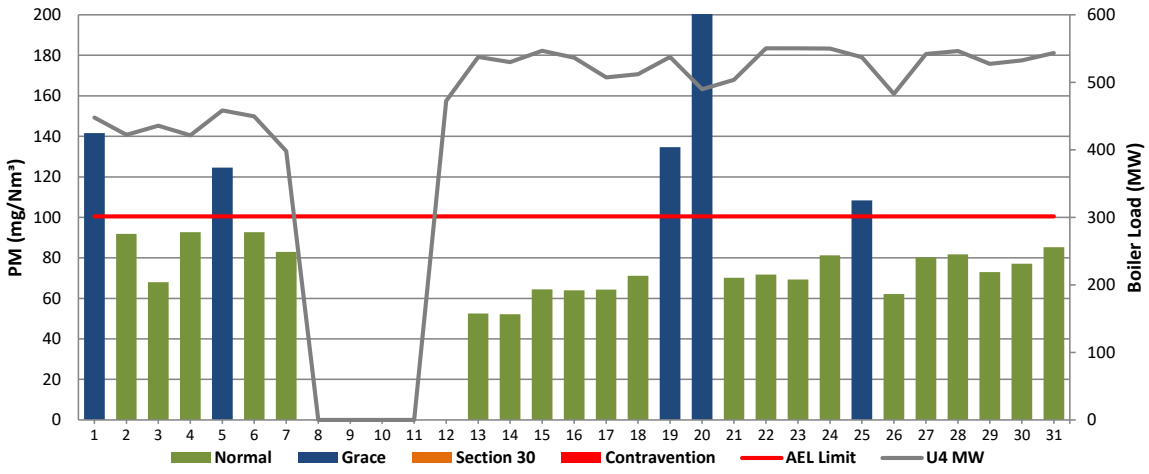




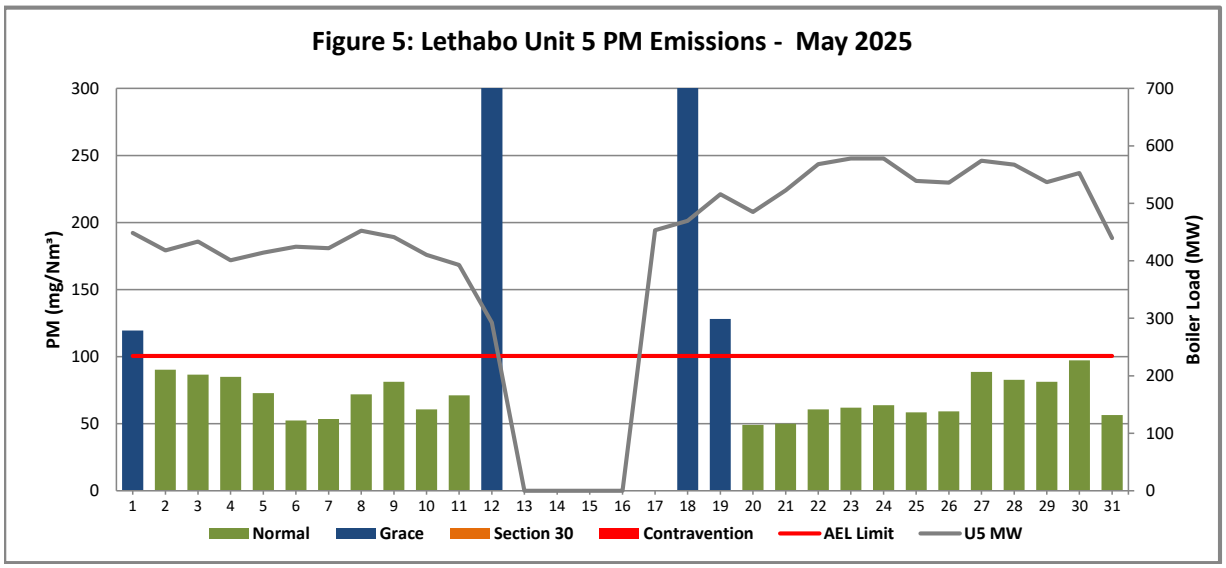
Reasons:	
Date	**Description**
01-May	Unit synchronized on load on the 29/04/2025 @09:14 and is expected to be below on the 02/05/2025 @09:14 and continue to be below the next day 03/5/2025. Poor ESP casing performance.
02-May	Unit synchronized on load on the 29/04/2025 @09:14 and is expected to be below on the 02/05/2025 @09:14 and continue to be below the next day 03/5/2025. Poor ESP casing performance.
03-May	Poor ESP casing performance.
04-May	Poor ESP casing performance.
05-May	Poor ESP casing performance.
06-May	Poor ESP casing performance.
07-May	Poor ESP casing performance.
08-May	Poor ESP casing performance. RHO ESP isolated for cooling.
09-May	Poor ESP casing performance. RHO ESP isolated for cooling.
10-May	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels.
11-May	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels.
12-May	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels.

13-May	Poor ESP casing performance. RHO ESP isolated for cooling.
14-May	Poor ESP casing performance.
15-May	Poor ESP casing performance.
16-May	Poor ESP casing performance.
17-May	Poor ESP casing performance.Lost so3 sulphur.
18-May	Poor ESP casing performance.
19-May	Poor ESP casing performance.
20-May	Poor ESP casing performance.High hopper levels.
21-May	Poor ESP casing performance.1 x high hopper level.
22-May	Poor ESP casing performance.Clean rapping brought forward.
23-May	Poor ESP casing performance. Sulphur plant issues. 1 X High hopper level.
25-May	Poor ESP casings(external issues).
26-May	Poor ESP casings. No SO3 plant due to low duct pressure.
27-May	Poor ESP casing performance.
29-May	Clean rapping brought forward. Poor ESP casings.
30-May	Poor ESP performance

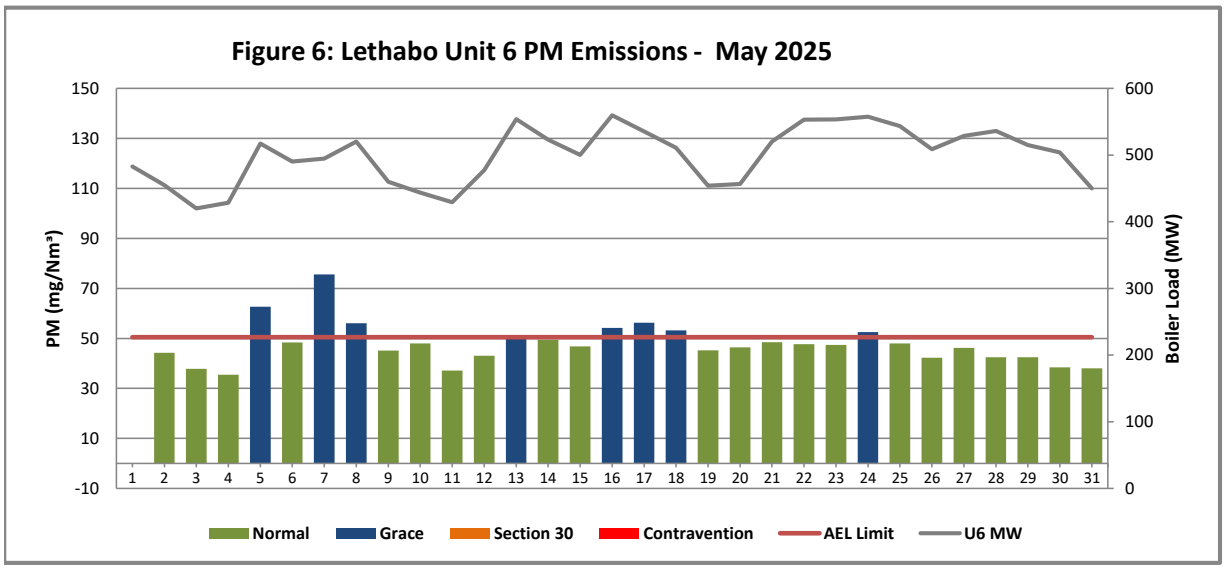
Figure 4: Lethabo Unit 4 PM Emissions - May 2025



Reasons:	
Date	**Description**
01-May	Poor ESP casing performance. High hopper levels.
05-May	Poor ESP casing performance. Clean rapping brought forward.
19-May	Correlation test, so3 plant off.
20-May	Correlation test, ESP plant Field 1, 2 3 were switched off.
25-May	Poor ESP casing performance.



Reasons:	
Date	**Description**
01-May	Poor ESP casing performance. High hopper lvels.
12-May	Unit 5 shut down.
18-May	The unit synchronised on 2025/05/17 @ 15:55, therefore the emissions need to be below the limit 2025/05/20 @ 15:55 and remain below the limit until 2025/05/21
19-May	The unit synchronised on 2025/05/17 @ 15:55, therefore the emissions need to be below the limit 2025/05/20 @ 15:55 and remain below the limit until 2025/05/21



Reasons:	
Date	**Description**
05-May	Correlation Test - High Emissions Test
07-May	Higher hopper levels and repairs of HFT radiators
08-May	Poor Casing performance , number of fields tripping and sparking
13-May	Poor Casing performance , number of fields tripping and sparking
16-May	Poor Casing performance , number of fields tripping and sparking
17-May	Poor Casing performance , number of fields tripping and sparking
18-May	Poor Casing performance due to high hopper levels which occurred
24-May	Poor Casing performance due to high hopper levels which occurred

Figure 7: Lethabo Unit 1 SO_2 Emissions - May 2025

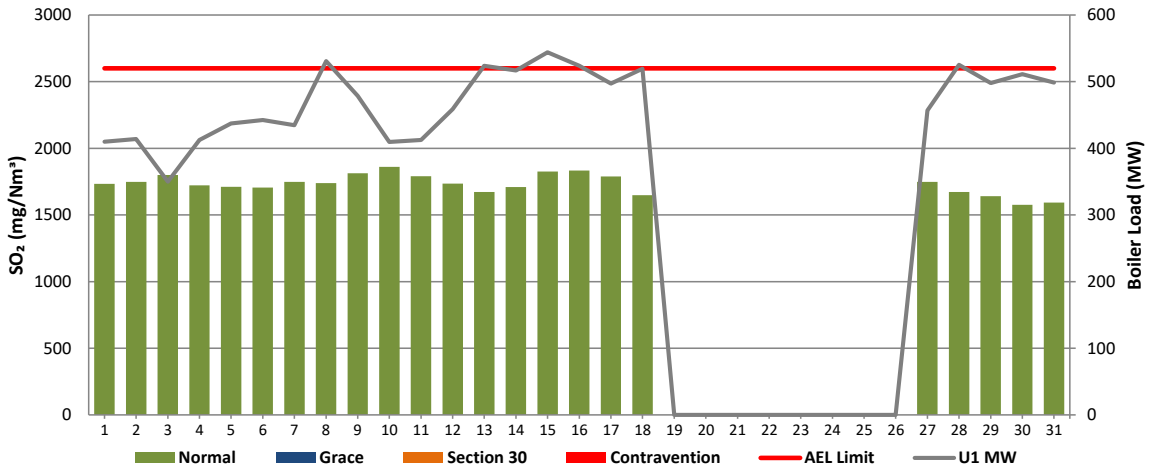


Figure 8: Lethabo Unit 2 SO_2 Emissions - May 2025

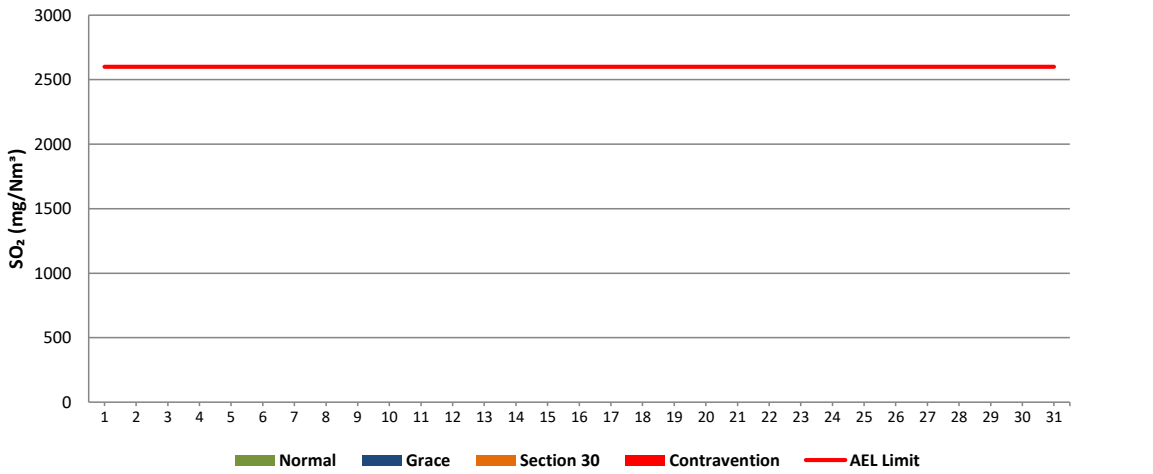


Figure 9: Lethabo Unit 3 SO_2 Emissions - May 2025

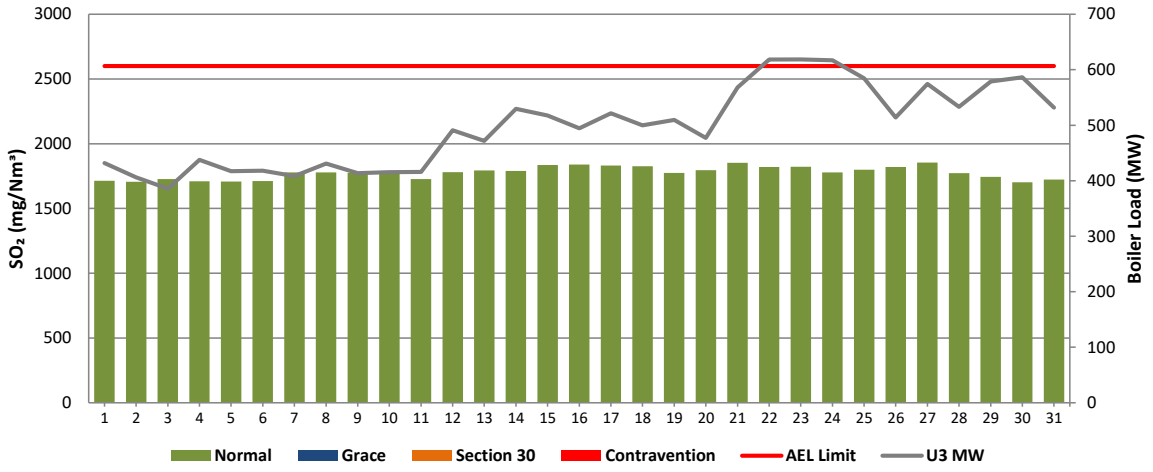
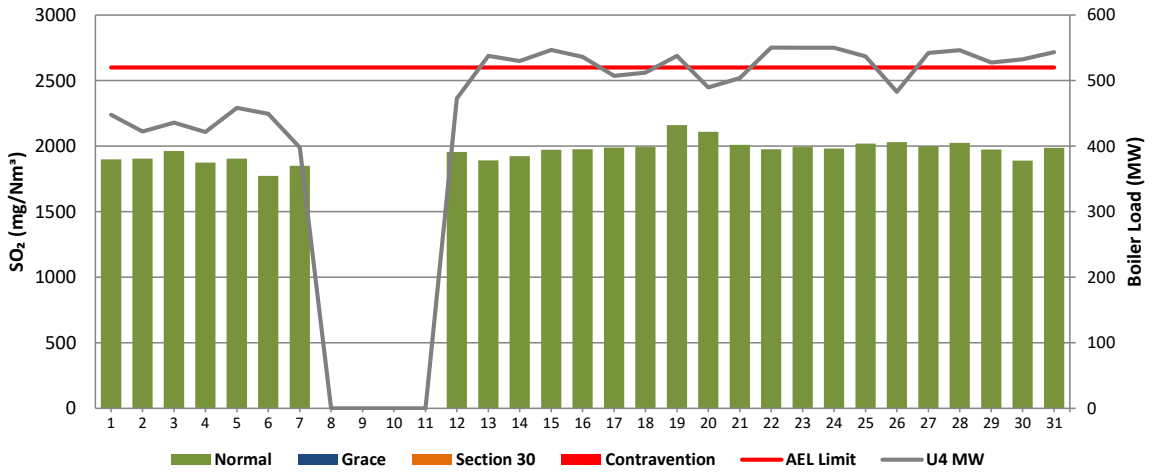


Figure 10: Lethabo Unit 4 SO_2 Emissions - May 2025



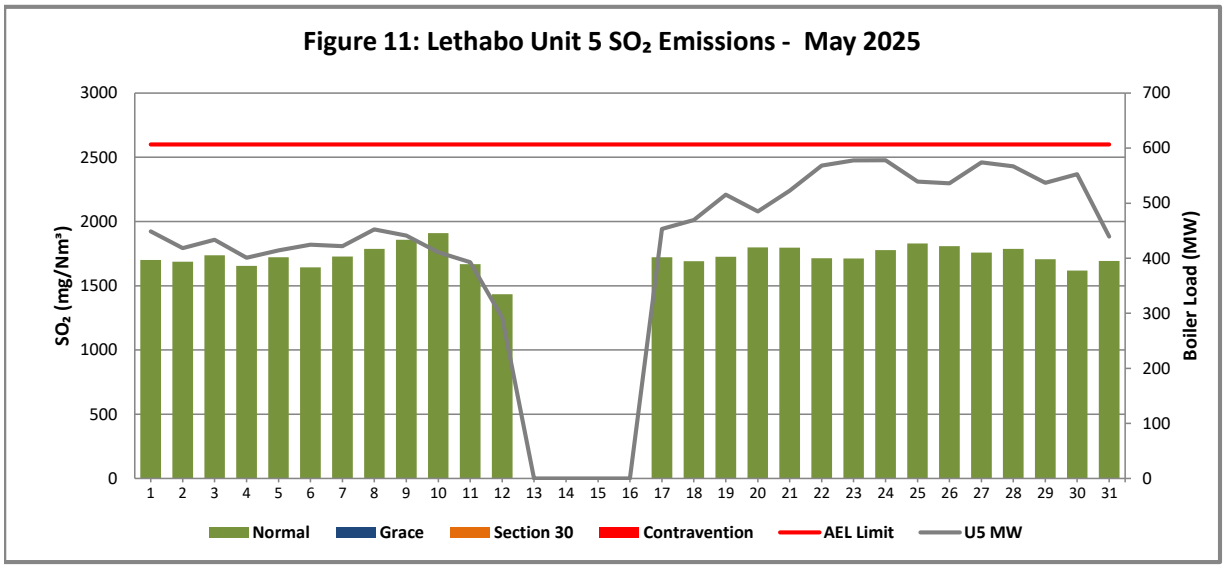


Figure 11: Lethabo Unit 5 SO₂ Emissions - May 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U5 MW

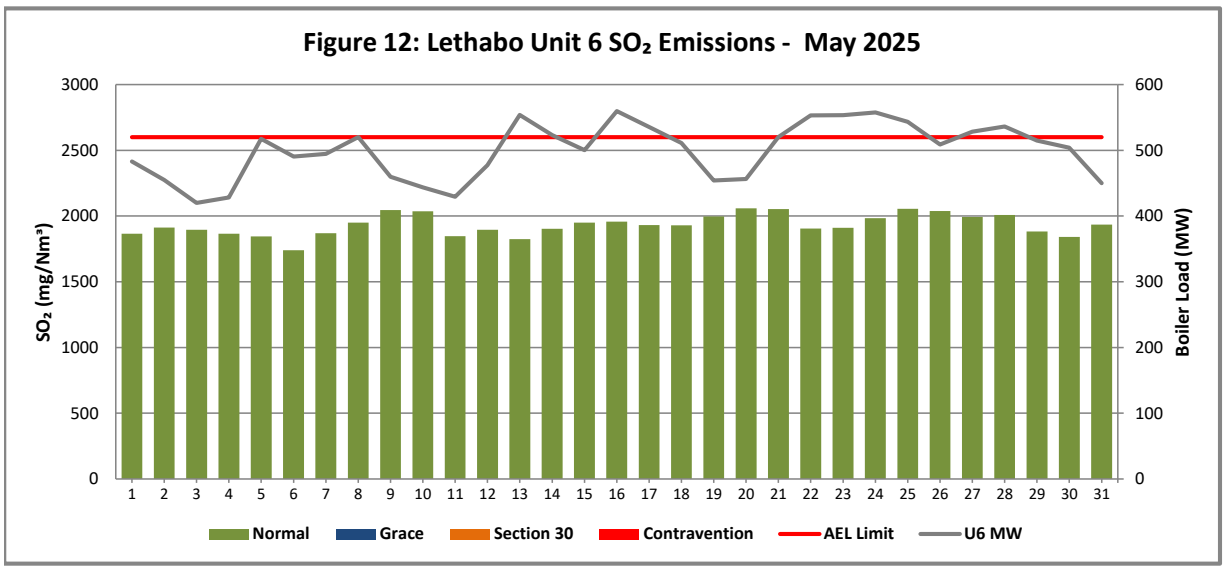


Figure 12: Lethabo Unit 6 SO₂ Emissions - May 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U6 MW

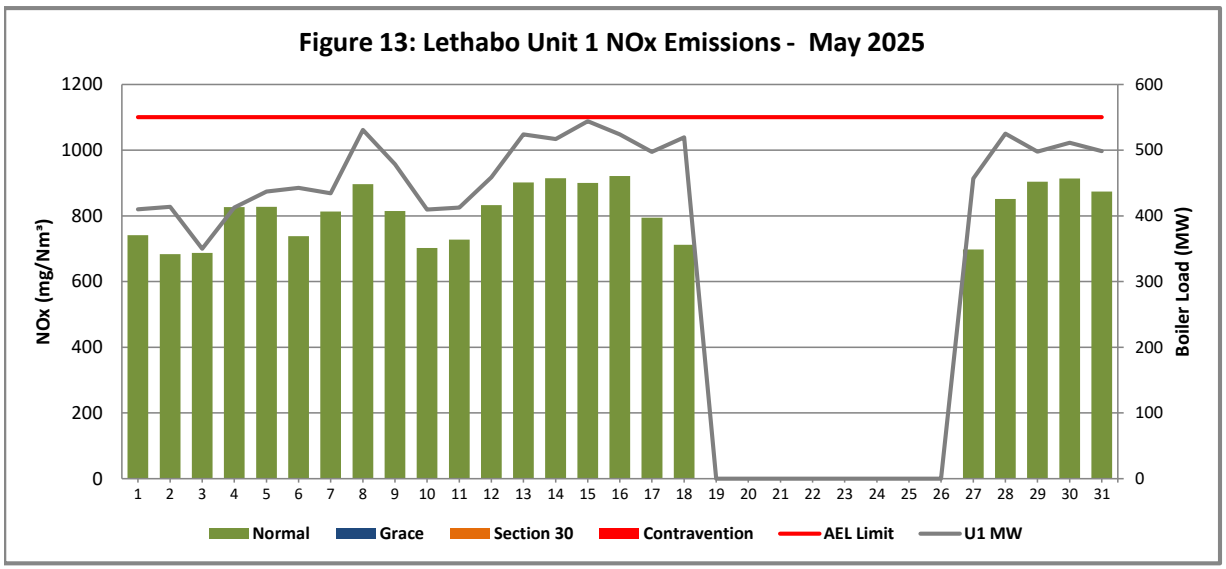


Figure 13: Lethabo Unit 1 NOx Emissions - May 2025
NOx (mg/Nm³)
Boiler Load (MW)
1200
1000
800
600
400
200
0
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U1 MW

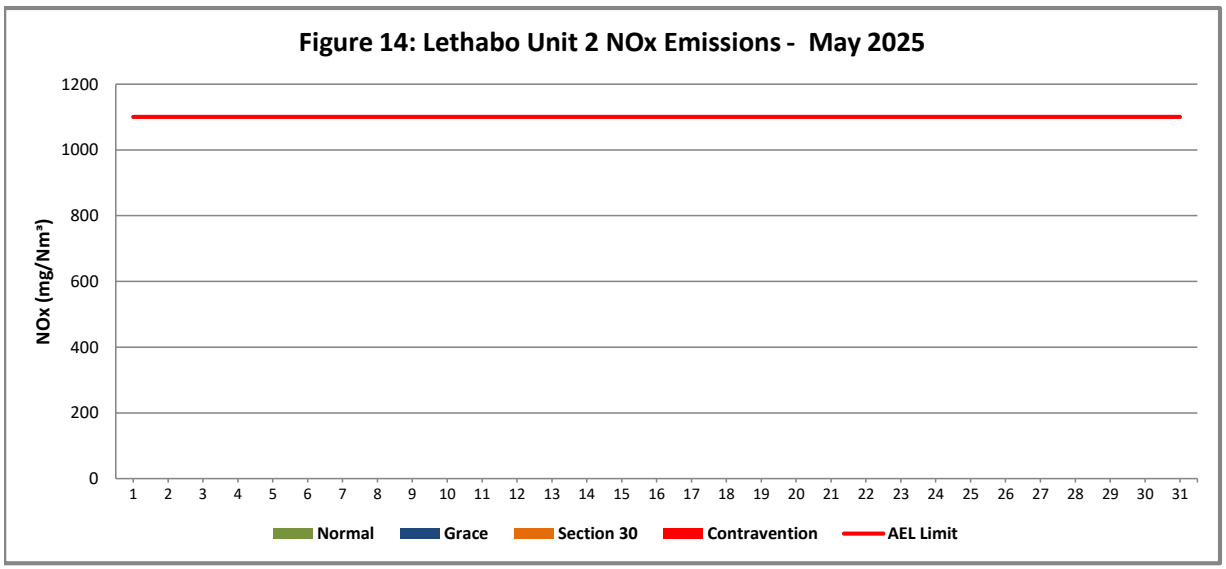


Figure 14: Lethabo Unit 2 NOx Emissions - May 2025
NOx (mg/Nm³)
1200
1000
800
600
400
200
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit

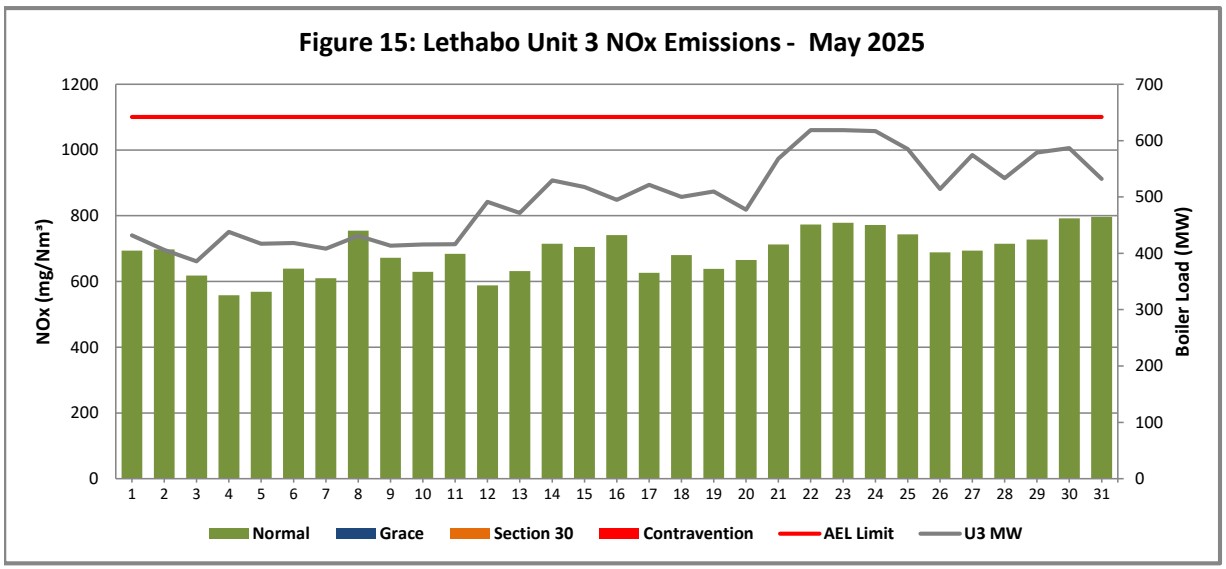


Figure 15: Lethabo Unit 3 NOx Emissions - May 2025
NOx (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U3 MW

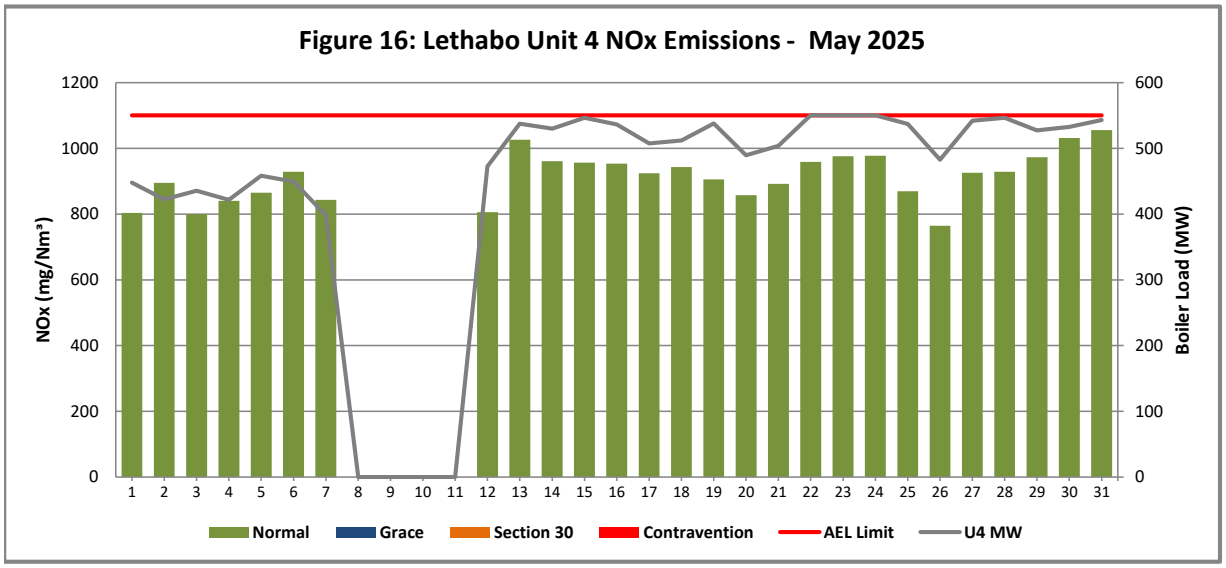


Figure 16: Lethabo Unit 4 NOx Emissions - May 2025
NOx (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U4 MW

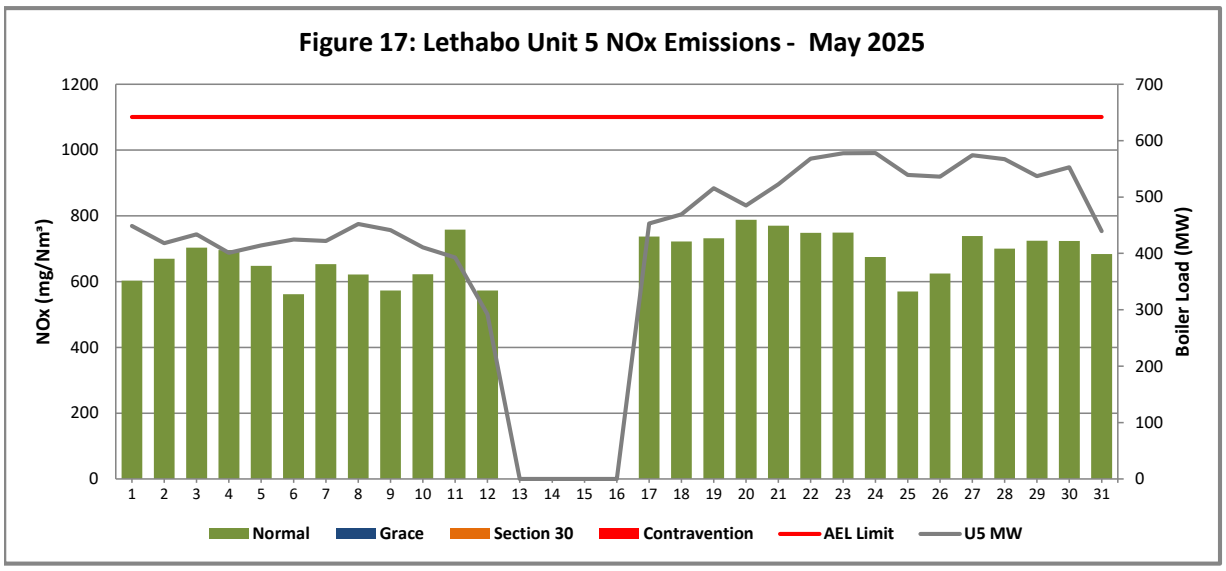


Figure 17: Lethabo Unit 5 NOx Emissions - May 2025
NOx (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U5 MW

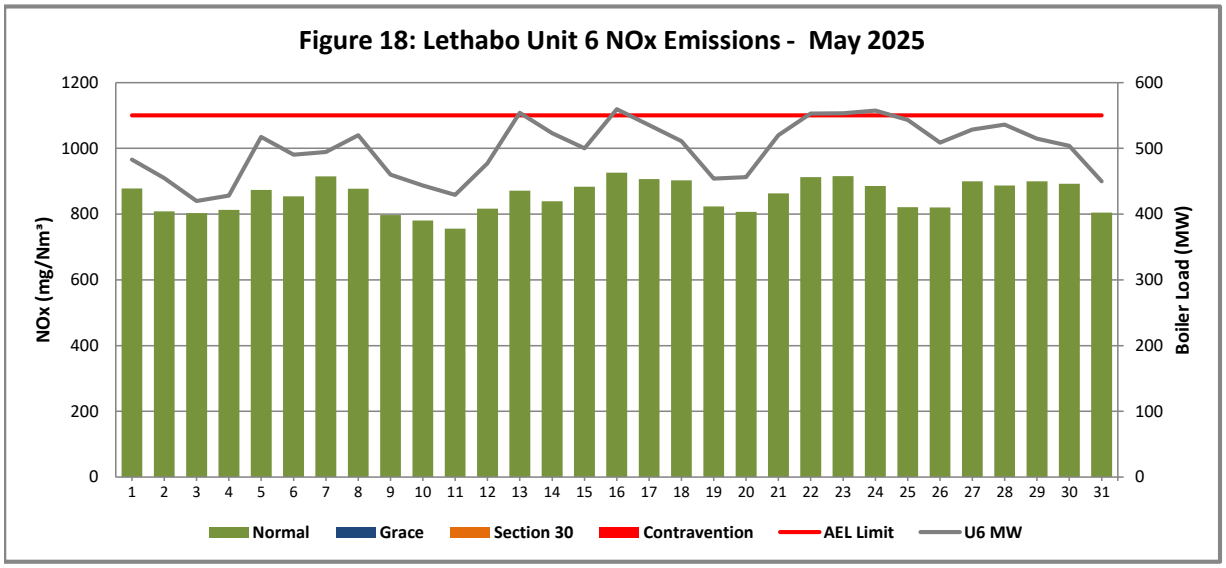


Figure 18: Lethabo Unit 6 NOx Emissions - May 2025
NOx (mg/Nm³)
Boiler Load (MW)
Normal
Grace
Section 30
Contravention
AEL Limit
U6 MW

7 SHUT DOWN AND LIGHT UP INFORMATION

Table 7.1: PM Start-up information for the month of May 2025

Unit No.1	*IN Outage*							
Breaker Open (BO)	*11:01 pm*	*2025/05/18*						
Draught Group (DG) Shut Down (SD)	*12:00 pm*	*2025/05/19*						
BO to DG SD (duration)	*00:12:59*	DD:HH:MM						
Fires in time	*2:00 am*	*2025/05/26*						
Synch. to Grid (or BC)	*6:15 am*	*2025/05/26*						
Fires in to BC (duration)	*00:04:15*	DD:HH:MM						
Emissions below limit from BC (end date)	*not > limit*	*not > limit*						
Emissions below limit from BC (duration)	*n/a*	DD:HH:MM						

Unit No.2	*MGO (ESP& SO3 Plant)*							
Breaker Open (BO)	*12:01 am*	*2025/05/01*						
Draught Group (DG) Shut Down (SD)	*1:00 am*	*2025/05/01*						
BO to DG SD (duration)	*00:00:59*	DD:HH:MM						
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)		DD:HH:MM						
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)		DD:HH:MM						

Unit No.3								
Breaker Open (BO)								
Draught Group (DG) Shut Down (SD)								
BO to DG SD (duration)								
Fires in time								
Synch. to Grid (or BC)								
Fires in to BC (duration)								
Emissions below limit from BC (end date)								
Emissions below limit from BC (duration)								

Unit No.4	*BTL Repairs*							
Breaker Open (BO)	*11:35 am*	*2025/05/07*						
Draught Group (DG) Shut Down (SD)	*11:00 pm*	*2025/05/07*						
BO to DG SD (duration)	*00:11:25*	DD:HH:MM						
Fires in time	*4:00 pm*	*2025/05/11*						
Synch. to Grid (or BC)	*11:57 pm*	*2025/05/11*						
Fires in to BC (duration)	*00:07:57*	DD:HH:MM						
Emissions below limit from BC (end date)	*not > limit*	*not > limit*						
Emissions below limit from BC (duration)	*n/a*	DD:HH:MM						

Unit No.5	*Repair Main Turbine overpeed rings*		*T8F Coal coveyor Out of Service*					
Breaker Open (BO)	*2:05 am*	*2025/05/12*	*12:58 am*	*2025/05/31*				
Draught Group (DG) Shut Down (SD)	*2:05 pm*	*2025/05/12*	*1:30 am*	*2025/05/31*				
BO to DG SD (duration)	*00:12:00*	DD:HH:MM	*00:00:32*	DD:HH:MM				
Fires in time	*3:00 am*	*2025/05/17*	*7:00 pm*	*2025/05/31*				
Synch. to Grid (or BC)	*3:55 pm*	*2025/05/17*	*11:59 pm*	*2025/05/31*				
Fires in to BC (duration)	*00:12:55*	DD:HH:MM	*00:04:59*	DD:HH:MM				
Emissions below limit from BC (end date)	*not > limit*	*not > limit*	*not > limit*	*not > limit*				
Emissions below limit from BC (duration)	*n/a*	DD:HH:MM	*n/a*	DD:HH:MM				

Unit No.6	*FRF Flexible Pipe Replacement*		*T8F Coal conveyor Out of Service*					
Breaker Open (BO)	*12:10 am*	*2025/05/01*	*2:27 am*	*2025/05/31*				
Draught Group (DG) Shut Down (SD)	*1:00 am*	*2025/05/01*	*3:00 am*	*2025/05/31*				
BO to DG SD (duration)	*00:00:50*	DD:HH:MM	*00:00:33*	DD:HH:MM				
Fires in time	*3:00 am*	*2025/05/01*	*2:00 pm*	*2025/05/31*				
Synch. to Grid (or BC)	*7:09 am*	*2025/05/01*	*11:59 pm*	*2025/05/31*				
Fires in to BC (duration)	*00:04:09*	DD:HH:MM	*00:09:59*	DD:HH:MM				
Emissions below limit from BC (end date)	*not > limit*	*not > limit*	*not > limit*	*not > limit*				
Emissions below limit from BC (duration)	*n/a*	DD:HH:MM	*n/a*	DD:HH:MM				

7.2: Point Source emissions released during start-up (fires-in) and Shut-down (SD) for the month of May 2025 in mg/Nm³

8. MAINTENANCE

Unit 1				
Beginning of Maintenance	2025/05/10 00:00:00			
Reason for Maintenance	RHO Casing repairs			
End (Time):	2025/05/10 20:05:00			
Duration	20:05:00			

Unit 2				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 3				
Beginning of Maintenance	2025/05/09 07:00:00			
Reason for Maintenance	RHO Casing Repairs			
End (Time):	2025/05/12 16:27:00			
Duration	81:27:00			

Unit 4				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 5				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

Unit 6				
Beginning of Maintenance				
Reason for Maintenance				
End (Time):				
Duration				

9. GENERAL

CO2 and Velocity Monitors Low Reliability Units 1-6:
Due to correction of bad data as per internal emission data integrity review actions in 2021 and 2022. Bad Velocity data and Bad CO2 data were corrected/removed as per the review actions and findings.

Unit 1 Monitor Reliability
01/05/2025 -03/05/2025: PM monitor Reliability low due to monitor max out.

Unit 1 Monitor Reliability
07/05/2025 - 08/05/2025: PM monitor Reliability low due to monitor max out.
Unit 1 Monitor Reliability
10/05/2025: PM monitor Reliability low due to monitor max out.

Unit 1 Monitor Reliability
06/04/2025: PM monitor Reliability low due to electrical board issues.

Unit 1 Monitor Reliability
12/05/2025 - 17/05/2025: PM monitor Reliabilty low due to monitor max out.
Unit 5 Monitor Reliability
18/05/2025: PM monitor REliability low due to mnitor max out.

Unit 1, 3,4, 5 & 6 Gaseous Monitor Reliability
29/05/2025: Gas Monitor Reliability low (CIE outside plant was busy with foxboro server replacement, our CEMS data is linked there, hence the monitor unreliability)
Unit 1
On the 24/04/2025 to 18/05/2025, unit 1 registered a non-compliance as the unit exceeded for greater than 72 hrs light up conditions due to poor ESP performance, high hopper levels and DHP issues.

Unit 3
On the 22/04/2025 to 23/05/2025, unit 3 registered a non-compliance as the unit exceeded for greater than 72 hrs light up conditions due to poor ESP performance, high hopper levels, DHP issues.

ADDENDUM TO MONTHLY EMISSIONS REPORT

10. S30 INCIDENT OR LEGAL CONTRAVENTION REGISTER

To be completed in the case of a S30 incident or a legal contravention:

Unit no	Incident Start Date	Incident End Date	Incident Cause	Remedial action	S30 initial notification sent	Date S30 investigation report sent	Date DEA Acknowledg-ment	Date DEA Acceptable	Comments / Reference No.
3	02-May-25	23-May-25	HFT faults	HFT Repairs	06-May-25				Investigation in progress

11. PARTICULATE EMISSIONS

EMISSION RATE (ACTUAL EMISSION/MWh GENERATED - kg/MWh)

MONTH	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	STATION
May-24	0.25	0.91	0.56	1.10	0.81	OFF	0.75
Jun-24	0.30	1.03	0.45	0.68	0.54	OFF	0.60
Jul-24	0.43	2.04	0.55	0.75	0.68	1.28	0.87
Aug-24	0.48	0.91	0.69	0.47	0.53	0.18	0.54
Sep-24	0.61	0.70	0.69	0.67	0.76	0.24	0.60
Oct-24	0.34	0.62	OFF	0.61	0.78	0.33	0.57
Nov-24	0.42	0.50	OFF	0.90	0.75	0.26	0.56
Dec-24	0.56	0.57	OFF	0.88	0.63	0.24	0.54
Jan-25	1.08	0.51	OFF	0.82	1.47	0.71	0.90
Feb-25	1.50	0.56	7.43	0.49	1.94	0.50	1.47
Mar-25	1.38	0.67	1.83	0.58	2.33	0.46	1.25
Apr-25	16.13	OFF	1.50	6.27	2.31	0.40	5.12
May-25	16.16	OFF	1.28	0.81	0.57	0.25	3.33

ADDENDUM TO MONTHLY EMISSIONS REPORT

12. DAILY EMISSIONS FIGURES

Final Dust Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit (U1-5)**	**Limit (U6)**
01-May	11941	OFF	293	142	120	OFF	100	50
02-May	5404	OFF	267	92	90	44	100	50
03-May	8638	OFF	191	68	87	38	100	50
04-May	1129	OFF	181	93	85	36	100	50
05-May	890	OFF	159	125	73	63	100	50
06-May	182	OFF	170	93	52	48	100	50
07-May	3243	OFF	138	83	53	76	100	50
08-May	3139	OFF	139	OFF	72	56	100	50
09-May	1319	OFF	577	OFF	81	45	100	50
10-May	8316	OFF	658	OFF	61	48	100	50
11-May	117	OFF	520	OFF	71	37	100	50
12-May	2280	OFF	550	OFF	6244	43	100	50
13-May	4676	OFF	212	53	OFF	51	100	50
14-May	2729	OFF	185	52	OFF	49	100	50
15-May	2150	OFF	142	65	OFF	47	100	50
16-May	4162	OFF	158	64	OFF	54	100	50
17-May	3554	OFF	158	64	OFF	56	100	50
18-May	7889	OFF	170	71	676	53	100	50
19-May	OFF	OFF	198	135	128	45	100	50
20-May	OFF	OFF	179	1608	49	46	100	50
21-May	OFF	OFF	151	70	50	49	100	50
22-May	OFF	OFF	187	72	61	48	100	50
23-May	OFF	OFF	166	69	62	47	100	50
24-May	OFF	OFF	91	81	64	52	100	50
25-May	OFF	OFF	135	108	59	48	100	50
26-May	OFF	OFF	107	62	59	42	100	50
27-May	OFF	OFF	124	80	89	46	100	50
28-May	318	OFF	68	82	83	43	100	50
29-May	65	OFF	102	73	81	42	100	50
30-May	99	OFF	147	77	97	38	100	50
31-May	46	OFF	93	85	56	38	100	50

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final SOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit**
01-May	1733	OFF	1713	1899	1700	1866	2600
02-May	1747	OFF	1706	1905	1687	1912	2600
03-May	1800	OFF	1727	1963	1738	1896	2600
04-May	1721	OFF	1710	1874	1655	1866	2600
05-May	1711	OFF	1708	1904	1722	1844	2600
06-May	1705	OFF	1712	1773	1644	1739	2600
07-May	1747	OFF	1779	1850	1727	1869	2600
08-May	1738	OFF	1778	OFF	1787	1949	2600
09-May	1813	OFF	1774	OFF	1857	2045	2600
10-May	1860	OFF	1775	OFF	1911	2036	2600
11-May	1791	OFF	1727	OFF	1667	1846	2600
12-May	1734	OFF	1780	1956	1434	1896	2600
13-May	1672	OFF	1794	1891	OFF	1823	2600
14-May	1709	OFF	1791	1923	OFF	1903	2600
15-May	1826	OFF	1835	1972	OFF	1949	2600
16-May	1832	OFF	1839	1977	OFF	1957	2600
17-May	1789	OFF	1832	1990	1722	1931	2600
18-May	1649	OFF	1826	1992	1691	1929	2600
19-May	OFF	OFF	1775	2161	1726	1996	2600
20-May	OFF	OFF	1795	2109	1798	2058	2600
21-May	OFF	OFF	1853	2009	1797	2054	2600
22-May	OFF	OFF	1821	1977	1714	1904	2600
23-May	OFF	OFF	1822	1993	1712	1910	2600
24-May	OFF	OFF	1779	1981	1778	1984	2600
25-May	OFF	OFF	1799	2020	1830	2055	2600
26-May	OFF	OFF	1821	2031	1809	2038	2600
27-May	1748	OFF	1854	2001	1758	1994	2600
28-May	1673	OFF	1773	2025	1787	2008	2600
29-May	1642	OFF	1745	1975	1706	1882	2600
30-May	1577	OFF	1702	1890	1618	1841	2600
31-May	1592	OFF	1723	1988	1694	1935	2600

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final NOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit**
01-May	741	OFF	694	804	603	878	1100
02-May	684	OFF	697	895	670	808	1100
03-May	687	OFF	618	800	703	803	1100
04-May	827	OFF	558	841	696	813	1100
05-May	828	OFF	569	865	648	874	1100
06-May	738	OFF	639	929	562	854	1100
07-May	813	OFF	610	844	653	915	1100
08-May	896	OFF	755	OFF	622	877	1100
09-May	815	OFF	672	OFF	573	797	1100
10-May	702	OFF	629	OFF	622	781	1100
11-May	728	OFF	684	OFF	758	756	1100
12-May	833	OFF	588	806	573	817	1100
13-May	902	OFF	632	1026	OFF	872	1100
14-May	914	OFF	714	961	OFF	839	1100
15-May	900	OFF	705	957	OFF	883	1100
16-May	922	OFF	741	953	OFF	926	1100
17-May	795	OFF	626	924	737	907	1100
18-May	712	OFF	680	943	722	903	1100
19-May	OFF	OFF	638	905	732	824	1100
20-May	OFF	OFF	666	858	788	807	1100
21-May	OFF	OFF	712	892	770	863	1100
22-May	OFF	OFF	773	959	748	913	1100
23-May	OFF	OFF	778	976	749	916	1100
24-May	OFF	OFF	772	977	675	886	1100
25-May	OFF	OFF	743	870	570	821	1100
26-May	OFF	OFF	689	765	624	820	1100
27-May	697	OFF	694	926	738	900	1100
28-May	851	OFF	715	929	700	887	1100
29-May	904	OFF	728	973	724	900	1100
30-May	914	OFF	792	1032	724	893	1100
31-May	874	OFF	797	1055	684	804	1100

13. AVAILABILITY

ESP utilisation

Availability												
Month	Unit 1	Days Affected	Unit 2	Days Affected	Unit 3	Days Affected	Unit 4	Days Affected	Unit 5	Days Affected	Unit 6	Days Affected
May-24	100.00%	0.0	97.91%	2.6	100.00%	0.0	97.67%	2.9	99.38%	0.8	100.00%	0.00%
Jun-24	100.00%	0.00	99.17%	1.00	98.09%	2.29	98.32%	2.01	100.00%	0.00	100.00%	0.00
Jul-24	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	100.00%	0.00%
Aug-24	98.59%	1.8	100.00%	0.0	99.21%	1.0	100.00%	0.0	99.84%	0.2	100.00%	0.00%
Sep-24	98.55%	1.74	99.84%	0.19	100.00%	0.00	99.12%	1.06	99.16%	1.01	100.00%	0.00
Oct-24	99.19%	1.0	100.00%	0.0	100.00%	0.0	100.00%	0.0	97.67%	2.9	100.00%	0.00%
Nov-24	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Dec-24	99.39%	0.76	99.24%	0.95	100.00%	0.00	99.18%	1.01	99.96%	0.05	99.27%	0.91
Jan-25	98.99%	1.3	100.00%	0.0	100.00%	0.0	100.00%	0.0	98.40%	2.0	100.00%	0.0
Feb-25	99.18%	0.9	99.84%	0.2	100.00%	0.0	100.00%	0.0	100.00%	0.0	98.90%	1.2
Mar-25	98.08%	2.4	99.27%	0.9	98.99%	1.3	100.00%	0.0	95.52%	5.6	100.00%	0.0
Apr-25	98.21%	2.15	100.00%	0.00	100.00%	0.00	100.00%	0.00	97.50%	3.00	98.48%	1.82
May-25	99.33%	0.84	100.00%	0.00	97.26%	3.39	100.00%	0.00	100.00%	0.00	100.00%	0.00

SO_3 plant utilisation

Availability												
Month	Unit 1	Days Affected	Unit 2	Days Affected	Unit 3	Days Affected	Unit 4	Days Affected	Unit 5	Days Affected	Unit 6	Days Affected
May-24	99.45%	0.2	99.87%	0.0	96.37%	1.1	99.87%	0.0	100.00%	0.0	Off-line	Off-line
Jun-24	97.08%	0.88	69.03%	9.29	100.00%	0.00	99.34%	0.20	99.77%	0.07	Off-line	Off-line
Jul-24	98.30%	0.5	41.43%	18.2	99.73%	0.1	99.58%	0.1	98.39%	0.5	53.66%	14.37
Aug-24	99.46%	0.2	91.70%	2.6	100.00%	0.0	97.98%	0.6	99.59%	0.1	96.68%	1.03
Sep-24	100.00%	0.0	89.45%	3.2	99.33%	0.2	99.84%	0.0	99.58%	0.1	99.92%	0.02
Oct-24	99.85%	0.0	95.65%	1.3	Off-line	Off-line	98.92%	0.3	93.82%	1.9	99.59%	0.13
Nov-24	99.99%	0.0	96.60%	1.0	Off-line	Off-line	99.17%	0.3	97.46%	0.8	99.21%	0.24
Dec-24	52.80%	14.6	27.08%	22.6	Off-line	Off-line	77.33%	7.0	66.67%	10.3	60.94%	12.11
Jan-25	95.59%	1.4	93.50%	2.0	Off-line	Off-line	96.18%	1.2	90.28%	3.0	94.33%	1.8
Feb-25	91.37%	2.4	95.28%	1.3	67.36%	913.89%	95.45%	1.3	91.35%	2.4	97.77%	0.6
Mar-25	98.52%	0.5	96.36%	1.1	85.05%	463.48%	98.61%	0.4	99.91%	0.0	88.42%	3.6
Apr-25	95.63%	1.3	Off-line	Offline	91.27%	261.90%	85.62%	4.3	88.61%	3.4	99.78%	0.1
May-25	96.57%	1.1	0.00%	31.0	98.12%	58.33%	99.01%	0.3	100.00%	0.0	99.03%	0.3

ADDENDUM TO MONTHLY EMISSIONS REPORT

Particulate Emission Monitors

Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
May-24	98.93%	93.01%	97.45%	91.88%	95.47%	OFF
Jun-24	98%	87%	97%	97%	99%	OFF
Jul-24	90.95%	73.05%	97.04%	95.37%	98.85%	61.98%
Aug-24	95.70%	91.44%	99.38%	99.60%	98.95%	99.58%
Sep-24	98.11%	94.42%	100.00%	98.42%	96.20%	99.64%
Oct-24	99.65%	94.32%	OFF	98.75%	96.51%	98.18%
Nov-24	99.43%	99.40%	OFF	99.31%	94.41%	98.54%
Dec-24	100.00%	96.61%	OFF	98.22%	96.26%	99.60%
Jan-25	96.64%	98.67%	OFF	87.85%	92.93%	99.02%
Feb-25	98.72%	97.70%	85.64%	99.62%	93.53%	98.72%
Mar-25	93.15%	96.04%	96.08%	99.85%	92.61%	97.36%
Apr-25	71.99%	OFF	99.17%	87.49%	94.03%	99.11%
May-25	67.27%	OFF	98.66%	99.17%	98.40%	99.86%

Gaseous Emission Monitors

Availability												
	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Unit 6	
Month	SO_x	NO_x	SO_x	NO_x	SO_x	NO_x	SO_x	NO_x	SO_x	NO_x	SO_x	NO_x
May-24	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	98.79%	98.79%	98.37%	98.37%	OFF	OFF
Jun-24	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	OFF	OFF
Jul-24	99.75%	99.89%	100.00%	100.00%	100.00%	100.00%	99.46%	99.73%	100.00%	100.00%	73.40%	70.78%
Aug-24	99.87%	100.00%	99.80%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Sep-24	100.00%	100.00%	100.00%	99.68%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Oct-24	99.85%	100.00%	99.58%	99.72%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.65%	99.65%
Nov-24	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.86%	100.00%
Dec-24	57.50%	57.50%	37.50%	37.50%	0.00%	0.00%	79.71%	79.71%	66.67%	66.67%	65.65%	65.73%
Jan-25	99.26%	99.09%	99.33%	99.33%	0.00%	0.00%	100.00%	96.43%	100.00%	100.00%	100.00%	100.00%
Feb-25	98.21%	100.00%	100.00%	99.60%	86.08%	85.19%	96.01%	96.01%	94.55%	94.55%	96.18%	96.18%
Mar-25	93.82%	99.87%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Apr-25	98.61%	98.61%	OFF	OFF	98.61%	98.61%	92.56%	91.94%	99.17%	99.17%	99.17%	99.17%
May-25	97.64%	97.64%	OFF	OFF	98.12%	98.12%	97.53%	97.53%	97.82%	97.82%	98.12%	98.12%

Oxygen Monitor Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Apr-24	100.00%	100.00%	99.86%	100.00%	100.00%	OFF
May-24	99.97%	100.00%	99.98%	98.79%	98.31%	OFF
Jun-24	100.00%	100.00%	100.00%	99.55%	36.78%	OFF
Jul-24	99.89%	100.00%	100.00%	100.00%	99.84%	50.17%
Aug-24	99.87%	99.80%	99.87%	99.87%	100.00%	99.48%
Sep-24	100.00%	99.90%	100.00%	99.86%	99.72%	99.70%
Oct-24	99.23%	99.55%	0.00%	99.87%	94.89%	99.28%
Nov-24	100.00%	100.00%	0.00%	99.86%	84.89%	99.15%
Dec-24	57.50%	37.50%	0.00%	79.71%	66.67%	65.73%
Jan-25	99.55%	99.50%	0.00%	98.40%	99.43%	82.47%
Feb-25	99.70%	99.24%	85.19%	95.83%	94.39%	60.94%
Mar-25	100.00%	100.00%	100.00%	100.00%	99.81%	99.87%
Apr-25	98.74%	OFF	98.44%	92.56%	99.03%	99.00%
May-25	97.27%	OFF	97.98%	97.53%	97.52%	97.98%

ADDENDUM TO MONTHLY EMISSIONS REPORT

14. EFFICIENCY

ESP Efficiency (%)						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Apr-24	99.901%	99.698%	99.774%	99.704%	99.714%	Unit Off
May-24	99.906%	99.582%	99.771%	99.525%	99.654%	Unit Off
Jun-24	99.89%	99.55%	99.82%	99.62%	99.75%	Unit Off
Jul-24	99.848%	99.125%	99.796%	99.588%	99.735%	99.450%
Aug-24	99.845%	99.625%	99.749%	99.755%	99.769%	99.907%
Sep-24	99.789%	99.660%	99.775%	99.644%	99.675%	99.896%
Oct-24	99.866%	99.716%	Unit Off	99.669%	99.637%	99.856%
Nov-24	99.838%	99.782%	Unit Off	99.515%	99.662%	99.888%
Dec-24	99.773%	99.722%	Unit Off	99.513%	99.695%	99.891%
Jan-25	99.573%	99.764%	Unit Off	99.650%	99.408%	99.613%
Feb-25	99.455%	99.758%	97.777%	99.804%	99.266%	99.787%
Mar-25	99.510%	99.690%	97.280%	99.770%	99.010%	99.780%
Apr-25	94.94%	Unit Off-line	99.46%	97.85%	99.12%	99.83%
May-25	93.94%	Unit Off-line	99.44%	99.67%	99.74%	99.86%

15. REMARKS

UNIT	MWLOSS	REASON	ACTUALSTARTDATE	ACTUALENDDATE
1	130	High dust hopper levels	2025/05/01 00:00:00	2025/05/05 07:28:00
1	80	RHO casing repairs	2025/05/10 00:00:00	2025/05/10 20:05:00
1	178	High stack emissions.	2025/05/11 18:19:00	2025/05/12 14:35:00
1	81	High stack emissions.	2025/05/12 14:36:00	2025/05/12 17:02:00
1	80	High dust hopper levels	2025/05/13 00:04:00	2025/05/13 04:36:00
1	169	High stack emissions.	2025/05/13 10:23:00	2025/05/13 14:49:00
1	70	High dust hopper levels	2025/05/13 23:59:00	2025/05/14 05:17:00
1	593	AM: IN	2025/05/18 23:01:00	2025/05/26 06:15:00
1	80	Clean rapping.	2025/05/27 19:59:00	2025/05/27 22:30:00
1	80	High stack emissions.	2025/05/27 22:30:00	2025/05/28 17:04:00
1	28	High stack emissions	2025/05/28 17:04:00	2025/05/29 04:03:00
1	180	High stack emissions	2025/05/29 20:04:00	2025/05/29 22:07:00
1	200	High stack emissions	2025/05/29 22:07:00	2025/05/30 02:35:00
2	593	MGO ESP & SO3	2025/05/01 00:00:00	2025/05/31 23:59:59
3	94	High dust hopper levels.	2025/05/01 00:00:00	2025/05/01 04:19:00
3	194	High dust hopper levels.	2025/05/01 04:19:00	2025/05/01 17:28:00
3	100	High hopper levels	2025/05/01 17:28:00	2025/05/02 19:32:00
3	49	EF:High stack emissions	2025/05/05 16:48:00	2025/05/06 10:57:00
3	118	RH Outer precip casing repairs	2025/05/09 07:00:00	2025/05/12 16:27:00
3	200	Emissions test.	2025/05/27 00:15:00	2025/05/27 01:16:00
3	186	Emission test	2025/05/27 01:16:00	2025/05/27 04:58:00
3	187	emissions test.	2025/05/28 00:02:00	2025/05/28 05:00:00
4	141	High dust hopper levels.	2025/05/01 00:00:00	2025/05/01 05:41:00
4	140	EF:High stack emissions	2025/05/02 15:22:00	2025/05/03 03:29:00
4	107	EF:High stack emissions	2025/05/03 03:29:00	2025/05/03 03:48:00
4	56	EF:High stack emissions	2025/05/03 03:48:00	2025/05/03 04:07:00
4	128	EF:High stack emissions	2025/05/03 04:07:00	2025/05/03 04:29:00
4	119	EF:High stack emissions	2025/05/03 04:29:00	2025/05/03 04:55:00
4	593	Boiler tube leak.	2025/05/07 11:35:00	2025/05/11 23:57:00
5	593	Repair Main Turbine overspeed rings	2025/05/12 02:05:00	2025/05/17 15:55:00
5	593	T8F coal conveyor O/C	2025/05/31 00:58:00	2025/05/31 23:59:59
6	593	FRF flexible pipe replacement.	2025/05/01 00:00:00	2025/05/01 07:09:00
6	70	High stack emissions	2025/05/18 13:36:00	2025/05/20 05:26:00
6	67	EF:High stack emissions	2025/05/23 22:55:00	2025/05/24 00:33:00

PM Exceedances		
U1.	Poor ESP casing performance. High hopper levels. DHP issues.	01-May
U1.	Poor ESP casing performance. High hopper levels. DHP issues. LHI Casing isolated.	02-May
U1.	Poor ESP casing performance. High hopper levels. DHP issues. Boiler load 280MW for LH Draught group. SO3 plant off due to low load.	03-May
U1.	Poor ESP casing performance. High hopper levels.	04-May
U1.	Poor ESP casing performance. High hopper levels. Manual rapping done.	05-May
U1.	Poor ESP casing performance. High hopper levels.	06-May
U1.	Poor ESP casing performance. High hopper levels. LHI ESP casing outage. Manual rapping done on LHI casing.	07-May
U1.	Poor ESP casing performance. High hopper levels. LHI ESP casing outage.	08-May
U1.	Poor ESP casing performance.	09-May
U1.	Poor ESP casing performance. High hopper levels. RHO ESP casing outage. Manual rapping done for 40 minutes on RHO casing.	10-May
U1.	Poor ESP casing performance. High hopper levels.	11-May
U1.	Poor ESP casing performance. High hopper levels. LHI Precip casing inlet & outlet dampers closed.	12-May

PM Exceedances		
U1.	Poor ESP casing performance. High hopper levels. LHI Precip casing inlet & outlet dampers closed.	13-May
U1.	Poor ESP casing performance. High hopper levels.	14-May
U1.	Poor ESP casing performance. High hopper levels. LHI Precip casing inlet & outlet dampers closed.	15-May
U1.	Poor ESP casing performance. High hopper levels.	16-May
U1.	Poor ESP casing performance. High hopper levels. Chain conveyor tripping. Unit 1 shut down.	17-May
U1.	Poor ESP casing performance. High hopper levels.	18-May
U1.	The unit synchronised on 2025/05/26 @ 06:15, therefore the emissions need to be below the limit 2025/05/29 @ 06:15 and remain below the limit until 2025/05/30.	28-May
U3.	Unit synchronized on load on the 29/04/2025 @09:14 and is expected to be below on the 02/05/2025 @09:14 and continue to be below the next day 03/5/2025. Poor ESP casing performance. High hopper levels.	01-May
U3.	Unit synchronized on load on the 29/04/2025 @09:14 and is expected to be below on the 02/05/2025 @09:14 and continue to be below the next day 03/5/2025. Poor ESP casing performance. High hopper levels. RHO ESP casing isolated.	02-May
U3.	Poor ESP casing performance.	03-May
U3.	Poor ESP casing performance.	04-May
U3.	Poor ESP casing performance.	05-May
U3.	Poor ESP casing performance.	06-May
U3.	Poor ESP casing performance.	07-May
U3.	Poor ESP casing performance. RHO ESP isolated for cooling.	08-May

U3.	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels. Dust plant conveyor belts standing.	09-May
U3.	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels. Dust plant conveyor belts standing.	10-May
U3.	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels. Dust plant conveyor belts standing.	11-May
U3.	Poor ESP casing performance. RHO ESP isolated for cooling. 15 x high hopper levels. Dust plant conveyor belts standing.	12-May
U3.	Poor ESP casing performance. RHO ESP isolated for cooling. 2 x high hopper levels. SO3 Plant off due to 2nd air heater gas temps low. Clean rapping brought forward.	13-May
U3.	Poor ESP casing performance.	14-May
U3.	Poor ESP casing performance.	15-May
U3.	Poor ESP casing performance.	16-May
U3.	Poor ESP casing performance. Lost so3 sulphur.	17-May
U3.	Poor ESP casing performance.	18-May
U3.	Poor ESP casing performance.	19-May
U3.	Poor ESP casing performance. High hopper levels.	20-May
U3.	Poor ESP casing performance. 1 x high hopper level.	21-May

PM Exceedances		
U3.	Poor ESP casing performance. Clean rapping brought forward.	22-May
U3.	Poor ESP casing performance. Sulphur plant issues. 1 X High hopper level. Proces parameters not balanced.	23-May
U3.	Poor ESP casings(external issues).	25-May
U3.	Poor ESP casings. No SO3 plant due to low duct pressure.	26-May
U3.	Poor ESP casing performance.	27-May
U3.	Clean rapping brought forward. Poor ESP casings.	29-May
U3.	Poor ESP performance	30-May
U4.	Poor ESP casing performance. High hopper levels. DHP issues.	01-May
U4.	Poor ESP casing performance. Clean rapping brought forward.	05-May
U4.	Correlation test, so3 plant off.	19-May
U4.	Correlation test, ESP plant Field 1, 2 3 were switched off.	20-May
U4.	Poor ESP casing performance.	25-May
U5.	Poor ESP casing performance. High hopper lvels. LHI ESP casing put on test rapping. Clean rapping brought forward.	01-May
U5.	Unit 5 shut down.	12-May
U5.	The unit synchronised on 2025/05/17 @ 15:55, therefore the emissions need to be below the limit 2025/05/20 @ 15:55 and remain below the limit until 2025/05/21	18-May
U5.	The unit synchronised on 2025/05/17 @ 15:55, therefore the emissions need to be below the limit 2025/05/20 @ 15:55 and remain below the limit until 2025/05/21	19-May

PM Exceedances		
U6	Correlation Test - High Emissions Test	05-May
U6	Higher hopper levels and repairs of HFT radiators	07-May
U6	Poor Casing performance , number of fields tripping and sparking	08-May
U6	Poor Casing performance , number of fields tripping and sparking	13-May
U6	Poor Casing performance , number of fields tripping and sparking	16-May
U6	Poor Casing performance , number of fields tripping and sparking	17-May
U6	Poor Casing performance due to high hopper levels which occurred	18-May
U6	Poor Casing performance due to high hopper levels which occurred	24-May