Eskom

Mr. Mcebo Mkhatshwa
Air Quality Officer
Fezile Dabi District Municipality
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Date: 17/09/2025

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LRP01PLA000 _0479/2025/09/12

Dear Mr. Mkhatshwa

LETHABO POWER STATION EMISSION MONTHLY REPORT FOR AUGUST 2025

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

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

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

Yours sincerely

pp **Karabo Rakgolela**
GENERAL MANAGER

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Eskom Holdings SOC Ltd Reg No 2002/015527/30

Eskom	Report	Lethabo Power Station

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

Reference number: **LRP01PLA000 _0479/2025/09/12**
Document Type: **Report**
Area of Applicability: **Environment**
Report Date: **September-2025**
Classification: **Controlled Disclosure**

Signatures:

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Boiler Engineer
Date: 18/09/2025

Verified by :
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Environmental Officer
Date: 2025/09/18

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Date: 2025/09/18

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C&I Manager
Date: 2025=09-20

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Act.Environmental Manager
Date: 2025-09-22

Approved by:
H Sewsunker
Techincal Manager
Date: 2025/09/30

Reviewed by:
pp
T. Njapha
Engineering Manager
Date: 2025/09/26

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	Max Permitted Consumption Rate	Consumption Rate Aug-2025
	Coal	Tons	*2 000 000*	*1 172 162*
	Fuel Oil	Tons	*1 700*	*1681.360*
Production Rates	**Product / By-Product Name**	**Units**	**Max Production Capacity Permitted**	**Indicative Production Rate Aug-2025**
	Energy	GWh	*2 834.640*	*1 632.137*
	Ash	Tons	*770 000*	*428 190.640*
	RE Ash	kg/MWh	*not specified*	*0.575*

Note: Max energy rate = AEL capacity [3,810 MW] × 24 Hrs × Days in MONTH ÷ 1,000 (to convert to GWh).

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	*0.6 TO >2.6*	*0.770*
Ash Content	%	*<47%*	*36.530*

Note: The "standard" is not a fixed limit but an optimal guideline. It may vary with coal quality. The stipulated range reflects station acceptance test values.

3 EMISSION LIMITS (mg/Nm³)

	Daily Limit		
Associated Unit/Stack	PM	SO_2	NO_x
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	ESP Efficiency	Technology Type	SO_3 Plant Utlization
Unit 1	*ESP + SO_3*	*99.774%*	*SO_3*	*99.7%*
Unit 2	*ESP + SO_3*	*Off-line*	*SO_3*	*Off-line*
Unit 3	*ESP + SO_3*	*99.833%*	*SO_3*	*96.4%*
Unit 4	*ESP + SO_3*	*99.780%*	*SO_3*	*98.9%*
Unit 5	*ESP + SO_3*	*99.701%*	*SO_3*	*99.9%*
Unit 6	*ESP + SO_3*	*99.668%*	*SO_3*	*98.1%*

Note: The ESP plant does not have a bypass mode; therefore, it operates at 100% utilization.

5 DATA RELIABILITY (%)

Associated Unit/Stack	PM	SO_2	NO	O_2
Unit 1	*99.0*	*100.0*	*87.9*	*87.5*
Unit 2	*Exempt*	*100.0*	*98.0*	*100.0*
Unit 3	*99.7*	*93.6*	*87.4*	*85.4*
Unit 4	*99.6*	*84.9*	*84.9*	*87.3*
Unit 5	*99.5*	*96.0*	*86.2*	*88.0*
Unit 6	*99.2*	*77.9*	*93.9*	*95.5*

Note: NO_x emissions are measured as NO in PPM. The final NO_x value is expressed as total NO_2 equivalent.

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for August 2025

Associated Unit/Stack	PM (tons)	SO_2 (tons)	NO_x (tons)
Unit 1	212.9	3 646	1 878
Unit 2	Exempt	45	11
Unit 3	137.1	4 394	1 618
Unit 4	123.3	2 894	1 201
Unit 5	240.4	4 720	1 438
Unit 6	225.0	4 111	1 660
SUM	938.82	19 810	7 805

Table 6.2: PM AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm^3)
Unit 1	27	4	0	0	4	126.0
Unit 2	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Unit 3	25	4	0	0	4	82.0
Unit 4	15	5	0	0	5	97.8
Unit 5	22	9	0	0	9	113.2
Unit 6	28	2	0	0	2	146.7
SUM	**117**	**24**	**0**	**0**	**24**	

Table 6.3: SO_2 AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	1 769.6
Unit 2	2	0	0	0	0	1 564.3
Unit 3	30	0	0	0	0	1 984.0
Unit 4	23	0	0	0	0	2 124.7
Unit 5	31	0	0	0	0	2 200.7
Unit 6	31	0	0	0	0	2 102.7
SUM	**148**	**0**	**0**	**0**	**0**	

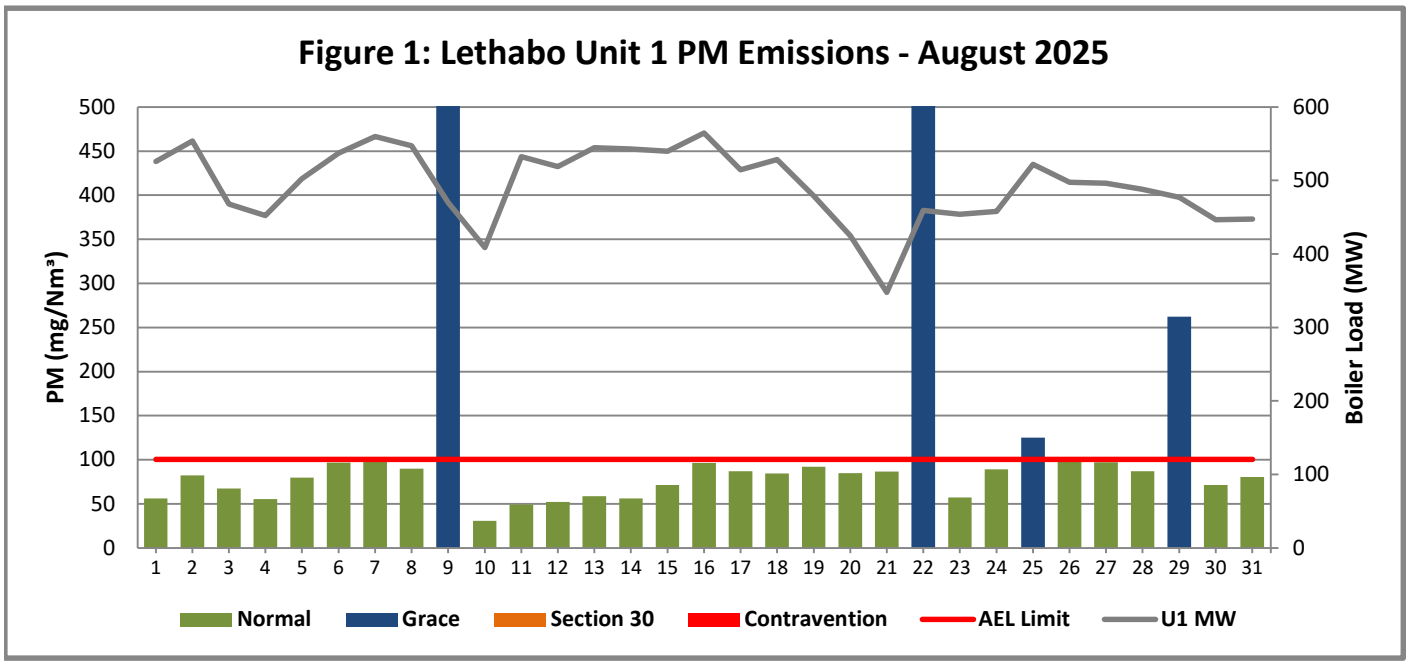
Table 6.4: NO_x AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	904.6
Unit 2	2	0	0	0	0	416.1
Unit 3	30	0	0	0	0	715.1
Unit 4	23	0	0	0	0	862.6
Unit 5	31	0	0	0	0	666.5
Unit 6	31	0	0	0	0	843.7
SUM	**148**	**0**	**0**	**0**	**0**	

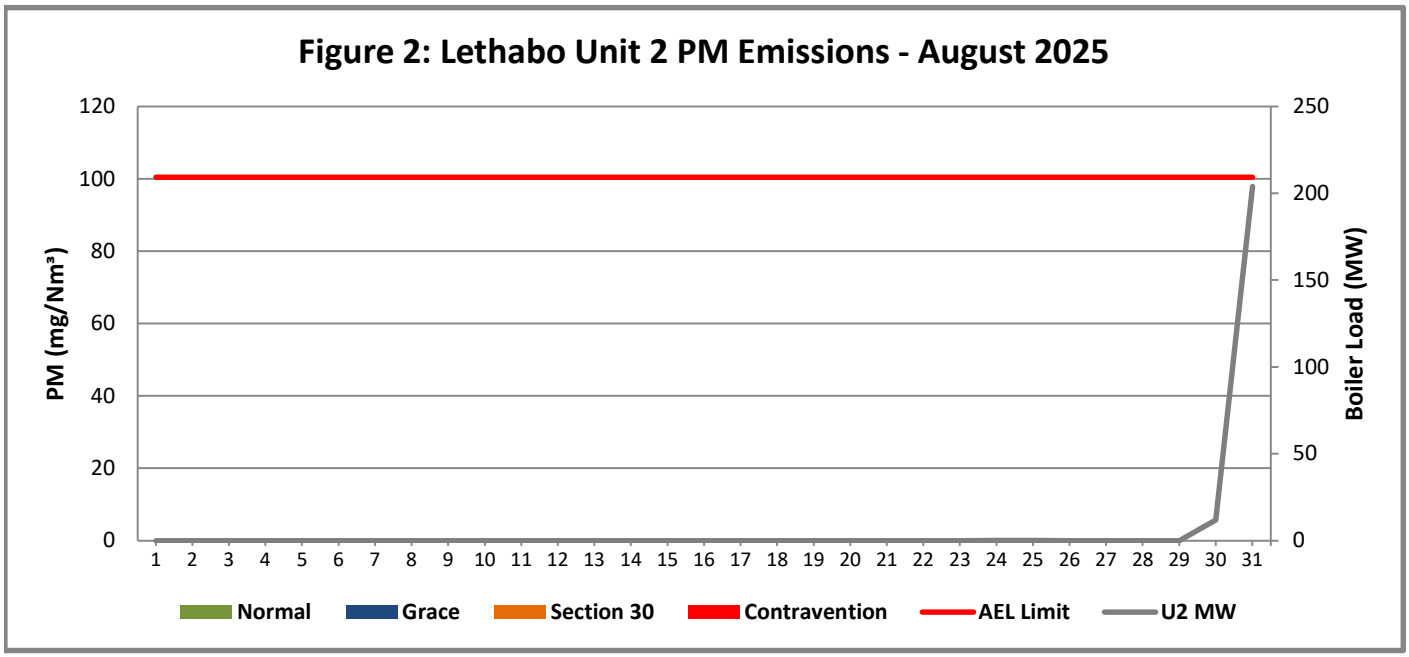
Note: Daily limit compliance is shown in the bar charts; monthly compliance is summarized in the table above.

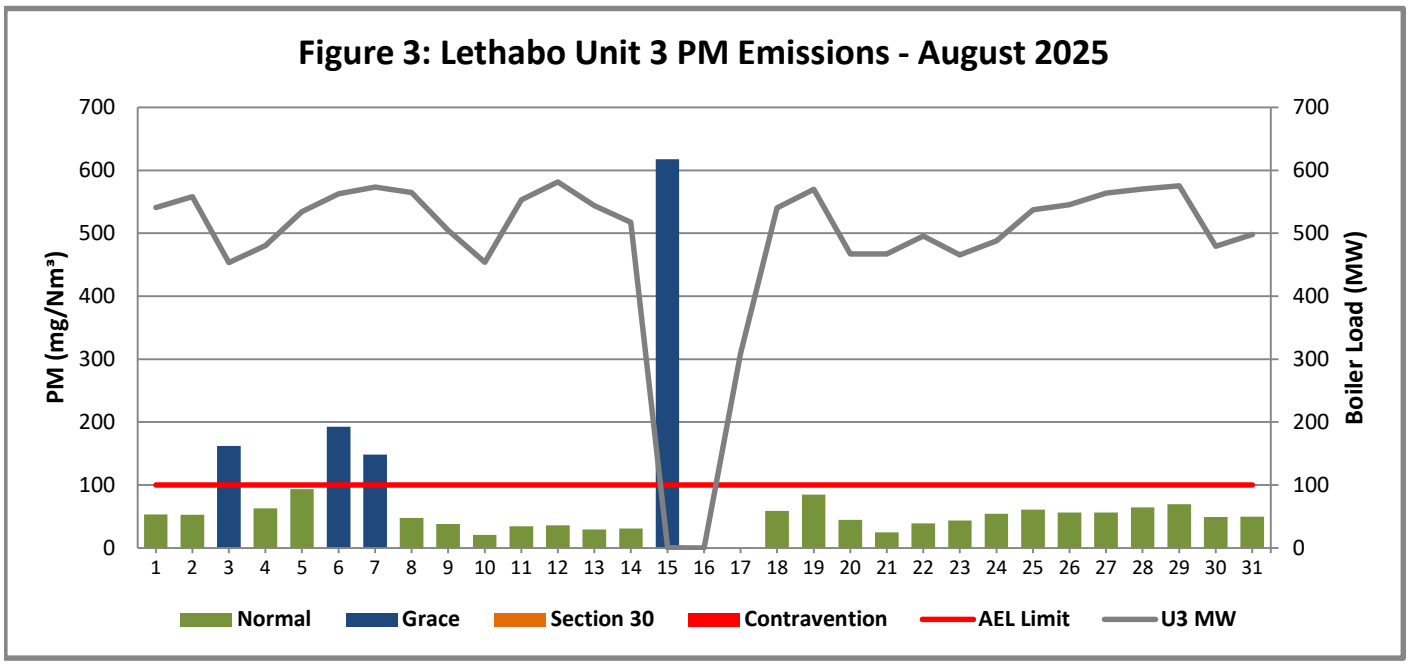
Table 6.5: Legend Description

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

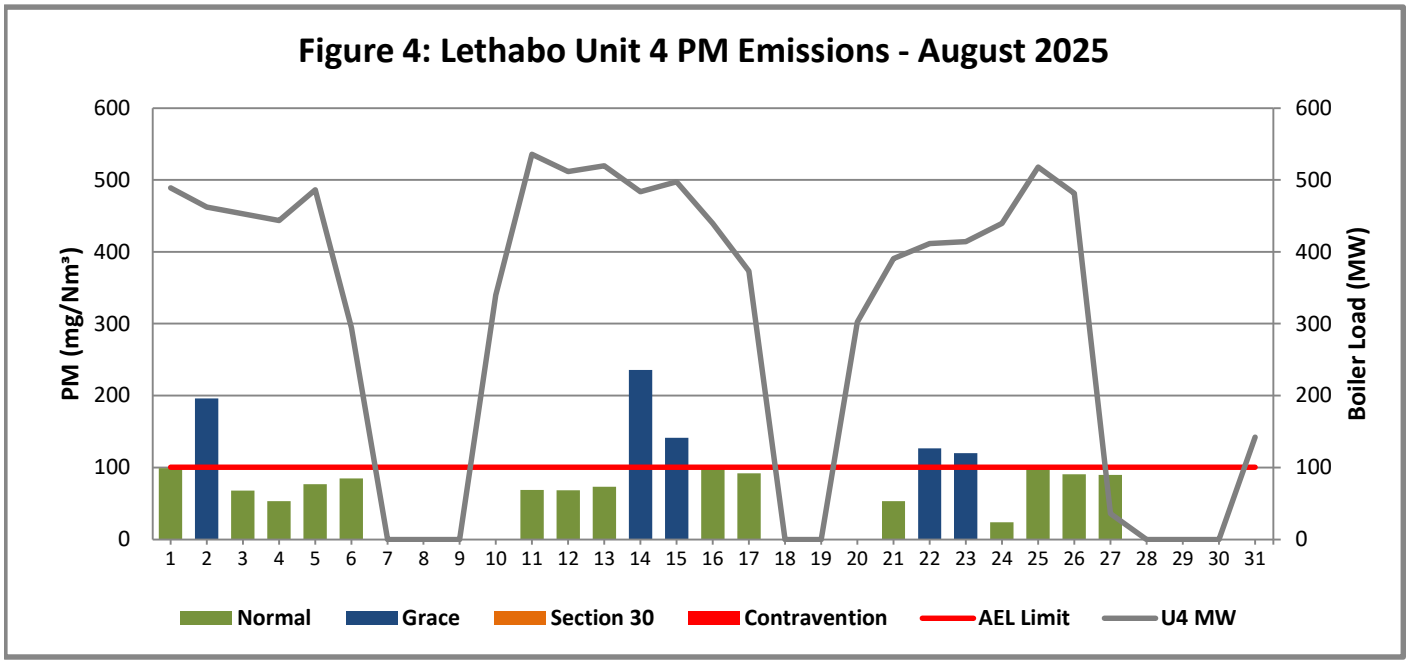


Reasons:	
Date	**Description**
09-Aug	ESP Casing poor performance.RHI casing outage.
22-Aug	Unit 1 tripped.Poor ESP casings performance.
25-Aug	Poor ESP casing performance.High hopper levels.
29-Aug	Poor performance casings.LHI casing outage.



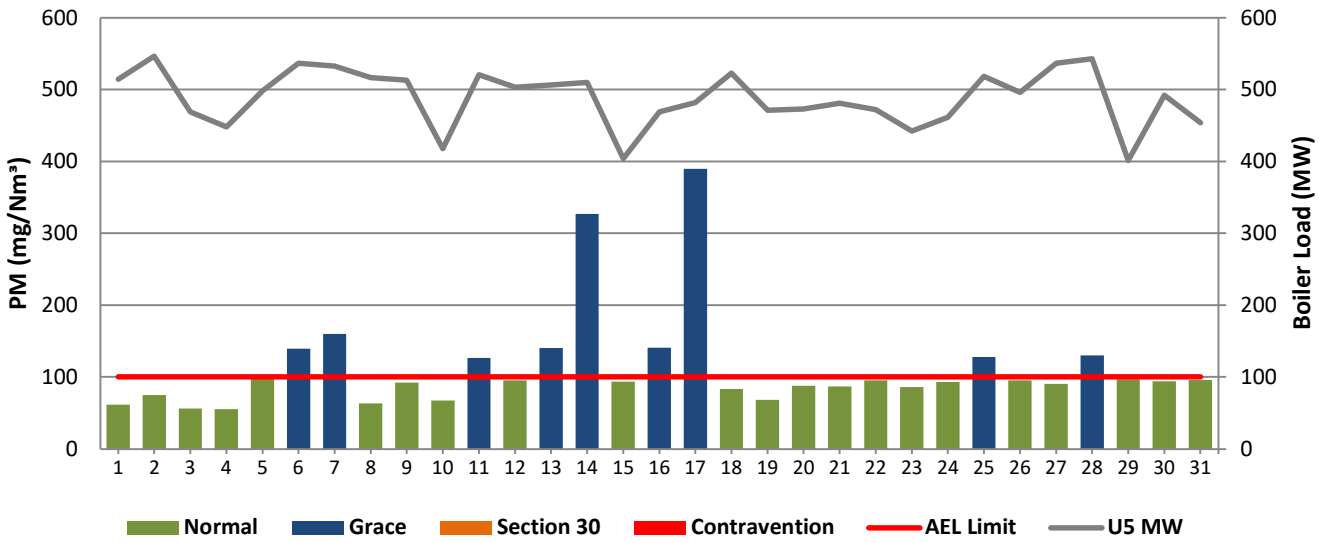


Reasons:	
Date	**Description**
03-Aug	ESP poor casing performance.RHO ESP casing outage.
06-Aug	ESP poor casing performance.
07-Aug	ESP poor casing performance.Clean rapping brought forward.
15-Aug	Unit 3 on cold reserve.

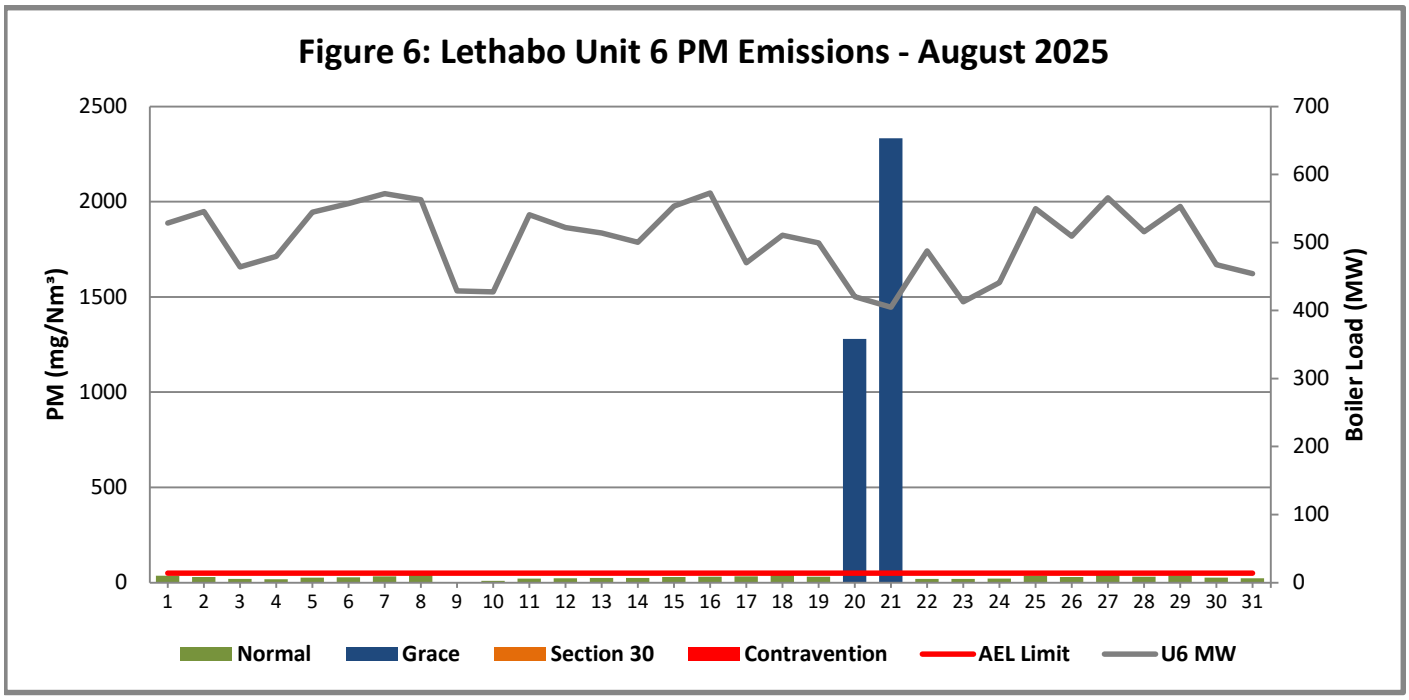


Reasons:	
Date	**Description**
02-Aug	Poor ESP casing performance.RHO ESP casing outage.
14-Aug	Poor ESP casing performance.High hopper levels.
15-Aug	Poor ESP casing performance.Test rap all ESP casings for a minute.Clean rapping brought forward.
22-Aug	Poor ESP performance.
23-Aug	Poor ESP casing performance.Manual rapping done.

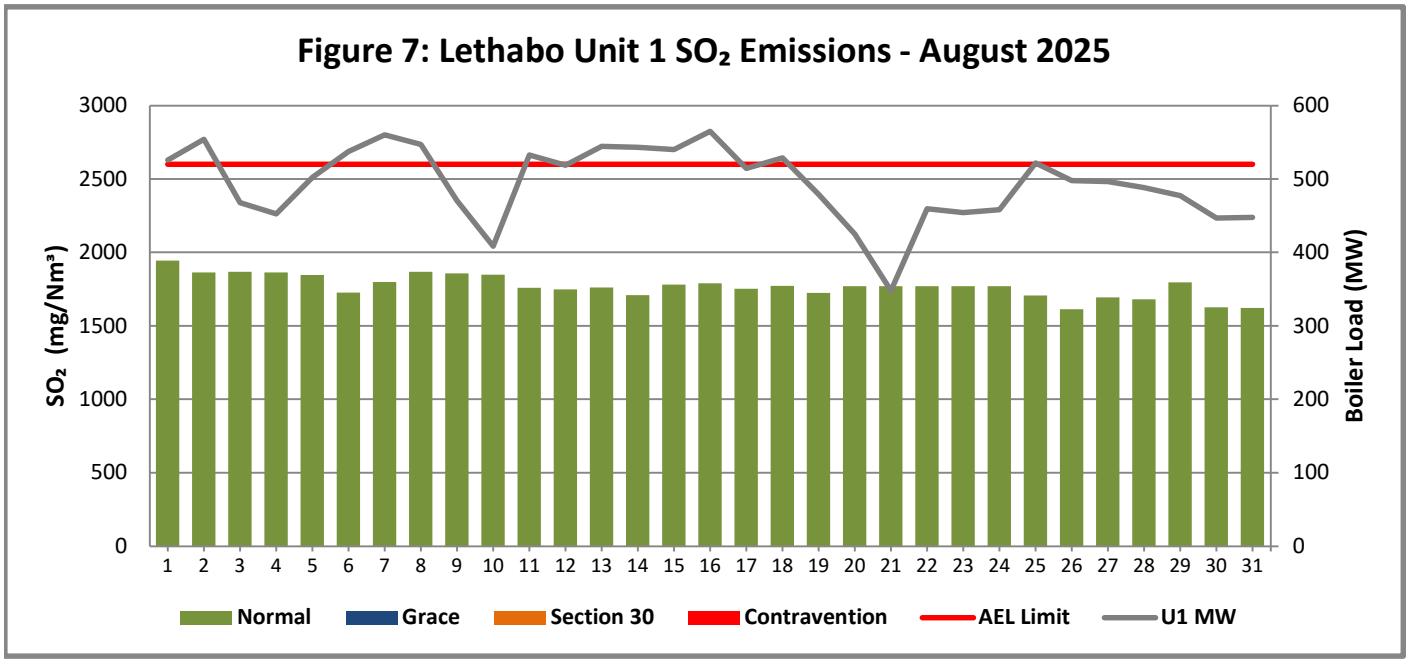
Figure 5: Lethabo Unit 5 PM Emissions - August 2025



Reasons:	
Date	**Description**
06-Aug	Clean rapping brought forward.Poor ESP casing performance.
07-Aug	Clean rapping brought forward.Poor ESP casing performance.Pre outage STEP test done.
11-Aug	Poor ESP casing performance.Manual rapping done.High hopper levels.SO3 plant issues.
13-Aug	Poor ESP casing performance.High hopper levels.SO3 plant issues.
14-Aug	Poor ESP casing performance.SO3 plant issues.Clean rapping brought forward.
16-Aug	Poor ESP casing performance.LHO Casing outage.
17-Aug	Poor ESP casing performance.LHO Casing outage.
25-Aug	High hopper levels. Poor ESP casing performance. Sulphur flow on manual.
28-Aug	Poor ESP casing performance.Manual rapping done.



Reasons:	
Date	**Description**
20-Aug	No abatement plant technology due to low load due to work on the air heaters
21-Aug	No abatement plant technology due to low load due to work on the air heaters.



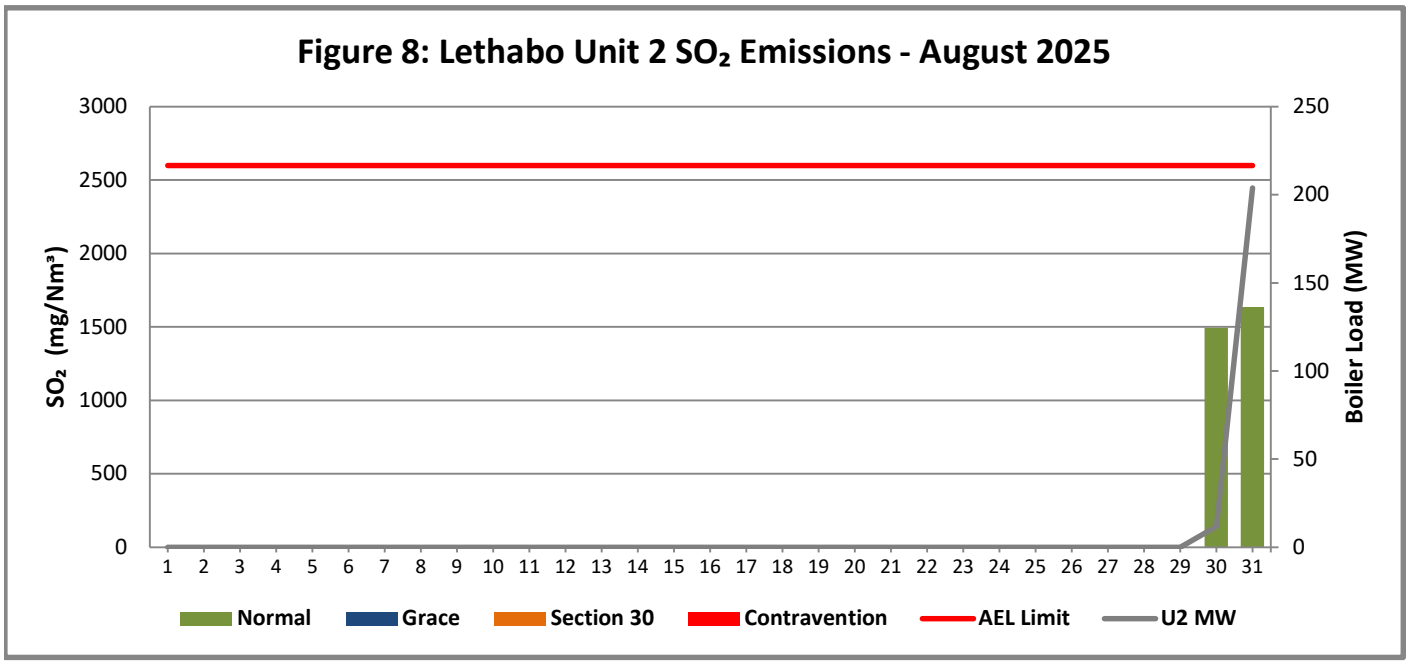


Figure 8: Lethabo Unit 2 SO₂ Emissions - August 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
3000
2500
2000
1500
1000
500
0
250
200
150
100
50
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U2 MW

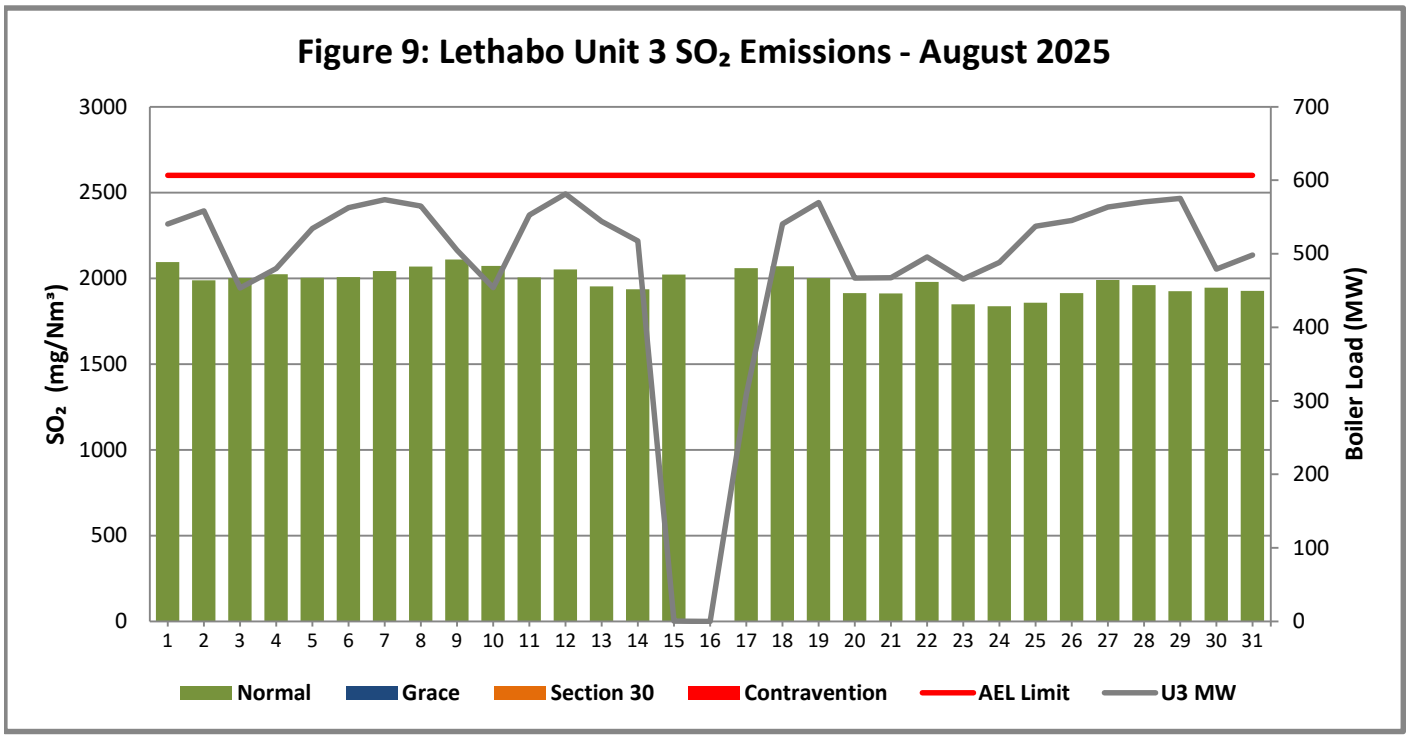


Figure 9: Lethabo Unit 3 SO₂ Emissions - August 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
3000
2500
2000
1500
1000
500
0
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U3 MW

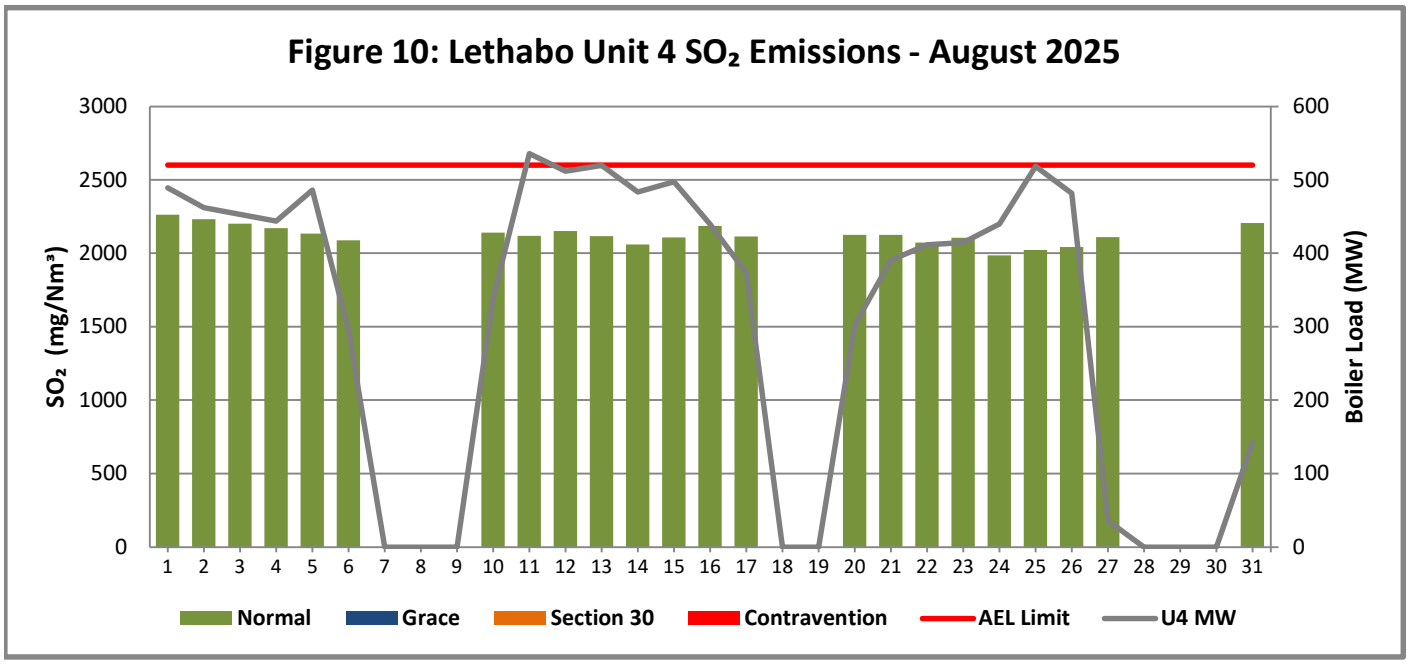


Figure 10: Lethabo Unit 4 SO₂ Emissions - August 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
3000
2500
2000
1500
1000
500
0
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U4 MW

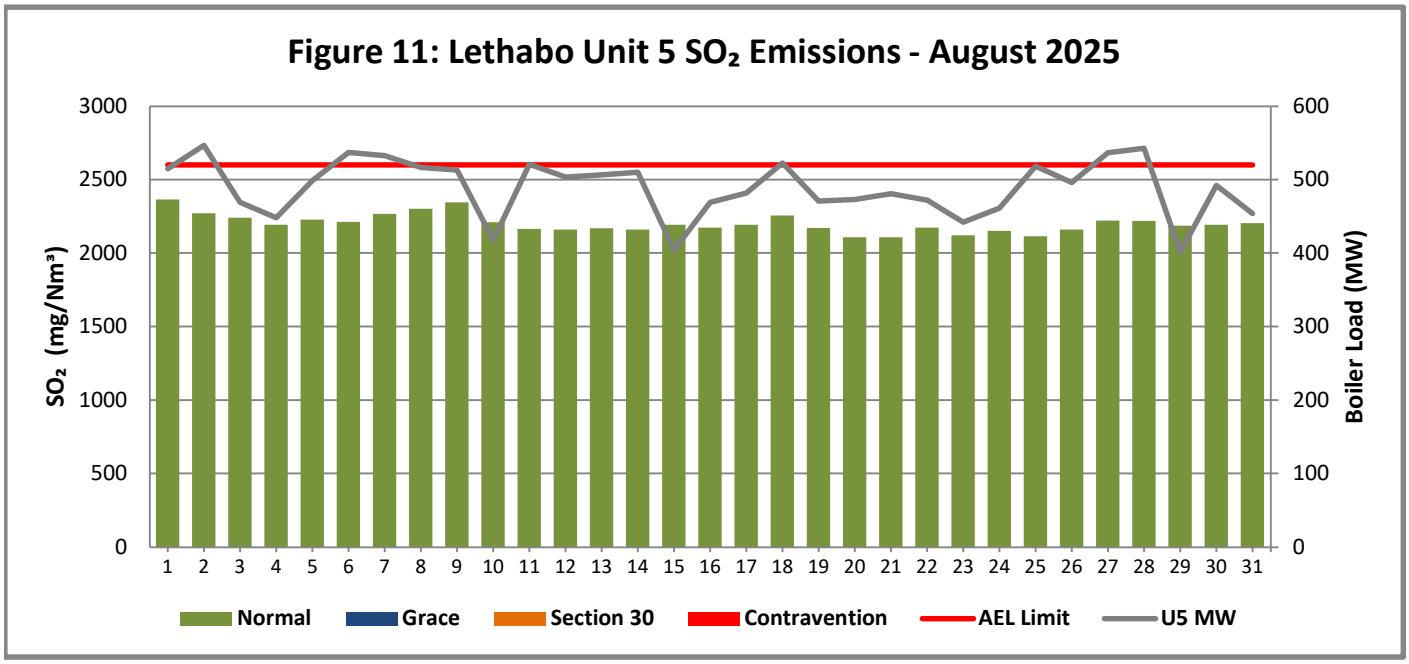


Figure 11: Lethabo Unit 5 SO₂ Emissions - August 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
3000
2500
2000
1500
1000
500
0
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U5 MW

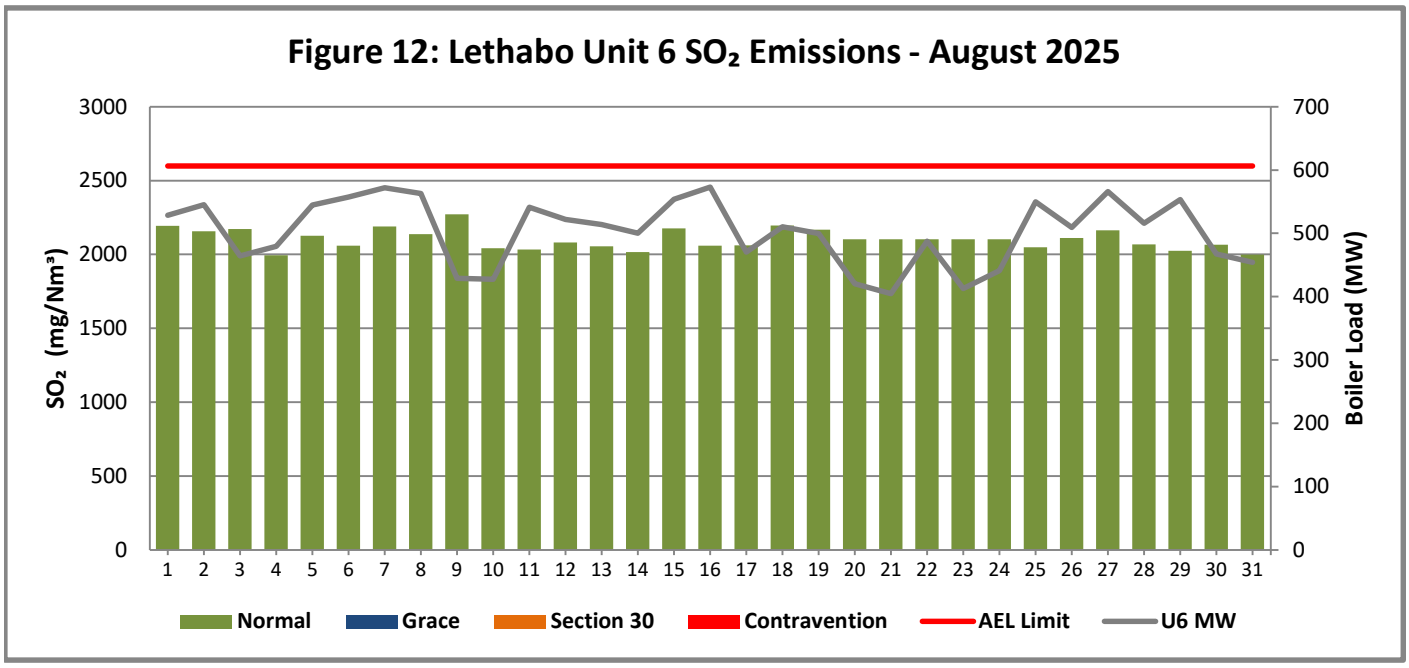


Figure 12: Lethabo Unit 6 SO₂ Emissions - August 2025
SO₂ (mg/Nm³)
Boiler Load (MW)
3000
2500
2000
1500
1000
500
0
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U6 MW

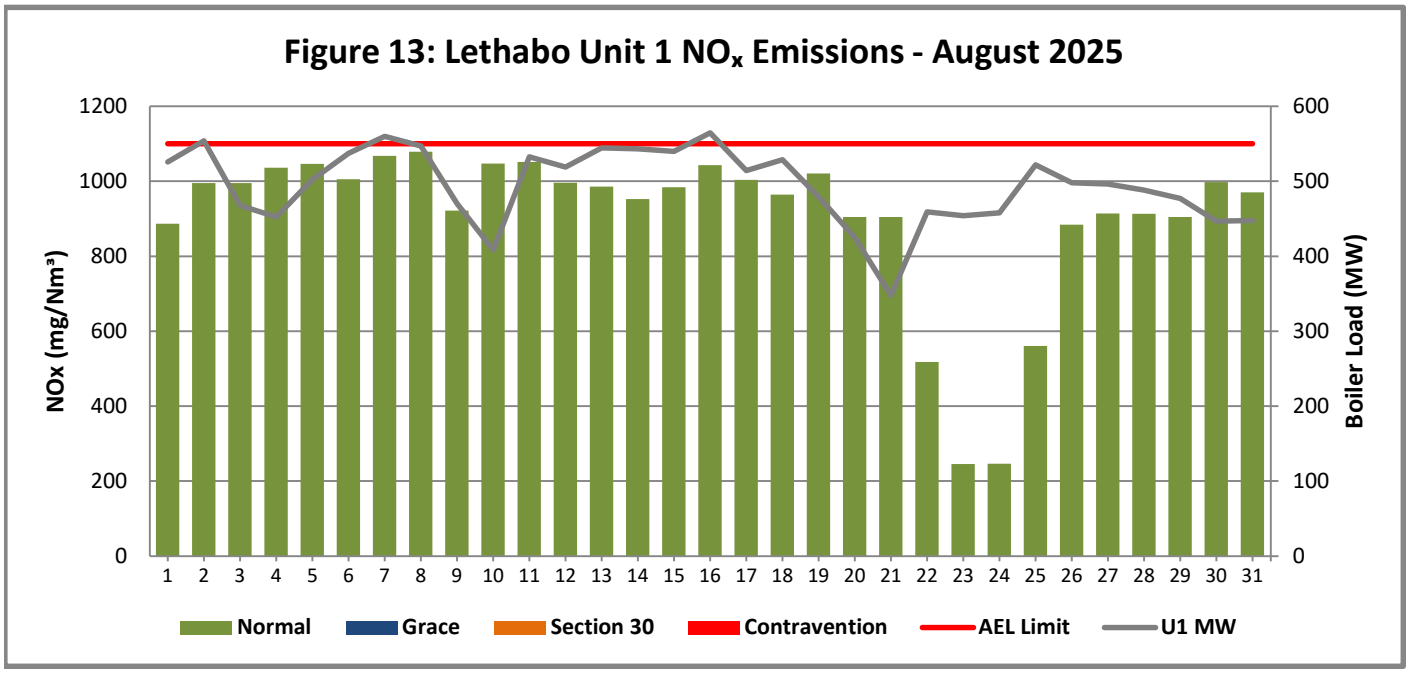


Figure 13: Lethabo Unit 1 NOₓ Emissions - August 2025
NOx (mg/Nm³)
Boiler Load (MW)
1200
1000
800
600
400
200
0
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U1 MW

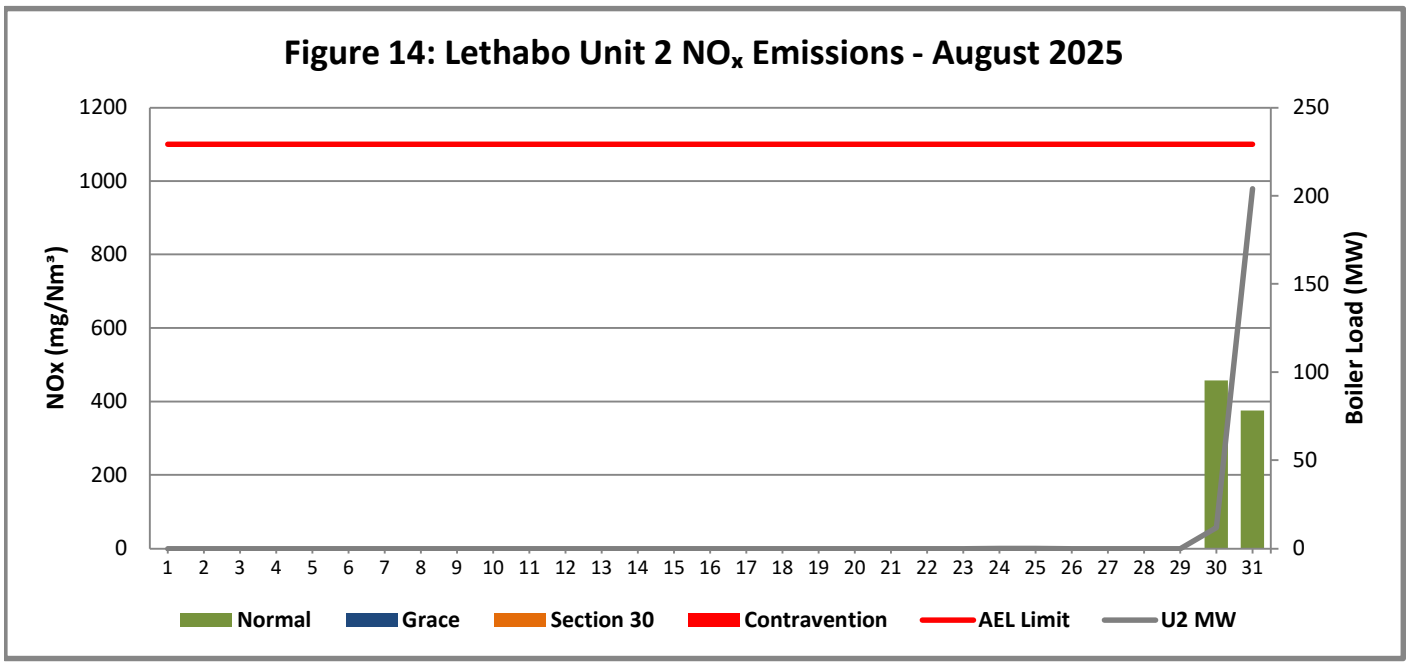


Figure 14: Lethabo Unit 2 NOx Emissions - August 2025
NOx (mg/Nm³)
Boiler Load (MW)
1200
1000
800
600
400
200
0
250
200
150
100
50
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U2 MW

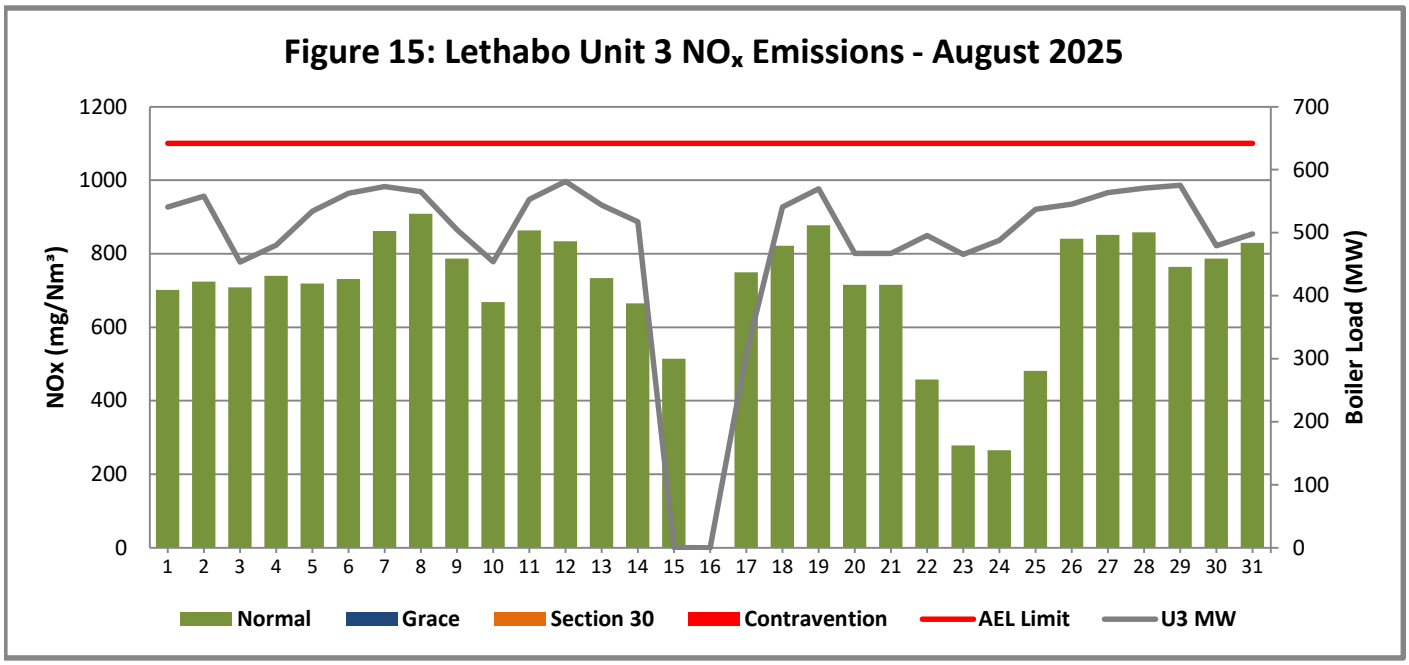


Figure 15: Lethabo Unit 3 NOx Emissions - August 2025
NOx (mg/Nm³)
Boiler Load (MW)
1200
1000
800
600
400
200
0
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Normal
Grace
Section 30
Contravention
AEL Limit
U3 MW

Figure 16: Lethabo Unit 4 NO_x Emissions - August 2025

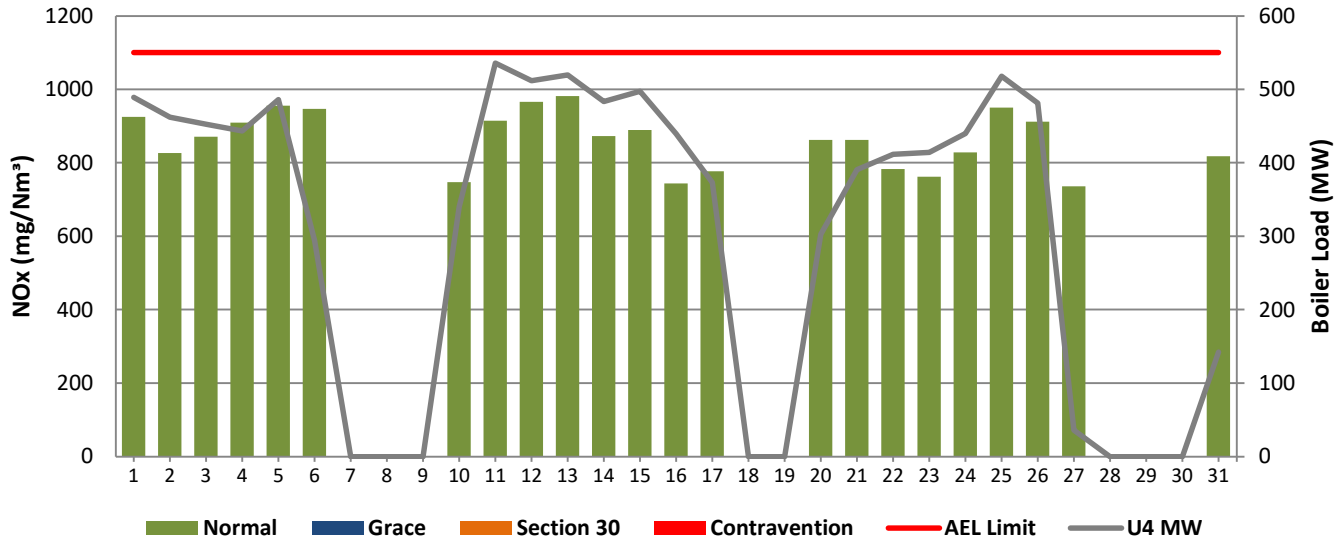
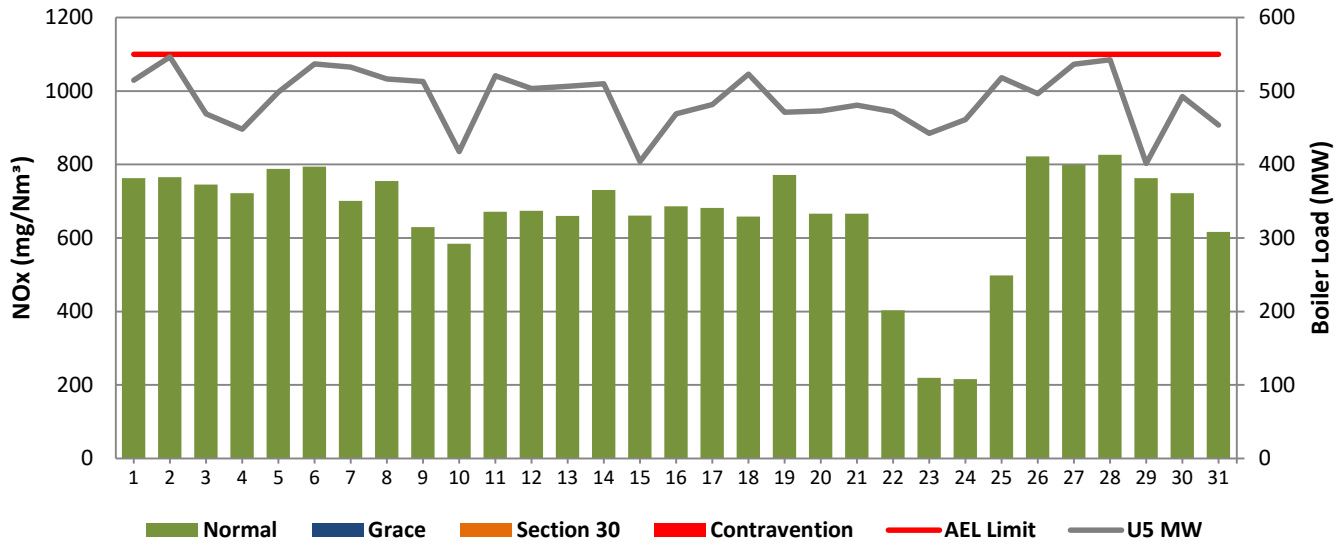
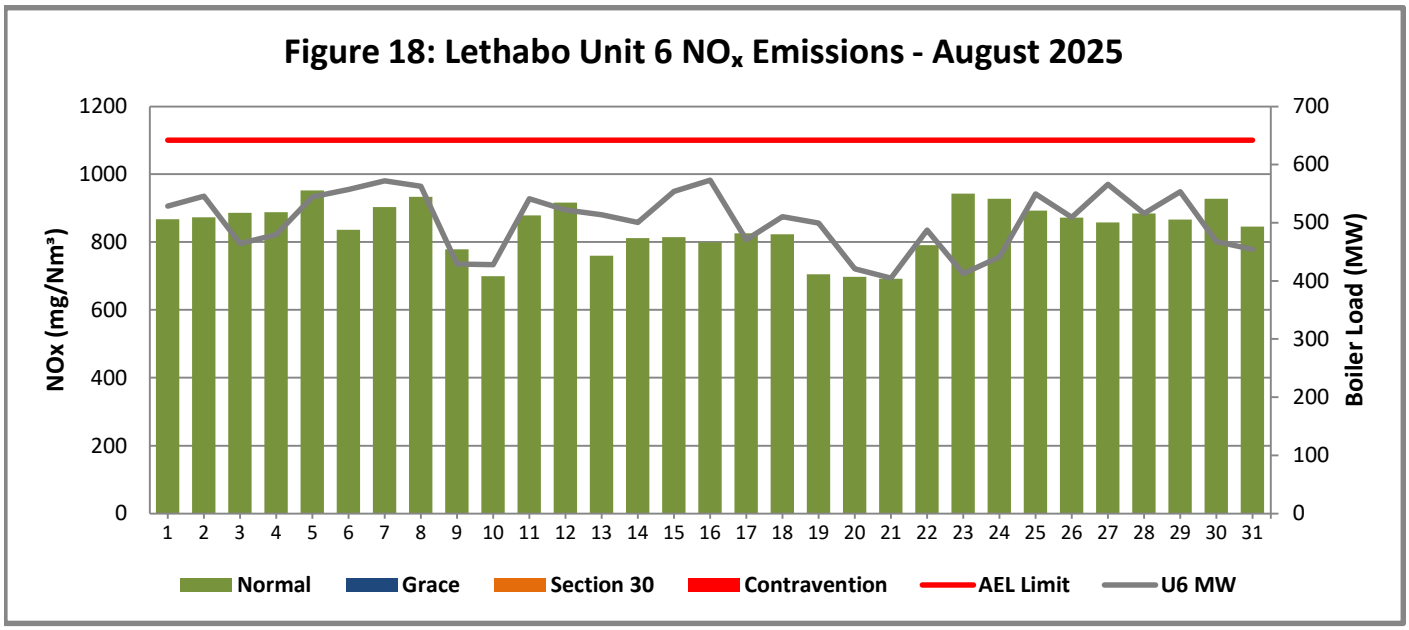


Figure 17: Lethabo Unit 5 NO_x Emissions - August 2025





7 SHUT-DOWN AND LIGHT-UP INFORMATION FOR AUGUST 2025

See Events sheet

8. MAINTENANCE

Unit 1				
Beginning of Maintenance	2025/08/09 00:00:00	2025/08/22 00:00:00	2025/08/29 00:00:00	
Reason for Maintenance	RHI Precip. casing repairs.	RH inner casing repairs.	LH Inner precip casing repairs	
End (Time):	2025/08/09 18:02:00	2025/08/22 21:11:00	2025/08/30 04:32:00	
Duration	18:02:00	21:11:00	28:32:00	

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

Unit 3				
Beginning of Maintenance	2025/08/03 07:35:00			
Reason for Maintenance	RHO casing repairs.			
End (Time):	2025/08/03 18:55:00			
Duration	11:20:00			

Unit 4				
Beginning of Maintenance	2025/08/01 23:59			
Reason for Maintenance	RHO casing repairs			
End (Time):	2025/08/02 20:00			
Duration	20:01:00			

Unit 5				
Beginning of Maintenance	2025/08/15 10:03:00	2025/08/17 00:00		
Reason for Maintenance	LHO casing repairs	LHI casing repairs		
End (Time):	2025/08/16 20:17:00	2025/08/17 20:00		
Duration	34:14:00	20:00:00		

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

9 COMPLAINTS

There were no complaints for this months

Source Code / Name	Root Cause Analysis	Calculation of Impacts / emissions associated with the incident	Dispersion modeling of pollutants where applicable	Measures implemented to prevent reoccurrence

10 GENERAL

Unit 1: Monitor Reliability
12/08/2025: PM monitor Reliability low due to server issues.

Unit 3, 4, 5: Monitor Reliability
10 - 12/08/2025: PM monitor Reliability low due to server issues.

Unit 1, 3, 4, 5 & 6: Gaseous Monitor Reliability
20 - 22/08/2025: Gaseous monitor reliability low due to server issues.

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.

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 Acceptab le	Comments / Reference No.		

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
Aug-24	0.48	0.91	0.69	0.47	0.53	0.18	0.54
Sept-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
Jun-25	0.60	OFF	0.45	0.49	0.52	0.25	0.47
Jul-25	0.50	OFF	0.40	0.73	1.07	0.07	0.66
Aug-25	0.60	0.00	0.39	0.59	0.68	0.62	0.58

ADDENDUM TO MONTHLY EMISSIONS REPORT

12. DAILY EMISSIONS FIGURES

Final Dust Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit (U1-U5)**	**Limit (U6)**
01-Aug	56		53	99	61	36	100	50
02-Aug	82		53	196	75	30	100	50
03-Aug	67		162	68	56	19	100	50
04-Aug	56		63	53	55	18	100	50
05-Aug	80		94	77	99	27	100	50
06-Aug	97		192	85	139	28	100	50
07-Aug	99		149		160	32	100	50
08-Aug	90		48		63	44	100	50
09-Aug	590		38		92		100	50
10-Aug	31		21		67	10	100	50
11-Aug	49		35	69	127	21	100	50
12-Aug	52		36	68	95	23	100	50
13-Aug	59		30	73	140	24	100	50
14-Aug	56		31	236	327	25	100	50
15-Aug	71		618	141	93	29	100	50
16-Aug	96			99	141	31	100	50
17-Aug	87			92	390	33	100	50
18-Aug	84		59		83	42	100	50
19-Aug	92		85		68	31	100	50
20-Aug	85		45		88	1279	100	50
21-Aug	87		25	53	87	2333	100	50
22-Aug	871		39	126	95	19	100	50
23-Aug	57		44	120	86	20	100	50
24-Aug	89		54	24	93	21	100	50
25-Aug	125		61	99	128	37	100	50
26-Aug	100		56	90	95	29	100	50
27-Aug	97		56	90	90	41	100	50
28-Aug	87		64		130	32	100	50
29-Aug	262		69		97	38	100	50
30-Aug	71		49		94	26	100	50
31-Aug	81		50		96	23	100	50

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final SOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit**
01-Aug	1944		2094	2263	2364	2193	2600
02-Aug	1863		1988	2232	2271	2156	2600
03-Aug	1867		2001	2200	2239	2173	2600
04-Aug	1864		2024	2171	2193	1994	2600
05-Aug	1845		2004	2134	2228	2126	2600
06-Aug	1727		2007	2087	2211	2060	2600
07-Aug	1799		2042		2266	2189	2600
08-Aug	1867		2069		2302	2138	2600
09-Aug	1857		2110		2344	2271	2600
10-Aug	1849		2072	2141	2210	2042	2600
11-Aug	1758		2005	2118	2165	2034	2600
12-Aug	1748		2052	2151	2160	2082	2600
13-Aug	1760		1952	2116	2168	2056	2600
14-Aug	1709		1937	2058	2160	2016	2600
15-Aug	1781		2023	2107	2194	2177	2600
16-Aug	1790			2186	2173	2060	2600
17-Aug	1752		2060	2113	2193	2061	2600
18-Aug	1771		2071		2255	2195	2600
19-Aug	1723		2001		2171	2167	2600
20-Aug	1770		1914	2125	2108	2103	2600
21-Aug	1770		1911	2125	2107	2103	2600
22-Aug	1770		1979	2072	2173	2103	2600
23-Aug	1770		1848	2104	2121	2103	2600
24-Aug	1770		1837	1985	2150	2103	2600
25-Aug	1705		1858	2023	2115	2048	2600
26-Aug	1613		1913	2042	2160	2111	2600
27-Aug	1694		1991	2108	2220	2163	2600
28-Aug	1681		1960		2220	2069	2600
29-Aug	1795		1925		2185	2026	2600
30-Aug	1625	1494	1946		2192	2065	2600
31-Aug	1622	1635	1928	2205	2203	1999	2600

ADDENDUM TO MONTHLY EMISSIONS REPORT

Final NOx Concentration (mg/Nm³)

Date	U1	U2	U3	U4	U5	U6	**Limit**
01-Aug	887		702	925	763	867	1100
02-Aug	995		724	826	766	873	1100
03-Aug	995		709	871	746	887	1100
04-Aug	1036		739	909	722	888	1100
05-Aug	1047		719	956	788	953	1100
06-Aug	1006		731	946	794	837	1100
07-Aug	1068		862		701	903	1100
08-Aug	1079		909		755	934	1100
09-Aug	922		787		629	778	1100
10-Aug	1047		668	747	584	699	1100
11-Aug	1051		863	915	671	879	1100
12-Aug	996		834	966	674	917	1100
13-Aug	986		733	982	660	760	1100
14-Aug	952		665	872	730	812	1100
15-Aug	984		514	889	661	814	1100
16-Aug	1043			743	686	800	1100
17-Aug	1004		750	777	682	826	1100
18-Aug	964		822		659	823	1100
19-Aug	1020		877		772	705	1100
20-Aug	905		715	863	667	698	1100
21-Aug	905		715	863	667	692	1100
22-Aug	518		458	783	403	791	1100
23-Aug	246		278	762	219	943	1100
24-Aug	246		266	829	216	928	1100
25-Aug	560		482	950	498	893	1100
26-Aug	884		841	912	822	873	1100
27-Aug	914		851	736	799	858	1100
28-Aug	913		859		827	885	1100
29-Aug	904		764		763	866	1100
30-Aug	998	457	787		722	928	1100
31-Aug	970	375	829	818	617	846	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
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%
Sept-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%	0.0	0.00%	0.0	0.00%	0.0	0.00%	0.0	0.00%	0.0	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%	0.00%
Feb-25	99.18%	0.92	99.84%	0.17	100.00%	0.00	100.00%	0.00	100.00%	0.00	98.90%	1.24
Mar-25	98.08%	2.38	99.27%	0.91	98.99%	1.25	100.00%	0.00	95.52%	5.55	100.00%	0.00
Apr-25	98.21%	2.1	100.00%	0.0	100.00%	0.0	100.00%	0.0	97.50%	3.0	98.48%	1.8
May-25	99.33%	0.8	100.00%	0.0	97.26%	3.4	100.00%	0.0	100.00%	0.0	100.00%	0.0
Jun-25	98.12%	2.3	100.00%	0.0	100.00%	0.0	100.00%	0.0	99.16%	1.0	100.00%	0.0
Jul-25	97.94%	2.6	100.00%	0.0	100.00%	0.0	100.00%	0.0	98.41%	2.0	100.00%	0.0
Aug-25	97.72%	2.8	100.00%	0.0	99.62%	0.5	99.33%	0.8	98.18%	2.3	100.00%	0.0

SO3 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
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
Sept-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%	0.05	95.65%	1.35	Off-line	Off-line	98.92%	0.33	93.82%	1.92	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%	1.76
Feb-25	91.37%	2.4	95.28%	1.3	67.36%	9.14	95.45%	1.3	91.35%	2.4	97.77%	0.62
Mar-25	98.52%	0.5	96.36%	1.1	85.05%	4.63	98.61%	0.4	99.91%	0.0	88.42%	3.59
Apr-25	95.63%	1.3	Off-line	Offline	91.27%	2.62	85.62%	4.3	88.61%	3.4	99.78%	0.07
May-25	96.57%	1.1	Off-line	Offline	98.12%	0.58	99.01%	0.3	100.00%	0.0	99.03%	0.3
Jun-25	99.86%	0.0	Off-line	Offline	99.25%	0.22	99.83%	0.1	98.19%	0.5	99.22%	0.2
Jul-25	99.87%	0.0	Off-line	Offline	99.06%	0.29	100.00%	0.0	98.79%	0.4	66.67%	10.3
Aug-25	99.73%	0.1	Off-line	Offline	96.41%	1.11	98.87%	0.4	99.87%	0.0	98.06%	0.6

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Particulate Emission Monitors

Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Aug-24	95.7%	91.4%	99.4%	99.6%	99.0%	99.6%
Sept-24	98.1%	94.4%	100.0%	98.4%	96.2%	99.6%
Oct-24	99.7%	94.3%	OFF	98.8%	96.5%	98.2%
Nov-24	99.4%	99.4%	OFF	99.3%	94.4%	98.5%
Dec-24	100.0%	96.6%	OFF	98.2%	96.3%	99.6%
Jan-25	96.6%	98.7%	OFF	87.8%	92.9%	99.0%
Feb-25	98.7%	97.7%	85.6%	99.6%	93.5%	98.7%
Mar-25	93.1%	96.0%	96.1%	99.8%	92.6%	97.4%
Apr-25	72.0%	OFF	99.2%	87.5%	94.0%	99.1%
May-25	67.3%	OFF	98.7%	99.2%	98.4%	99.9%
Jun-25	96.9%	OFF	98.1%	99.5%	98.4%	99.2%
Jul-25	99.5%	OFF	100.0%	99.4%	98.4%	66.7%
Aug-25	99.0%	Exempt	99.7%	99.6%	99.5%	99.2%

Gaseous Emission Monitors

Availability												
	Unit 1		Unit 2		Unit 3		Unit 4		Unit 5		Unit 6	
Month	SOx	NOx	SOx	NOx	SOx	NOx	SOx	NOx	SOx	NOx	SOx	NOx
Aug-24	99.9%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Sept-24	100.0%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Oct-24	99.8%	100.0%	99.6%	99.7%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	99.7%	99.7%
Nov-24	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	99.9%	100.0%
Dec-24	57.5%	57.5%	37.5%	37.5%	0.0%	0.0%	79.7%	79.7%	66.7%	66.7%	65.6%	65.7%
Jan-25	99.3%	99.1%	99.3%	99.3%	0.0%	0.0%	100.0%	96.4%	100.0%	100.0%	100.0%	100.0%
Feb-25	98.2%	100.0%	100.0%	99.6%	86.1%	85.2%	96.0%	96.0%	94.6%	94.6%	96.2%	96.2%
Mar-25	93.8%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Apr-25	98.6%	98.6%	OFF	OFF	98.6%	98.6%	92.6%	91.9%	99.2%	99.2%	99.2%	99.2%
May-25	97.6%	97.6%	OFF	OFF	98.1%	98.1%	97.5%	97.5%	97.8%	97.8%	98.1%	98.1%
Jun-25	99.9%	99.9%	OFF	OFF	96.0%	96.0%	99.8%	99.8%	99.7%	99.6%	99.6%	99.8%
Jul-25	99.7%	99.7%	OFF	OFF	99.7%	99.7%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%
Aug-25	100.0%	87.9%	100.0%	98.0%	93.6%	87.4%	84.9%	84.9%	96.0%	86.2%	77.9%	93.9%

Oxygen Monitor Availability						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Aug-24	99.9%	99.8%	99.9%	99.9%	100.0%	99.5%
Sept-24	100.0%	99.9%	100.0%	99.9%	99.7%	99.7%
Oct-24	99.2%	99.5%	0.0%	99.9%	94.9%	99.3%
Nov-24	100.0%	100.0%	0.0%	99.9%	84.9%	99.1%
Dec-24	57.5%	37.5%	0.0%	79.7%	66.7%	65.7%
Jan-25	99.6%	99.5%	0.0%	98.4%	99.4%	82.5%
Feb-25	99.7%	99.2%	85.2%	95.8%	94.4%	60.9%
Mar-25	100.0%	100.0%	100.0%	100.0%	99.8%	99.9%
Apr-25	98.7%	OFF	98.4%	92.6%	99.0%	99.0%
May-25	97.3%	OFF	98.0%	97.5%	97.5%	98.0%
Jun-25	99.7%	OFF	95.8%	99.8%	99.6%	99.6%
Jul-25	99.7%	OFF	99.7%	99.7%	99.6%	100.0%
Aug-25	87.5%	100.0%	85.4%	87.3%	88.0%	95.5%

ADDENDUM TO MONTHLY EMISSIONS REPORT

14. EFFICIENCY

ESP Efficiency (%)						
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Aug-24	99.84%	99.63%	99.75%	99.75%	99.77%	99.91%
Sept-24	99.79%	99.66%	99.78%	99.64%	99.67%	99.90%
Oct-24	99.87%	99.72%	Unit Off	99.67%	99.64%	99.86%
Nov-24	99.84%	99.78%	Unit Off	99.51%	99.66%	99.89%
Dec-24	99.77%	99.72%	Unit Off	99.51%	99.69%	99.89%
Jan-25	99.57%	99.76%	Unit Off	99.65%	99.41%	99.61%
Feb-25	99.46%	99.76%	97.78%	99.80%	99.27%	99.79%
Mar-25	99.51%	99.69%	97.28%	99.77%	99.01%	99.78%
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%
Jun-25	99.76%	Unit Off-line	99.80%	99.79%	99.74%	99.88%
Jul-25	99.80%	Unit Off-line	99.82%	99.69%	99.50%	99.97%
Aug-25	99.77%	Off-line	99.83%	99.78%	99.70%	99.67%

15. REMARKS

UNIT	MWLOSS	REASON	ACTUALSTARTDATE	ACTUALENDDATE
1	90	RHI casing repairs	2025/08/09 00:00:00	2025/08/09 18:02:00
1	140	High stack emissions.	2025/08/19 20:09:00	2025/08/20 00:17:00
1	593	UNIT TRIPPED DUE TO LOSS OF FRF PUMP.	2025/08/21 14:22:00	2025/08/21 18:27:00
1	90	Precip casing repairs	2025/08/22 00:00:00	2025/08/22 21:11:00
1	190	High stack emissions.	2025/08/27 21:51:00	2025/08/28 04:53:00
1	90	LHI casing rapper bars repairs	2025/08/29 00:00:00	2025/08/30 04:32:00
2	593	MGO ESP & SO3	2025/08/01 00:00:00	2025/08/09 20:56:00
2	353	ESP & SO3 plant Optimization	2025/08/31 01:00:00	2025/08/31 14:42:00
2	593	Condenser vac. trip. HP By-pass opted.	2025/08/31 14:42:00	2025/08/31 17:37:00
2	593	Boiler tube leak repairs	2025/08/31 19:31:00	2025/08/31 23:59:59
3	118	RHO casing repairs.	2025/08/03 07:35:00	2025/08/03 18:55:00
3	593	AM; Overspeed trip test.	2025/08/15 00:04:00	2025/08/15 00:58:00
3	0	Cold reserve	2025/08/15 00:58:00	2025/08/16 03:00:00
3	593	Repair spraywaters	2025/08/16 03:00:00	2025/08/17 07:54:00
4	56	EF:High stack emissions	2025/08/01 15:21:00	2025/08/01 16:59:00
4	64	High stack emissions.	2025/08/01 16:59:00	2025/08/01 20:40:00
4	70	High stack emissions.	2025/08/01 20:40:00	2025/08/01 23:59:00
4	96	RHO casing repairs	2025/08/01 23:59:00	2025/08/02 04:31:00
4	71	RHO precip casing repairs	2025/08/02 04:31:00	2025/08/02 20:00:00
4	593	Unit was manually tripped due to loss of essential equipment	2025/08/06 13:46:00	2025/08/10 04:33:00
4	160	High stack emissions.	2025/08/16 09:23:00	2025/08/16 15:22:00
4	180	High stack emissions.	2025/08/16 15:22:00	2025/08/17 00:05:00
4	160	EF:High stack emissions	2025/08/17 00:05:00	2025/08/17 04:51:00
4	593	Boiler tube leak	2025/08/17 20:15:00	2025/08/20 05:32:00
4	593	Boiler tube leak.	2025/08/27 02:07:00	2025/08/30 10:00:00
4	0	Cold Reserve	2025/08/30 10:00:00	2025/08/31 15:16:00
5	196	AM: High stack emissions.	2025/08/15 04:04:00	2025/08/15 10:03:00
5	100	LHO precip casing	2025/08/15 10:03:00	2025/08/16 20:17:00
5	98	High stack emissions.	2025/08/15 10:03:00	2025/08/16 00:32:00
5	100	LH Inner precip casing repairs	2025/08/17 00:00:00	2025/08/17 20:00:00
5	593	R/H Pyrometer protection activated.	2025/08/29 09:17:00	2025/08/29 14:10:00
6	593	Tripped on low drum level	2025/08/08 23:38:00	2025/08/09 04:07:00
6	18	AM: Planned mill load line tests.	2025/08/14 22:00:00	2025/08/15 01:18:00
6	328	LH PA fan repairs	2025/08/20 22:19:00	2025/08/21 03:20:00

PM Exceedances		
U1.	ESP Casing poor performance. RHI casing outage.	09-Aug
U1.	Unit 1 tripped. Poor ESP casings performance.	22-Aug
U1.	Poor ESP casing performance. High hopper levels.	25-Aug
U1.	Poor performance casings. LHI casing outage.	29-Aug
U3.	ESP poor casing performance. RHO ESP casing outage.	03-Aug
U3.	ESP poor casing performance.	06-Aug
U3.	ESP poor casing performance. Clean rapping brought forward.	07-Aug
U3.	Unit 3 on cold reserve.	15-Aug
U4.	Poor ESP casing performance. RHO ESP casing outage.	02-Aug
U4.	Poor ESP casing performance. High hopper levels.	14-Aug
U4.	Poor ESP casing performance. Test rap all ESP casings for a minute. Clean rapping brought forward.	15-Aug
U4.	Poor ESP performance.	22-Aug
U4.	Poor ESP casing performance. Manual rapping done.	23-Aug
U5.	Clean rapping brought forward. Poor ESP casing performance.	06-Aug
U5.	Clean rapping brought forward. Poor ESP casing performance. Pre outage STEP test done.	07-Aug
U5.	Poor ESP casing performance. Manual rapping done. High hopper levels. SO3 plant issues.	11-Aug

PM Exceedances		
U5.	Poor ESP casing performance. High hopper levels. SO3 plant issues.	13-Aug
U5.	Poor ESP casing performance. SO3 plant issues. Clean rapping brought forward.	14-Aug
U5.	Poor ESP casing performance. LHO Casing outage.	16-Aug
U5.	Poor ESP casing performance. LHO Casing outage.	17-Aug
U5.	High hopper levels. Poor ESP casing performance. Sulphur flow on manual.	25-Aug
U5.	Poor ESP casing performance. Manual rapping done.	28-Aug
U6.	No abatement plant technology due to low load.	20-Aug
U6.	No abatement plant technology due to low load.	21-Aug