Eskom	Technical and Generic Report	Matimba Power Station

Title: **Matimba Power Station July 2025 emissions report**

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1. Report Summary

Matimba Power Station was issued with an Atmospheric Emission License (H16/1/13-WDM05) in September 2022. The License requires the license holder to submit monthly reports to the Department. This report contains the required information as specified in the license for July 2025.The information recorded in the report is obtained from Matimba Emission Reporting tool MTB0725ERT.

During the period under review, Matimba experienced one hundred and twenty two (122) exceedances of the daily particulate matter emission limit (50mg/Nm^3), one hundred and ten (110) of these exceedances occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence and twelve (12) exceedances occurred within the 48-hour grace period.

There were no exceedances of the monthly SOx limit (3500mg/Nm^3). The were no exceedances of the daily NOx emission limit (750mg/Nm^3).

Flue gas conditioning plant availability was below 90% for unit 2, unit 4 and unit 6. Unit 1 SO3 plant's availability was 95%. Unit 2 SO3 plant's availability was 70%. Unit 4 SO3 plant's availability was 70%. Unit 5 SO3 plant's availability was 91% and unit 6 SO3 plant's availability was 84%.

The consumption rates for fuel oil for the month of July 2025 exceeded the limit of 1200 tons by 2804.1280 tons due to unit 3 cold start up attempts and combustion support.

More information regarding above mentioned issues is provided in the relevant sections within the report.

2. Emission information

2.1 Raw materials and products

Table 1: Quantity of Raw Materials and Products used/produced for the month.

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption Rate (Quantity)	Consumption Rate
	Coal	Tons/month	1 500 000	903672
	Fuel Oil	Tons/month	1 200	2804.128
Production Rates	**Product/ By-Product Name**	**Unit**	**Maximum Production Capacity Permitted (Quantity)**	**Production Rate**
	Energy	MW	4000	2101.073
	Ash	Tons/month	547500	329398.877

The consumption rates for fuel oil for the month of July 2025 exceeded the permitted maximum limits due to unit 3 cold start up attempts and combustion support.

2.2 Abatement technology

Table 2: Abatement Equipment Control Technology Utilised

Associated Unit	Technology Type	Minimum utilisation (%)	Efficiency (%)
Unit 1	Electrostatic Precipitator	100%	97.507%
Unit 2	Electrostatic Precipitator	100%	96.233%
Unit 3	Electrostatic Precipitator	100%	Off-line
Unit 4	Electrostatic Precipitator	100%	88.179%
Unit 5	Electrostatic Precipitator	100%	98.845%
Unit 6	Electrostatic Precipitator	100%	99.896%
Associated Unit	**Technology Type**	**Minimum utilisation (%)**	**Actual Utilisation (%)**
Unit 1	SO_3 Plant	100%	95%
Unit 2	SO_3 Plant	100%	70%
Unit 3	SO_3 Plant	100%	Off
Unit 4	SO_3 Plant	100%	70%
Unit 5	SO_3 Plant	100%	91%
Unit 6	SO_3 Plant	100%	84%

Flue gas conditioning plant availability was below 90% for unit 2, unit 4 and unit 6. Unit 2 SO3 plant was on hold due to Sulphur flow transmitter isolator faulty. Unit 4 SO3 Plant was on hold due to left hand Precipts inlet temperature low and right-hand bias blower motor faulty. Unit 6 SO3 plant was on permit to repair sulphur flow control valve.

Table 3: Energy Source Material Characteristics.

	Characteristic	Stipulated Range (Unit)	Monthly Average Content
Coal burned	**Sulphur Content**	1.6%	1.318%
	Ash Content	40%	36.451%

Energy source characteristics remained within the ranges stipulated in the license.

2.3 Emissions reporting

2.3.1 Particulate Matter Emissions

The emission monitors correlation and parallel tests were performed on unit 2,3 and 4 in June 2024 and the curves were applied on emissions calculations for June 2025.Unit 1,5 and 6 emission calculations were done using the correlation/parallel tests curves from the spot test performed in August 2023.Unit 2 PM correlation curve applied is linear curve, Unit 3 and 4 PM correlation curve applied is polynomial curve.

Unit 1 Particulate Emissions

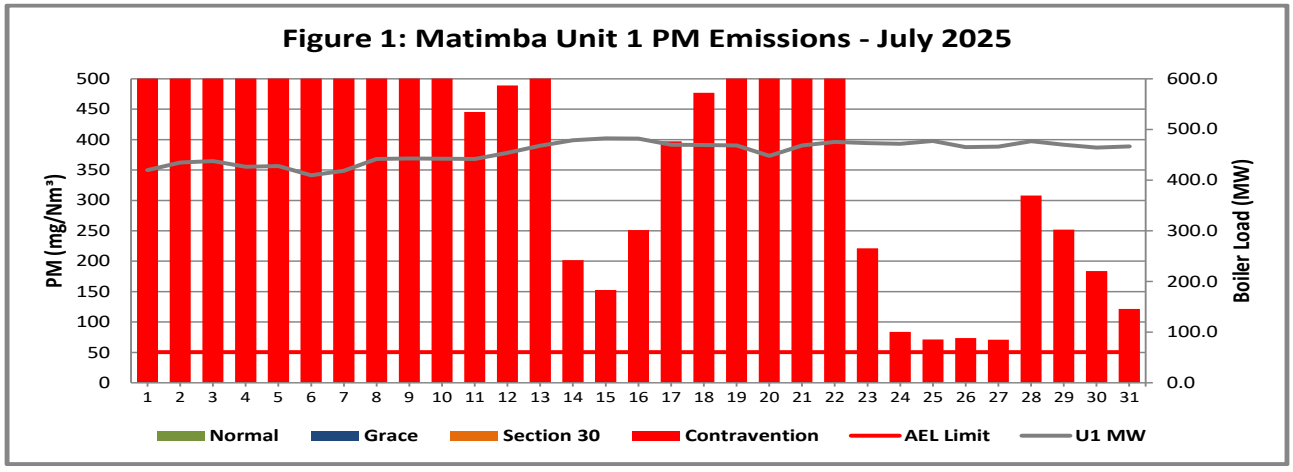

Figure 1: Particulate matter daily average emissions against emission limit for unit 1 for the month of July 2025

Interpretation: Unit 1 exceeded the daily particulate emission limit of 50mg/Nm3 on 1st to 31st of July 2025. All exceedances occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to high hopper levels causing electrostatic precipitators fields to trip and have low efficiency.

Unit 2 Particulate Emissions

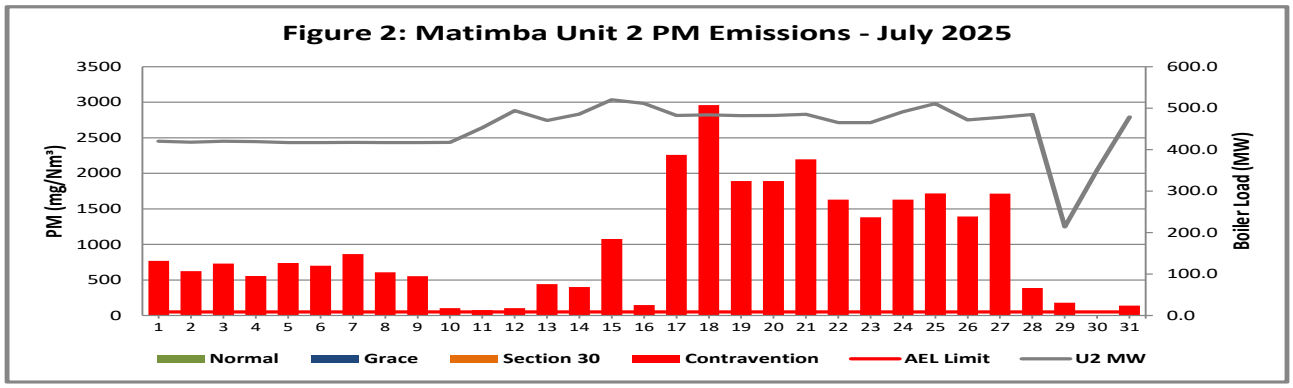

Figure 2: Particulate matter daily average emissions against emission limit for unit 2 for the month of July 2025

Interpretation: Unit 2 exceeded the daily particulate emission limit of 50mg/Nm3 on 1st to 29th and 31st of July 2025. All exceedances occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to high hopper levels causing electrostatic precipitators fields to trip and have low efficiency.

Unit 3 Particulate Emissions

Unit 3 is on outage

Unit 4 Particulate Emissions

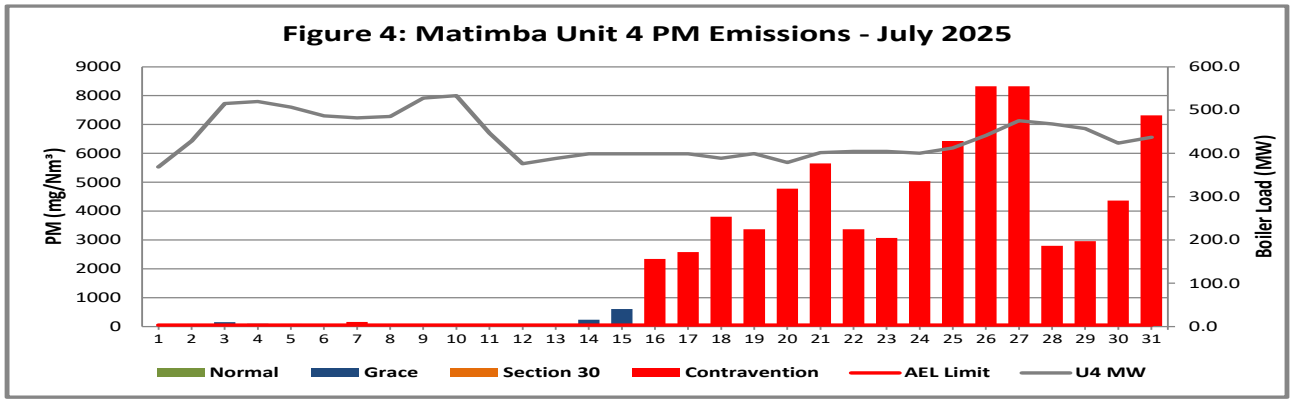

Figure 3: Particulate matter daily average emissions against emission limit for unit 4 for the month of July 2025

Interpretation: Unit 4 exceeded the daily particulate emission limit of 50mg/Nm3 on 3rd to 7th and 14th to 31st of July 2025. Exceedances from 5th to 8th and 16th to 31st of July 2025 occurred outside of the 48-hour grace period and were recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to high hopper levels causing electrostatic precipitators fields to trip and have low efficiency.

Unit 5 Particulate Emissions

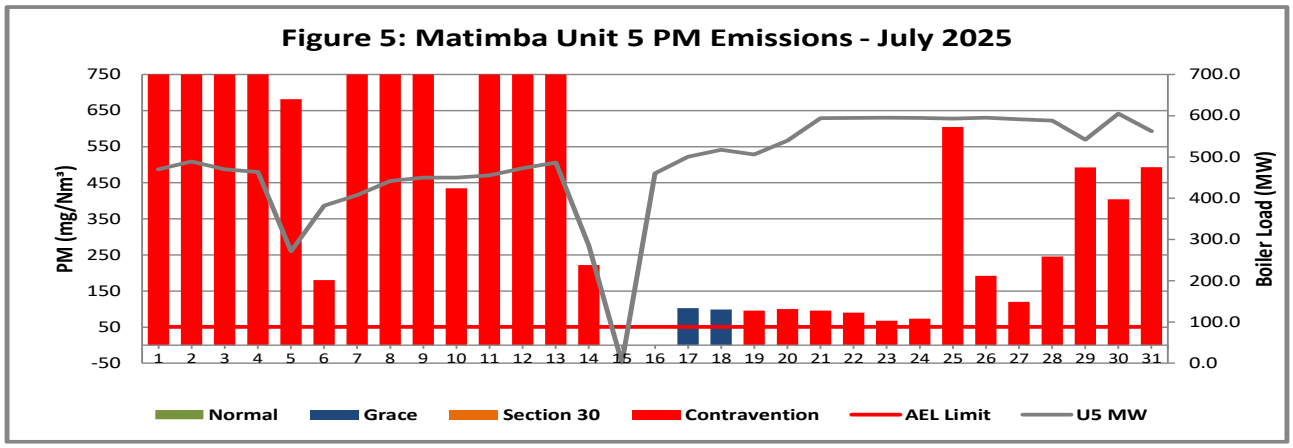

Figure 4: Particulate matter daily average emissions against emission limit for unit 5 for the month of July 2025

Interpretation: Unit 5 Particulate matter exceeded the daily limit of 50 mg/Nm^3 on 1st to 14th and 17th to 31st of July 2025. Exceedances from 1st to 14th and 19th to 31st of July 2025 occurred outside of the 48-hour grace period and was recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to high hopper levels causing electrostatic precipitators fields to trip and have low efficiency.

Unit 6 Particulate Emissions

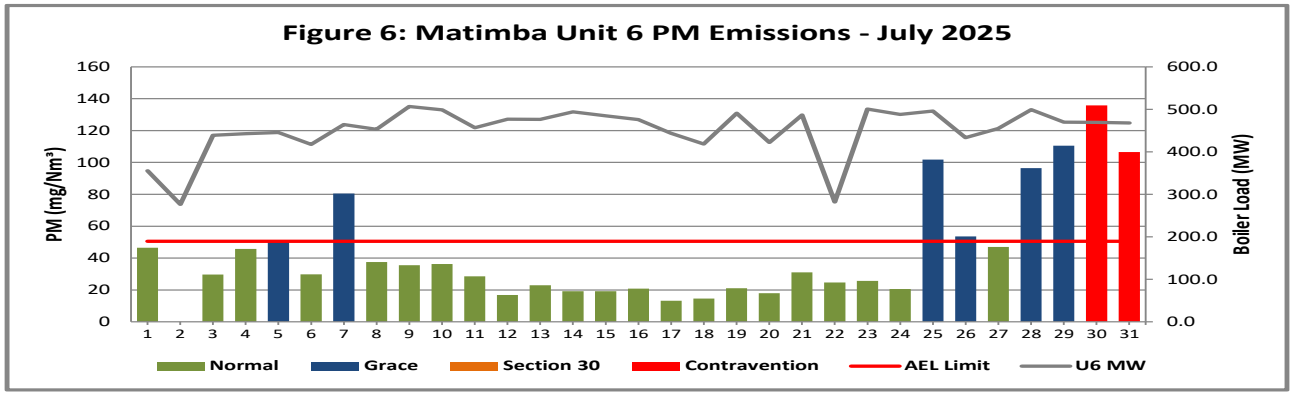

Figure 5: Particulate matter daily average emissions against emission limit for unit 6 for the month of July 2025

Interpretation: Unit 6 Particulate matter exceeded the daily limit of 50 mg/Nm^3 on 5th, 7th, 25th,26th, and 28th to 31st of July 2025. The exceedances from 30th and 31st of July 2025 occurred outside of the 48-hour grace period and was recorded on the Eskom incident management process as non-compliance to the Atmospheric Emissions Licence. The exceedances were due to high hopper levels causing electrostatic precipitators fields to trip and have low efficiency.

2.3.2 Gaseous Emissions

Gaseous emissions analyzers calibration for all 6 units were performed in July 2025 as per the Eskom emission standard requirement.

The quality assurance tests (QAL2) used for July 2025 emission calculations were performed in June 2024 for Unit 2,3 and 4. Unit 1,5 and 6 quality assurance curves utilized are spot tests performed in August 2023

2.3.2.a SOx Emissions

Unit 1 SO_2 Emissions

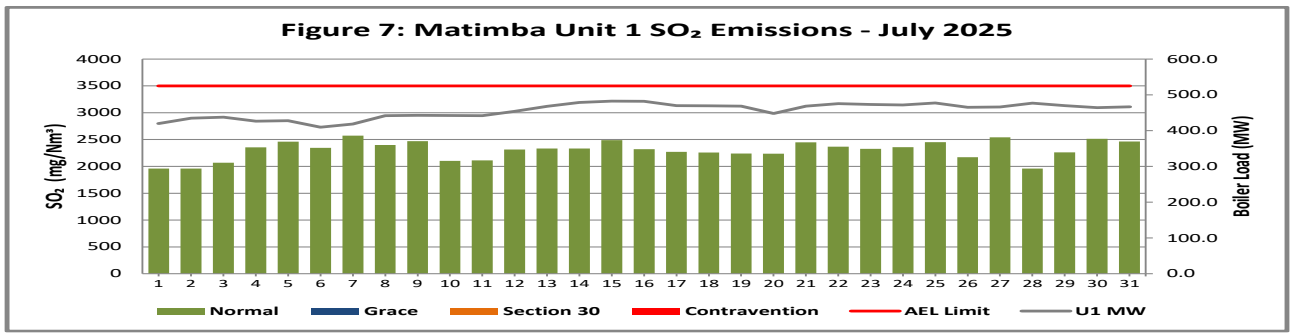

Figure 6: SO2 daily average emissions against emission limit for unit 1 for the month of July 2025

Interpretation: All daily averages below SO_2 emission monthly limit of 3500 mg/Nm^3.

Unit 2 SO_2 Emissions

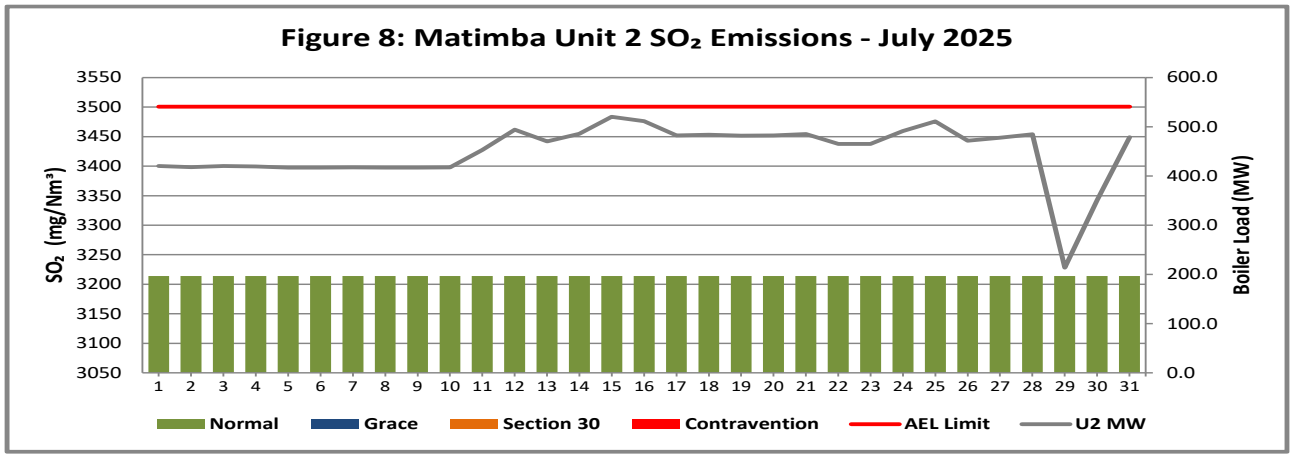

Figure 7: SO2 daily average emissions against emission limit for unit 2 for the month of July 2025

Interpretation: All daily averages below SO_2 emission monthly limit of 3500 mg/Nm^3.SRM (Standard Reference Measurements) were used to calculate the SO2 gaseous emissions for unit 1 in July 2025.

Unit 3 SO_2 Emissions

Unit 3 is on outage

Unit 4 SO_2 Emissions

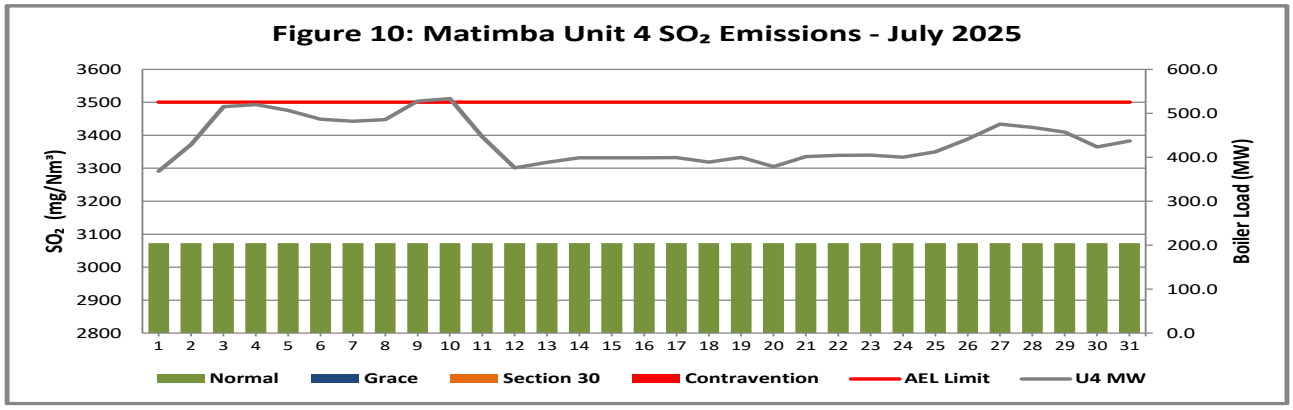

Figure 8: SO2 daily average emissions against emission limit for unit 4 for the month of July 2025

Interpretation: All daily averages below SO_2 emission monthly limit of 3500 mg/Nm^3 . SRM (Standard Reference Measurements) were used to calculate the SO2 gaseous emissions for unit 4 in July 2025.

Unit 5 SO_2 Emissions

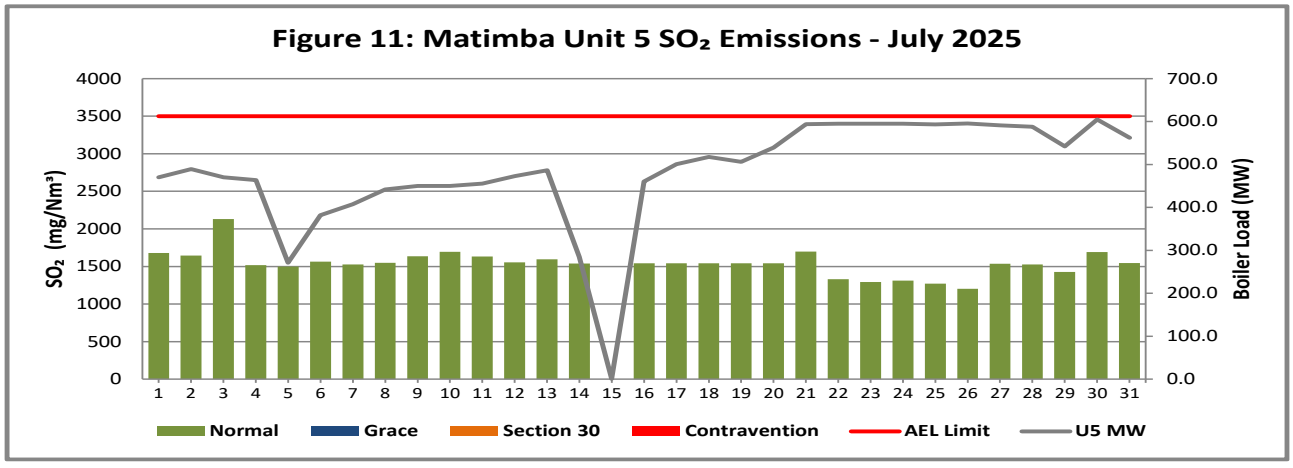

Figure 9: SO2 daily average emissions against emission limit for unit 5 for the month of July 2025

Interpretation: All daily averages below SO_2 emission monthly limit of 3500 mg/Nm^3.

Unit 6 SO_2 Emissions

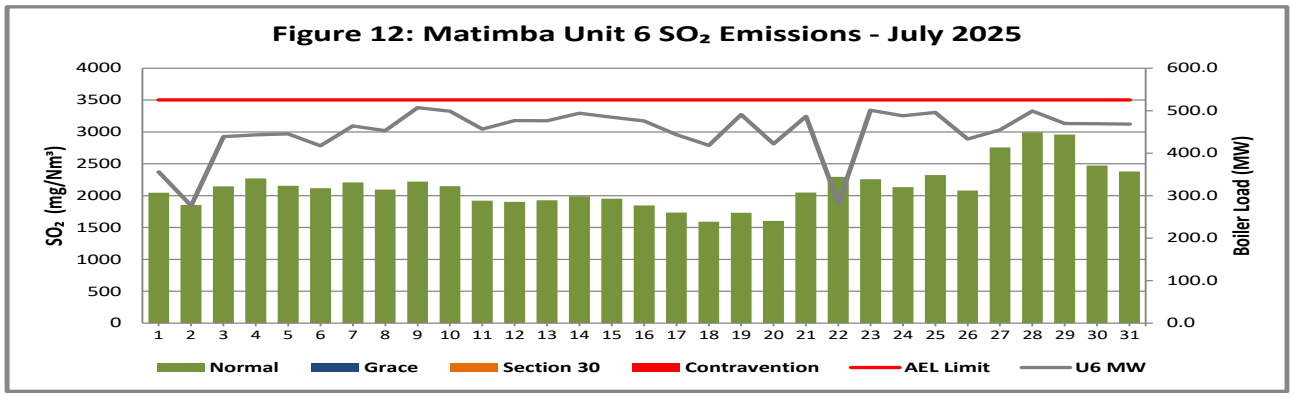

Figure 10: SO2 daily average emissions against emission limit for unit 6 for the month of July 2025

Interpretation: All daily averages below SO_2 emission monthly limit of 3500 mg/Nm^3 .

2.3.2.b NOx Emissions

Unit 1 NO_x Emissions

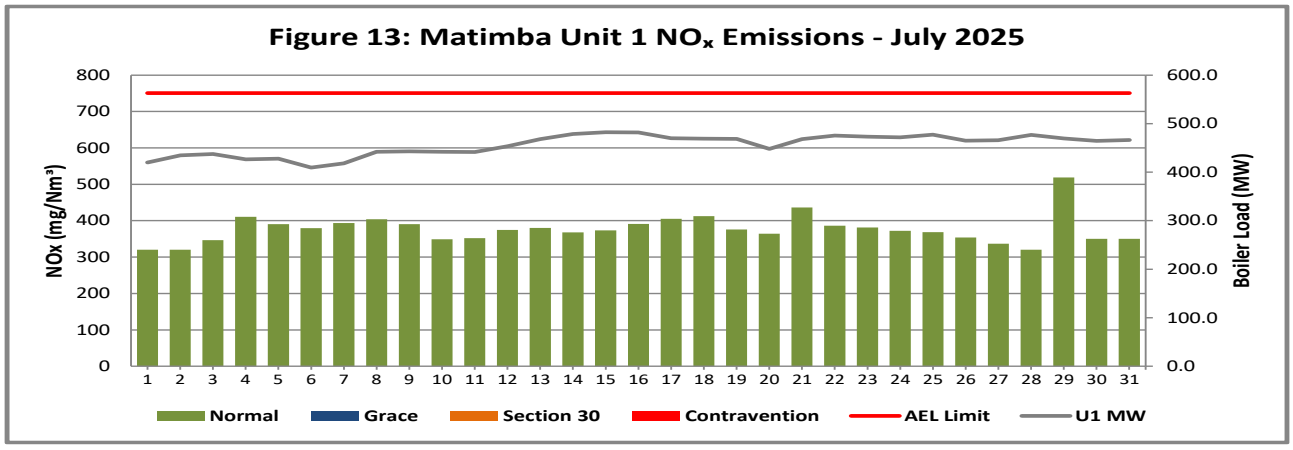

Figure 11: NOx daily average emissions against emission limit for unit 1 for the month of July 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm^3 .

Unit 2 NO_x Emissions

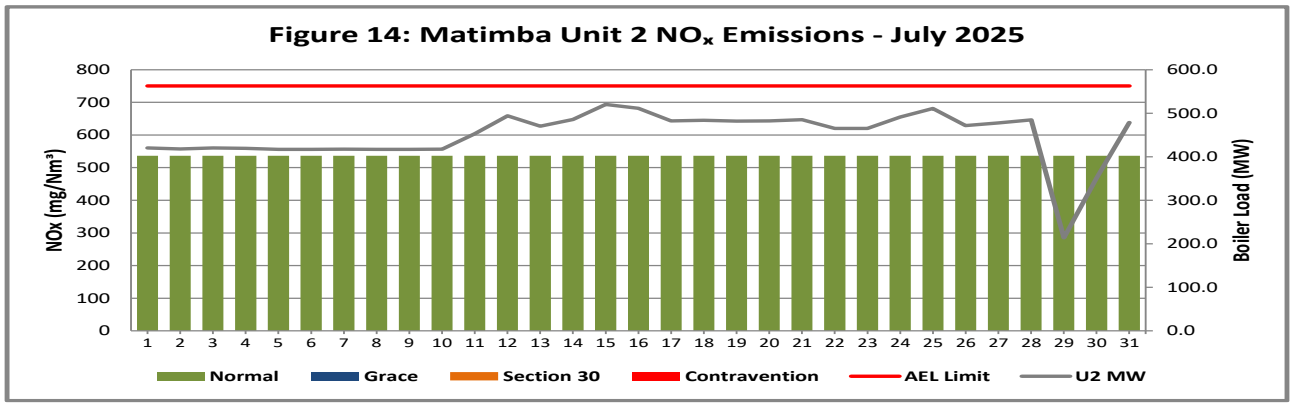

Figure 12: NOx daily average emissions against emission limit for unit 2 for the month of July 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm^3.

Unit 3 NO_x Emissions

Unit 3 is on outage

Unit 4 NO_x Emissions

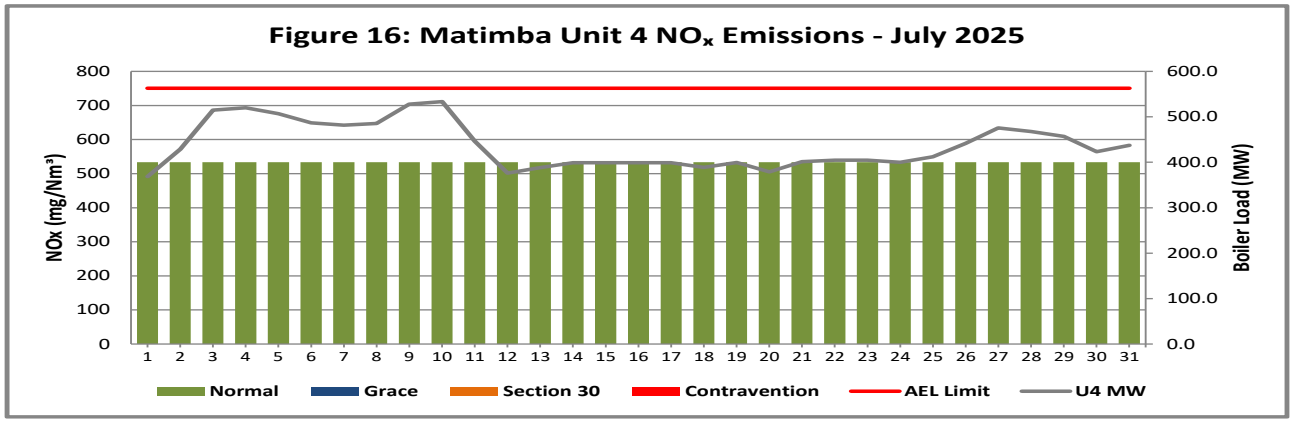

Figure 13: NOx daily average emissions against emission limit for unit 4 for the month of July 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm^3. SRM (Standard Reference Measurements) were used to calculate the SO2 gaseous emissions for unit 4 in July 2025.

Unit 5 NO_x Emissions

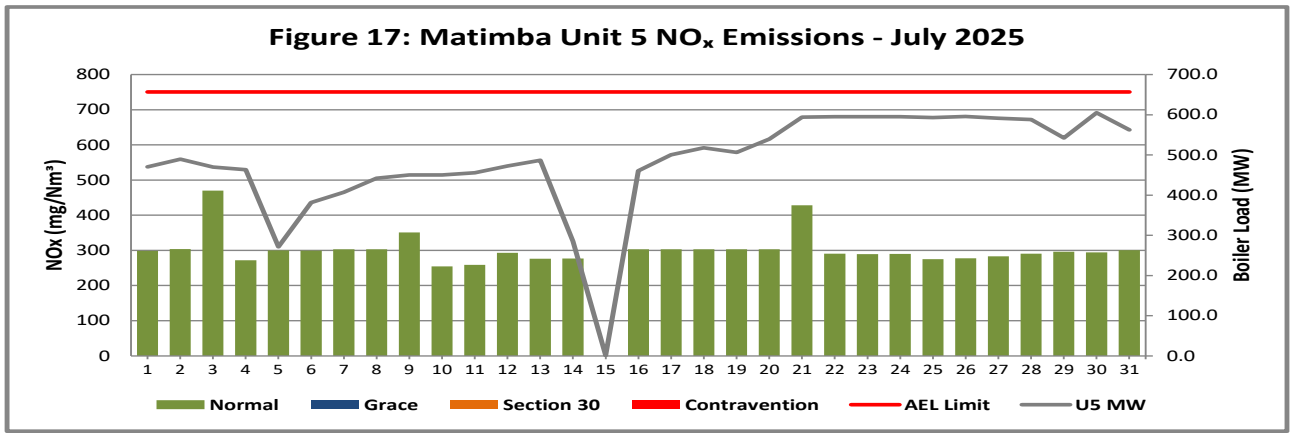

Figure 14: NOx daily average emissions against emission limit for unit 5 for the month of July 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm^3.

Unit 6 NO_x Emissions

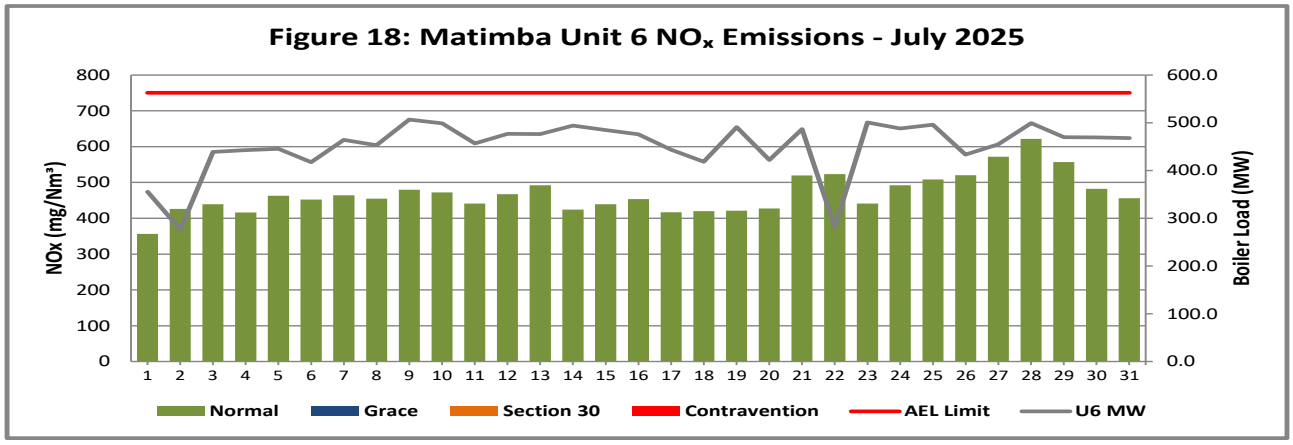

Figure 15: NOx daily average emissions against emission limit for unit 6 for the month of July 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm^3.

2.3.3 Total Volatile Organic Compounds

Table 4: Total volatile compound estimates

Eskom

CALCULATION OF EMISSIONS OF TOTAL VOLATILE COMPOUNDS FROM FUEL OIL STORAGE TANKS*

Date:	Monday, 25 August 2025
Station:	Matimba Power Station
Province:	Limpopo Province
Tank no.	1-4
Description:	Outdoor fuel oil storage tank
Tank Type:	Vertical fixed roof (vented to atmosphere)
Material stored:	Fuel Oil 150

MONTHLY INPUT DATA FOR THE STATION

Please only insert relevant monthly data inputs into the *blue cells* below
Choose from a dropdown menu in the *green cells*
The total VOC emissions for the month are in the *red cells*
IMPORTANT: Do not change ***any*** other cells without consulting the AQ CoE

MONTH:	**July**	
GENERAL INFORMATION:	**Data**	**Unit**
Total number of fuel oil tanks:	4	NA
Height of tank:	13.34	m
Diameter of tank:	9.53	m
Net fuel oil throughput for the month:	***2804.128***	
Molecular weight of the fuel oil:	166.00	Lb/lb-mole
METEROLOGICAL DATA FOR THE MONTH	**Data**	**Unit**
Daily average ambient temperature	17.66	°C
Daily maximum ambient temperature	25.87	°C
Daily minimum ambient temperature	10.47	°C
Daily ambient temperature range	15.40	°C
Daily total insolation factor	3.47	kWh/m²/day
Tank paint colour	***Grey/medium***	NA
Tank paint solar absorbtance	0.68	NA
FINAL OUTPUT:	**Result**	**Unit**
Breathing losses:	0.53	kg/month
Working losses:	0.08	kg/month
TOTAL LOSSES (Total TVOC Emissions for the month):	**0.61**	**kg/month**

*Calculations performed on this spreadsheet are taken from the USEPA AP-42- Section 7.1 Organic Liquid Storage Tanks - January 1996. This spreadsheet is derived from materials provided by Jimmy Peress, PE, Tritech Consulting Engineers, 85-93 Chevy Chase Street, Jamaica, NY 11432 USA, Tel - 718-454-3920, Fax - 718-454-6330, e-mail - PeressJ@nyc.rr.com.

2.3.4 Greenhouse gas (CO_2) emissions

CO_2 emissions are reported in terms of the Greenhouse gas reporting regulations (GN 43712, GNR. 994/2020) and are not included in the monthly AEL compliance report.

2.4 Daily power generated.

Table 5: Daily power generated per unit in MWh for the month of July 2025

Date	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
2025/07/01	9213.47	9047.59	Unit off	8004.78	10157.5	7628.29
2025/07/02	9569.37	9017.64	Unit off	9349.76	10573.9	5767.84
2025/07/03	9606.67	9079.41	Unit off	11244.9	10137.9	9509.84
2025/07/04	9324.81	9033.49	Unit off	11342.4	9988.47	9566.16
2025/07/05	9380.6	9020.34	Unit off	11046	5721.64	9640.31
2025/07/06	8957.25	8990.67	Unit off	10611.4	8180.32	8992.75
2025/07/07	9177.19	9010.6	Unit off	10515.5	8783.58	10062.3
2025/07/08	9707.99	8997.98	Unit off	10612.6	9544.24	9812.14
2025/07/09	9726.39	8986.92	Unit off	11558.9	9769.05	11037.8
2025/07/10	9690.11	8994.99	Unit off	11648.4	9756.1	10848.5
2025/07/11	9684.64	9775.19	Unit off	9664.1	9864.52	9901.05
2025/07/12	9969.87	10672.7	Unit off	8095.3	10233.4	10350.9
2025/07/13	10287.7	10148.1	Unit off	8425.53	10546.8	10358.4
2025/07/14	10534	10505.1	Unit off	8675.73	6168.32	10739.7
2025/07/15	10616.3	11274.7	Unit off	8680	Unit off	10522.1
2025/07/16	10604.1	11085.3	Unit off	8699.61	9802.41	10328.4
2025/07/17	10324.9	10424.6	Unit off	8707.54	10771.6	9607.21
2025/07/18	10306.3	10432.8	Unit off	8468.73	11153.8	9008
2025/07/19	10273.5	10362.3	Unit off	8733.65	10935.8	10638.8
2025/07/20	9806.82	10390.9	Unit off	8262.01	11684.9	9114.18
2025/07/21	10271.4	10469.5	Unit off	8767.08	12870.7	10555.5
2025/07/22	10417.4	10017.3	Unit off	8837.42	12853.1	5885.6
2025/07/23	10354.5	9981.23	Unit off	8844.89	12865	10858.7
2025/07/24	10320	10550	Unit off	8760.73	12838.5	10581.9
2025/07/25	10442.5	10952.3	Unit off	8959.88	12800	10732
2025/07/26	10147.4	10074	Unit off	9613.2	12860.6	9311.19
2025/07/27	10159.8	10203.3	Unit off	10379	12771.6	9808.76
2025/07/28	10441.6	10418.3	Unit off	10249.7	12712.6	10831.9
2025/07/29	10307.9	4428.94	Unit off	10025.6	11702.4	10179.7
2025/07/30	10183.5	7377.26	Unit off	9224.52	13078	10174
2025/07/31	10223.1	10333.3	Unit off	9561.33	12158.7	10135.9

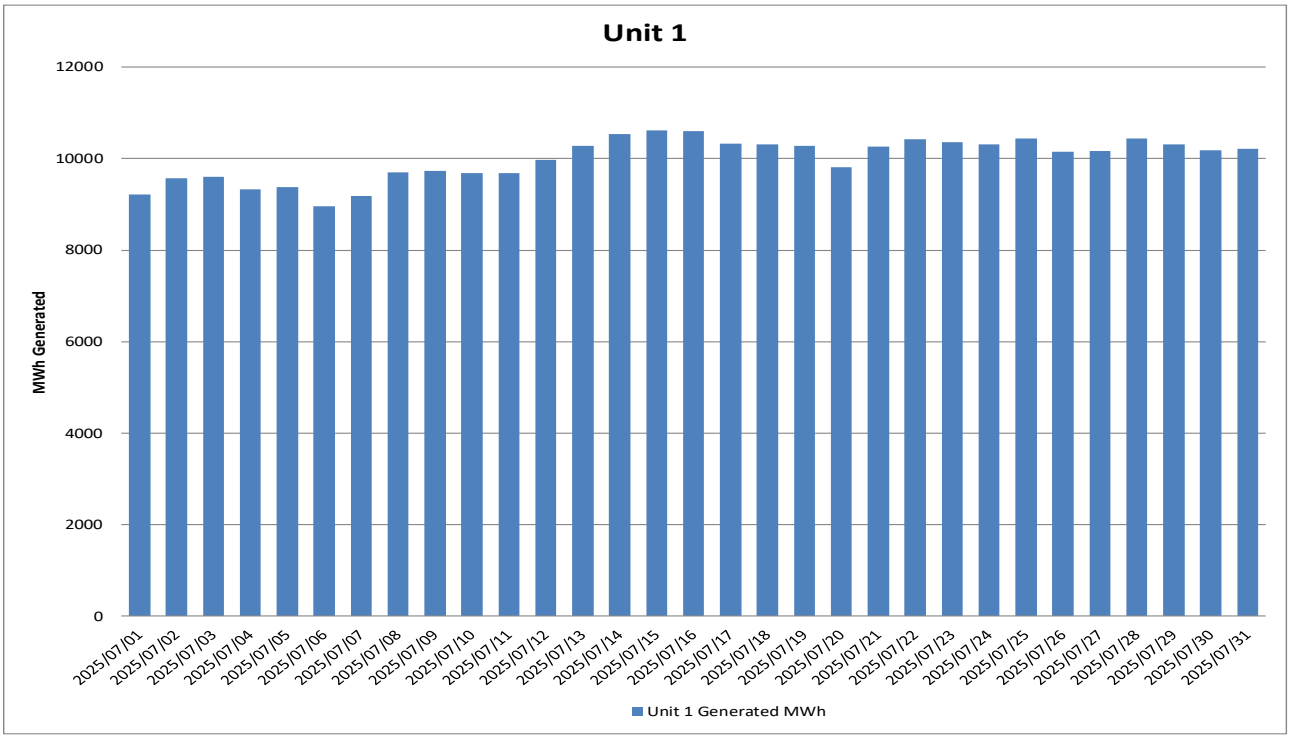

Figure 16: Unit 1 daily generated power in MWh for the month of July 2025

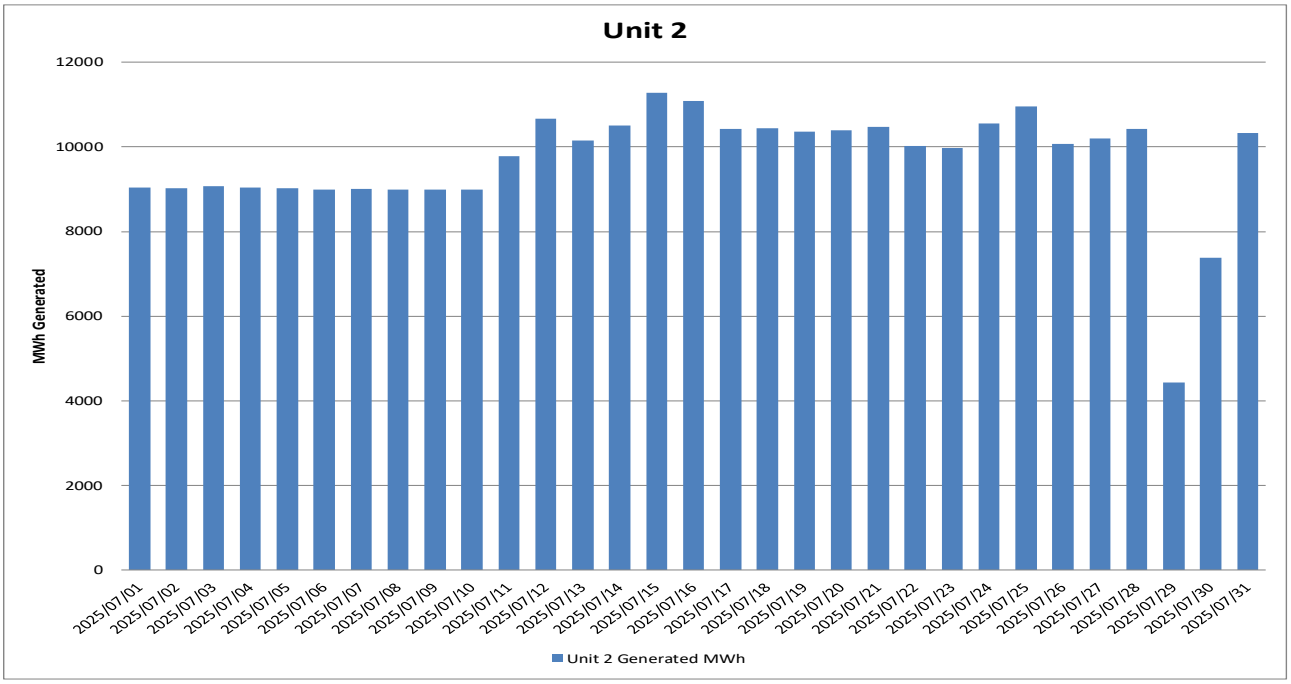

Figure 17: Unit 2 daily generated power in MWh for the month of July 2025

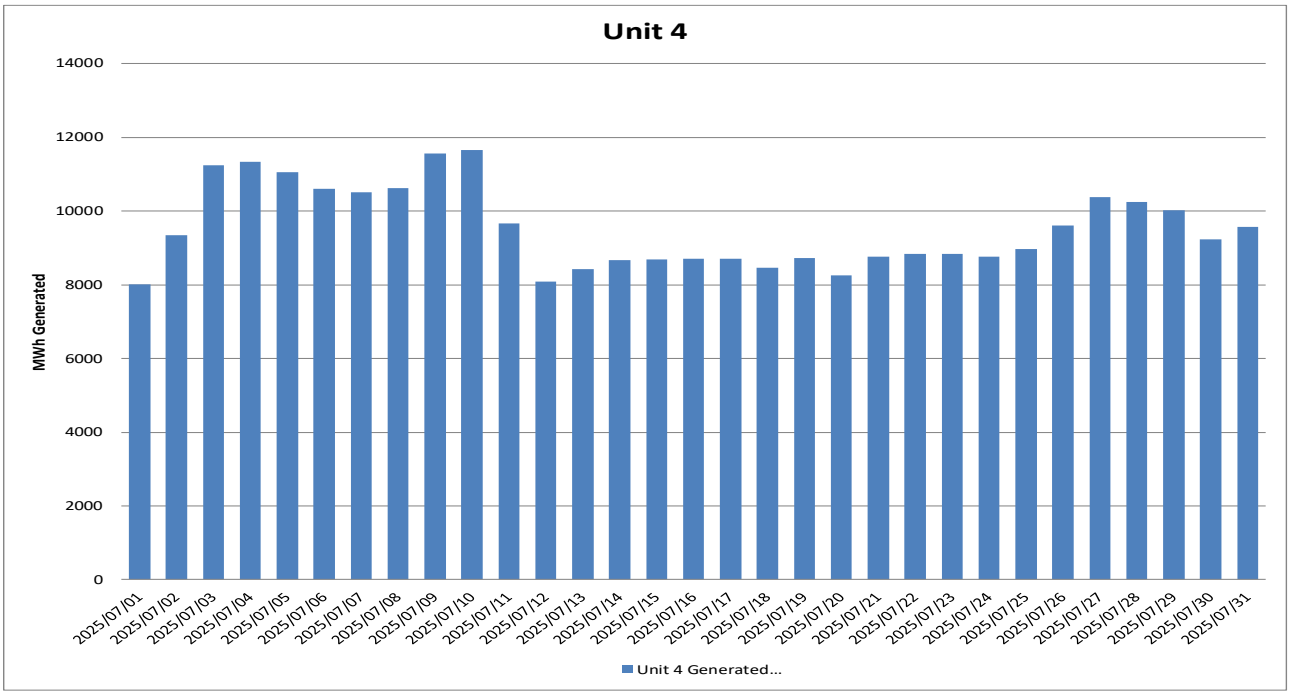

Figure 18: Unit 4 daily generated power in MWh for the month of July 2025

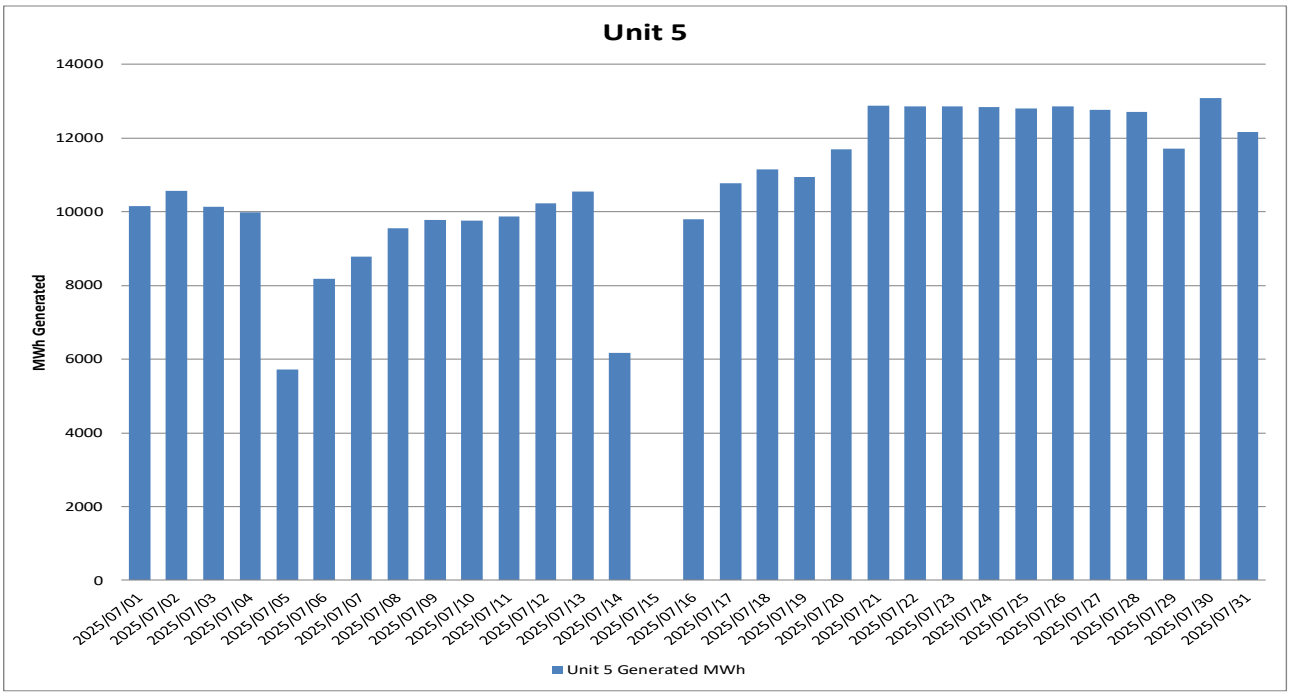

Figure 19: Unit 5 daily generated power in MWh for the month of July 2025

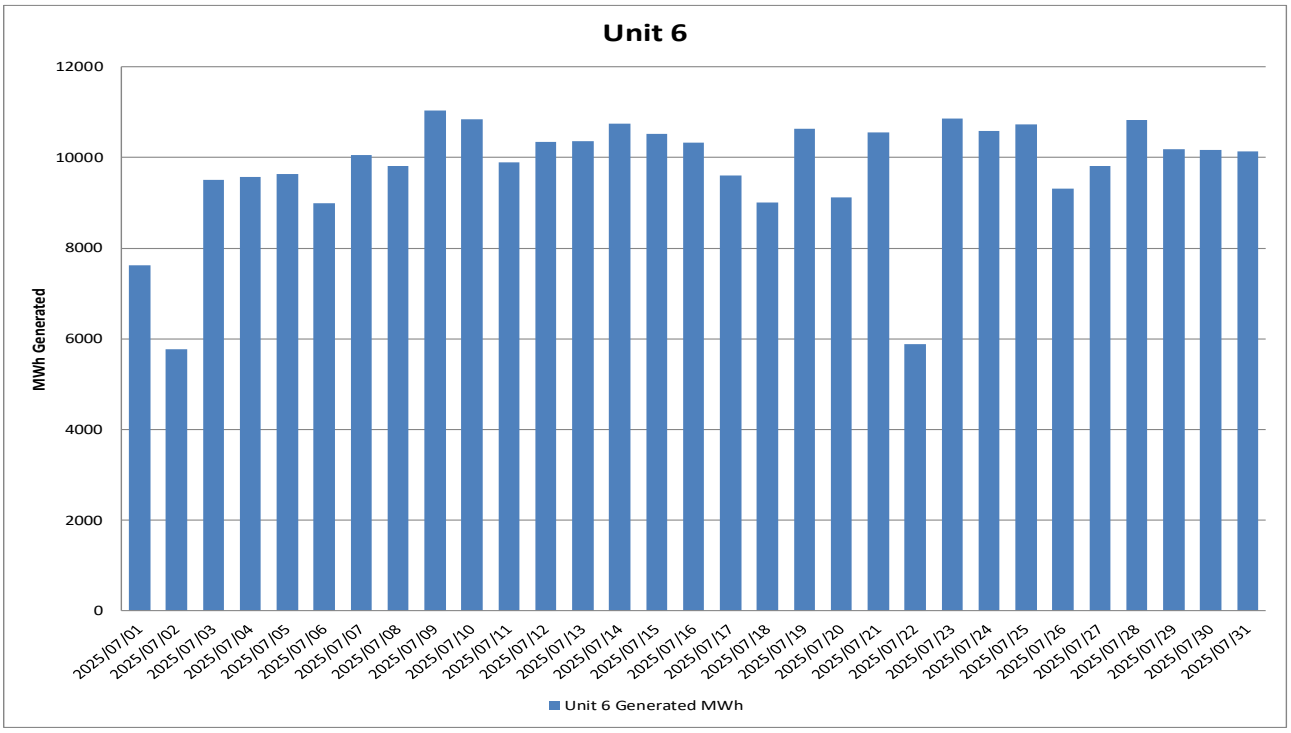

Figure 20: Unit 6 daily generated power in MWh for the month of July 2025

2.5 Pollutant Tonnages

The emitted pollutant tonnages for July 2025 are provided in table 6.

Table 6: Pollutant tonnages for the month of July 2025

Associated Unit/Stack	PM (tons)	SO_2 (tons)	NO_x (tons)
Unit 1	1 443.4	3 746	612
Unit 2	2 127.8	7 128	1 190
Unit 3	Off	Off	Off
Unit 4	6 774.1	8 468	1 470
Unit 5	702.9	2 305	457
Unit 6	60.1	3 020	665
SUM	11 108.15	24 666	4 393

2.6 Operating days in compliance to PM AEL Limit

Table 7: Operating days in compliance with PM AEL limit of July 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	0	0	0	31	31	857.6
Unit 2	0	0	0	30	30	995.9
Unit 3	Off	Off	Off	Off	Off	Off
Unit 4	7	4	0	20	24	2 458.2
Unit 5	0	2	0	27	29	503.9
Unit 6	22	6	0	2	8	44.7
SUM	**29**	**12**	**0**	**110**	**122**	

2.7 Operating days in compliance to SOx AEL Limit

Table 8: Operating days in compliance with SOx AEL limit of July 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Limit Value	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	3500	2 305.3
Unit 2	31	0	0	0	0	3500	3 214.1
Unit 3	Off	Off	Off	Off	Off	3500	Off
Unit 4	31	0	0	0	0	3500	3 072.7
Unit 5	30	0	0	0	0	3500	1 543.6
Unit 6	31	0	0	0	0	3500	2 134.1
SUM	**154**	**0**	**0**	**0**	**0**		

2.8 Operating days in compliance to NOx AEL Limit

Table 9: Operating days in compliance with NOx AEL limit of July 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	376.6
Unit 2	31	0	0	0	0	536.4
Unit 3	Off	Off	Off	Off	Off	Off
Unit 4	31	0	0	0	0	533.4
Unit 5	30	0	0	0	0	303.1
Unit 6	31	0	0	0	0	468.4
SUM	**154**	**0**	**0**	**0**	**0**	

2.9 Continuous Emission Monitors

Table 10: Monitor reliability percentage (%)

Associated Unit/Stack	PM	SO_2	NO	O_2
Unit 1	*45.8*	*100.0*	*81.6*	*100.0*
Unit 2	*33.3*	*100.0*	*100.0*	*100.0*
Unit 3	*Off*	*Off*	*Off*	*Off*
Unit 4	*54.3*	*100.0*	*100.0*	*100.0*
Unit 5	*67.0*	*79.4*	*58.9*	*76.9*
Unit 6	*98.2*	*99.7*	*99.7*	*91.0*

Note: NOx emissions are measured as NO in PPM. Final NOx value is expressed as total NO2.

Continuous emission monitors were reliable for less than 80% of the reporting period for unit 1,2, 4 and 5 PM. Unit 1 PM monitor reliability was low zero because the dust monitor was not calibrated, and the monitor kept maxing out of the monitor's range. Unit 2 PM monitor reliability was low due to the number of times the monitor kept maxing out of the monitors' range. Unit 4 PM monitor reliability was low due to the number of times the monitor kept maxing out of the monitors' range. Unit 5 PM monitor reliability was low due to the number of times the monitor kept maxing out of the monitors' range. Unit 2 and 4 gaseous monitor reliability was 100% due to the SRM (Standard Reference Material) values from the parallel test used to calculate the gaseous emissions for unit 2 and 4.

2.10.1 Changes, downtime, and repairs

Unit 1

- No adjustments done on the CEMs.
- Correlation test to be done.

Unit 2

- No adjustments done on the CEMs.
- No downtime or repairs done on the particulate monitors.

Unit 3

- No adjustments done on the CEMs.
- Correlation test to be done.

Unit 4

- No adjustments done on the CEMs.
- Correlation test to be done.

Unit 5

- No adjustments done on the CEMs.
- Correlation test to be done.

Unit 6

- No adjustments done on the CEMs.
- Correlation test to be done.

2.10.2 Sampling dates and times

Table 11: Dates of last full conducted CEMS verification tests for PM for unit 6.

Name of service provider:		Stacklabs Environmental Services CC		
Address of service provider:		10 Chisel Street Boltonia Krugersdorp 1739		
Stack/ Unit	**PM**	**SO_2**	**NOx**	**CO_2**
6	2020/09/09 06h41	New sampling tests in table 14	New sampling tests in table 14	New sampling tests in table 14

Table 12: Dates of last conducted CEMS Spot verification tests for PM, SO_2 and NOx for unit 1, 5 and 6)

Name of service provider:		Levego Environmental services		
Address of service provider:		Building R6 Pineland site Ardeer Road Modderfontein 1645		
Stack/ Unit	**PM**	**SO_2**	**NOx**	**CO_2**
1	2023/08/01 19h33	2023/08/01 19:33	2023/08/01 19:33	2023/08/01 19:33
5	2023/08/05 07:30	2023/08/05 07:30	2023/08/05 07:30	2023/08/05 07:30
6	Dates in table 13 above	2023/08/05 15:52	2023/08/05 15:52	2023/08/05 15:52

Note: The CEMS Spot verification tests for PM, SO_2 and NOx were performed in August 2023. PM spot verification test results for unit 6 failed and old curves are still in use.

Table 13: Dates of last full conducted CEMS verification tests for PM for unit 2, unit 3 and 4 only

Name of service provider:		Levego Environmental services		
Address of service provider:		Building R6 Pineland site Ardeer Road Modderfontein 1645		
Stack/ Unit	**PM**	**SO_2**	**NOx**	**CO_2**
2	2024/07/02 08h50	2024/07/02 12h35	2024/07/02 12h35	2024/07/02 12h35
3	2024/06/23 16h34	2024/06/23 14h00	2024/06/23 14h00	2024/06/23 14h00
4	2024/06/29 16h05	2024/06/29 11h00	2024/06/29 11h00	2024/06/29 11h00

2.10 Units Start-up information

Table 14: Start-up information

Unit	2	
Fires in	2025/07/30	01h16
Synchronization with Grid	2025/07/30	06h22
Emissions below limit	2025/07/29	The unit did not go below the limit
Fires in, to synchronization	5.6	HOURS
Synchronization to < Emission limit	N/A	HOURS

Unit	5	
Fires in	2025/07/05	20h31
Synchronization with Grid	2025/07/05	22h51
Emissions below limit	2025/07/14	14h26
Fires in, to synchronization	2.20	HOURS
Synchronization to < Emission limit	207.35	HOURS

Unit	5	
Fires in	2025/07/15	23h22
Synchronization with Grid	2025/07/16	03h44
Emissions below limit	2025/07/17	11h00
Fires in, to synchronization	4.22	HOURS
Synchronization to < Emission limit	31.16	HOURS

Unit	6	
Fires in	2025/07/02	01h31
Synchronization with Grid	2025/07/02	04h35
Emissions below limit	2025/07/02	10h43
Fires in, to synchronization	3.4	HOURS
Synchronization to < Emission limit	6.8	HOURS

Unit	6	
Fires in	2025/07/22	11h56
Synchronization with Grid	2025/07/22	19h09
Emissions below limit	2025/07/22	20h22
Fires in, to synchronization	7.13	HOURS
Synchronization to < Emission limit	1.13	HOURS

2.11 Emergency generation

Table 15: Emergency generation

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Emergency Generation hours declared by national Control	744	744	744	744	744	744
Emergency Hours declared including hours after standing down	744.00	727.75	Off	744.00	702.70	731.89
Days over the Limit during Emergency Generation	31	30	Off	24	29	8

During the period under review all Units were on emergency generation in force from 01 July 2025 until 31 July 2025.

2.12 Complaints register.

Table 16: Complaints

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
None					

2.13 Air quality improvements and social responsibility conducted.

Air quality improvements

None

Social responsibility conducted.

None

2.14 Ambient air quality monitoring

Marapong ambient air quality monitoring station was relocated from the previous location to Ditheku primary school and commissioned to service on 20 March 2024. The July 2025 ambient air quality monitoring report is attached to this report as an addendum.

2.15 Electrostatic precipitator and Sulphur plant status

Unit 1

- High hopper levels cause a decline in precipitator performance.
- The SO_3 plant is operating normally with no abnormalities observed.

Unit 2

- High hopper levels cause a decline in precipitator performance.
- The SO_3 plant is operating normally with no abnormalities observed.

Unit 3

- Unit on outage.

Unit 4

- High hopper levels cause a decline in precipitator performance.
- The SO_3 plant is operating normally with no abnormalities observed.

Unit 5

- High hopper levels cause a decline in precipitator performance.
- The SO_3 plant is operating normally with no abnormalities observed.

Unit 6

- High hopper levels cause a decline in precipitator performance.
- The SO_3 plant is operating normally with no abnormalities observed.

SO_3 common plant

- The SO_3 common plant is operating normally with no abnormalities observed.

2.16 General

Name and reference number of the monitoring methods used:

1. Particulate and gas monitoring according to standards
    a. BS EN 14181:2004 - Quality Assurance of Automated Measuring Systems
    b. ESKOM internal standard 240-56242363 Emissions Monitoring and Reporting Standard

Sampling locations:

1. Stack one
    a. Particulates:
        i. S23º 40' 2.8" E027º 36' 34.8" 175m from ground level and 75m from the top.
    b. Gas:
        i. S23º 40' 2.8" E027º 36' 34.8" 100m from ground level and 150m from the top.
    c. Stack height
        i. 250 meter consist of 3 flues
2. Stack two
    a. Particulates:
        i. S23º 40' 14.8" E027º 36' 47.5" 175m from ground level and 75m from the top.
    b. Gas:
        i. S23º 40' 14.8" E027º 36' 47.5" 100m from ground level and 150m from the top.
    c. Stack height
        i. 250 meter consist of 3 flues

3. Attachments

- Fugitive dustfall out monitoring report and Ambient air quality report.
- Marapong ambient air quality report

4. Report Conclusion

The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission report sent to your office.

Hoping the above will meet your satisfaction.

I hereby declare that the information in this report is correct.

Yours sincerely

Wikus Janse van Rensburg

GENERAL MANAGER: MATIMBA POWER STATION