

Technical and Generic Report

Matimba Power Station

Title: Matimba Power Station August

2025 emissions report

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RP/247/064

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Emission management

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Matimba Power Station

Functional Area Applicability:

Environment

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02 Oct 2025

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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 August 2025. The information recorded in the report is obtained from Matimba Emission Reporting tool MTB0825ERT.



During the period under review, Matimba experienced one hundred and forty six (146) exceedances of the daily particulate matter emission limit (50mg/Nm³), one hundred and thirty seven (137) 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 nine (19) exceedances occurred within the 48-hour grace period.

There were no exceedances of the monthly SOx limit (3500mg/Nm³). The were no exceedances of the daily NOx emission limit (750mg/Nm³).

Flue gas conditioning plant availability was below 90% for unit 2 and unit 3. Unit 1 SO3 plant's availability was 90%. Unit 2 SO3 plant's availability was 64%. Unit 3 SO3 plant's availability was 67%. Unit 4 SO3 plant's availability was 94%. Unit 5 SO3 plant's availability was 99% and unit 6 SO3 plant's availability was 95%.

The consumption rates for fuel oil for the month of August 2025 exceeded the limit of 1200 tons by 1995.732 tons due to multiple unit light ups and combustion support.

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

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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
useu	Coal	Tons/month	1 500 000	847980
	Fuel Oil	Tons/month	1 200	1995.732
Production Rates	Product/ By- Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate
114100	Energy	MW	4000	2092.385
	Ash	Tons/month	547500	306646.118

The consumption rates for fuel oil for the month of August 2025 exceeded the permitted maximum limits due to multiple unit light ups 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%	98.636%
Unit 2	Electrostatic Precipitator	100%	98.463%
Unit 3	Electrostatic Precipitator	100%	98.547%
Unit 4	Electrostatic Precipitator	100%	70.973%
Unit 5	Electrostatic Precipitator	100%	99.195%
Unit 6	Electrostatic Precipitator	100%	99.586%
Associated	Technology Type	Minimum utilisation	Actual Utilisation (%)
Unit		(%)	
Unit 1	SO₃ Plant	100%	90%
Unit 2	SO₃ Plant	100%	64%
Unit 3	SO₃ Plant	100%	67%
Unit 4	SO₃ Plant	100%	94%
Unit 5	SO₃ Plant	100%	99%
Unit 6	SO₃ Plant	100%	95%

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Flue gas conditioning plant availability was below 90% for unit 2 and unit 3. Unit 2 SO3 plant was on hold due to precipitators inlet temperature low. Unit 4 SO3 Plant was on hold due to convertor inlet temperature low.

Table 3: Energy Source Material Characteristics.

	Characteristic	Stipulated Range (Unit)	Monthly Average Content	
Cool burned	Sulphur Content	1.6%	1.328%	
Coal burned	Ash Content	40%	36.162%	

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

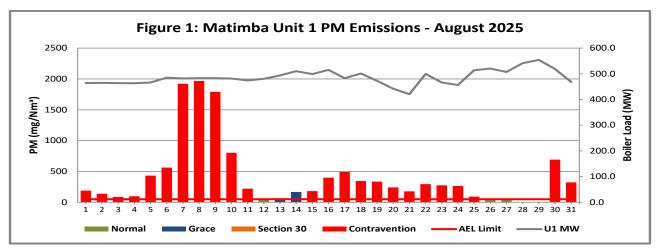


Figure 1: Particulate matter daily average emissions against emission limit for unit 1 for the month of August 2025

Interpretation: Unit 1 exceeded the daily particulate emission limit of 50mg/Nm3 on 1st to 11th, 13th to 25th, 30th and 31st of August 2025. Exceedances on the 1st to 11th, 15 to 25th, 30th and 31st of August 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.

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Unit 2 Particulate Emissions

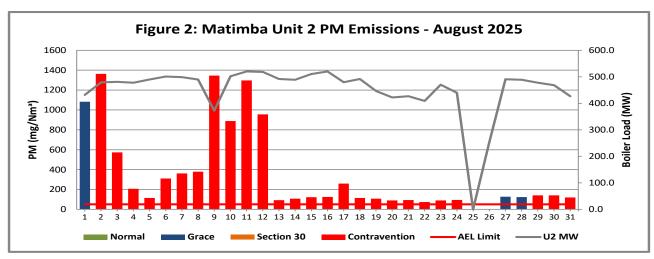


Figure 2: Particulate matter daily average emissions against emission limit for unit 2 for the month of August 2025

Interpretation: Unit 2 exceeded the daily particulate emission limit of 50mg/Nm3 on 1st to 24th and 27th to 31st of August 2025. Exceedances on the 2nd to 24th and 29th to 31st of August 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 3 Particulate Emissions

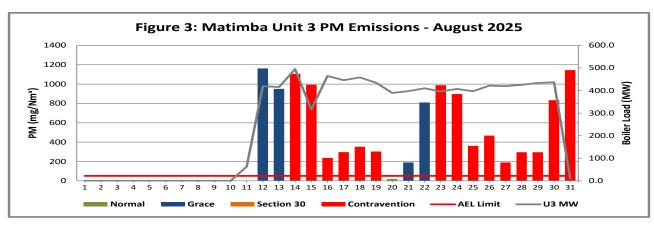


Figure 3: Particulate matter daily average emissions against emission limit for unit 3 for the month of August 2025

Interpretation: Unit 3 exceeded the daily particulate emission limit of 50mg/Nm3 on 12th to19th and 21st to 31st of August 2025. Exceedances on the 14th to 19th and 23rd to 31st of August 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.

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Unit 4 Particulate Emissions

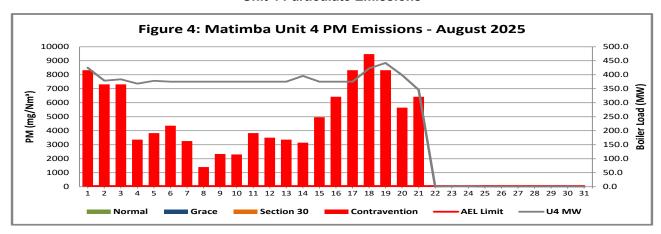


Figure 4: Particulate matter daily average emissions against emission limit for unit 4 for the month of August 2025

Interpretation: Unit 4 exceeded the daily particulate emission limit of 50mg/Nm3 on 1st to 21st of August 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 5 Particulate Emissions

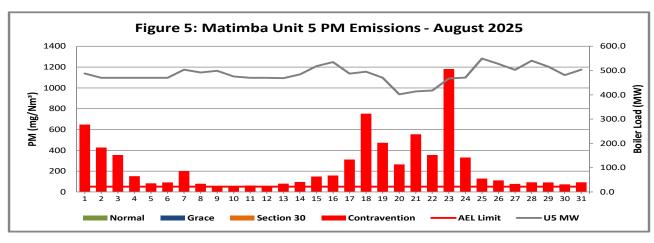


Figure 5: Particulate matter daily average emissions against emission limit for unit 5 for the month of August 2025

Interpretation: Unit 5 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 1st to 31st of August 2025. All exceedances 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.

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Unit 6 Particulate Emissions

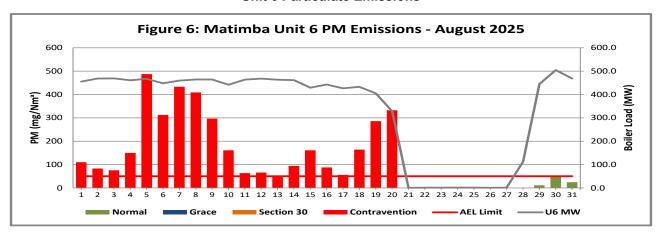


Figure 6: Particulate matter daily average emissions against emission limit for unit 6 for the month of August 2025

Interpretation: Unit 6 Particulate matter exceeded the daily limit of 50 mg/Nm³ on 1st to 20th of August 2025. The exceedances from 1st to 20th of August 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 August 2025 as per the Eskom emission standard requirement.

The quality assurance tests (QAL2) used for August 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

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Unit 1 SO₂ Emissions

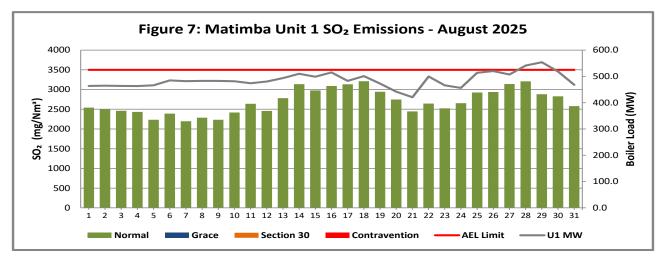


Figure 7: SO2 daily average emissions against emission limit for unit 1 for the month of August 2025

Interpretation: All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

Unit 2 SO₂ Emissions

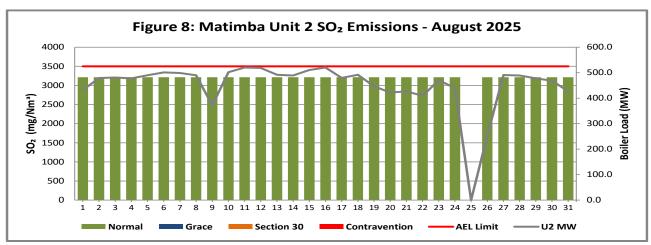


Figure 8: SO2 daily average emissions against emission limit for unit 2 for the month of August 2025

Interpretation: All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.SRM (Standard Reference Measurements) were used to calculate the SO₂ gaseous emissions for unit 2 in August 2025.

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Unit 3 SO₂ Emissions

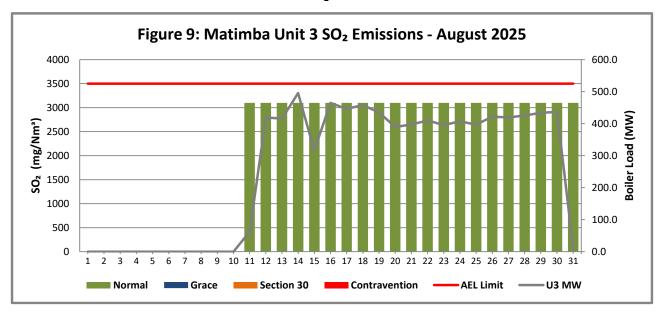


Figure 9: SO2 daily average emissions against emission limit for unit 3 for the month of August 2025

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

Unit 4 SO₂ Emissions

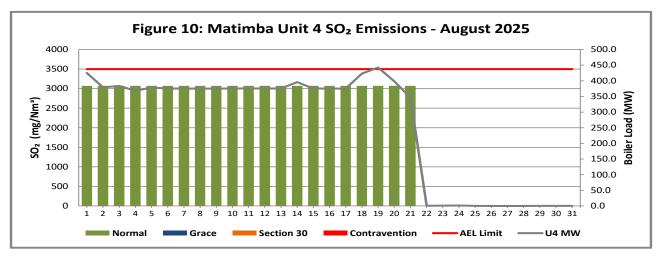


Figure 10: SO2 daily average emissions against emission limit for unit 4 for the month of August 2025

Interpretation: All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³. SRM (Standard Reference Measurements) were used to calculate the SO₂ gaseous emissions for unit 4 in August 2025.

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Unit 5 SO₂ Emissions

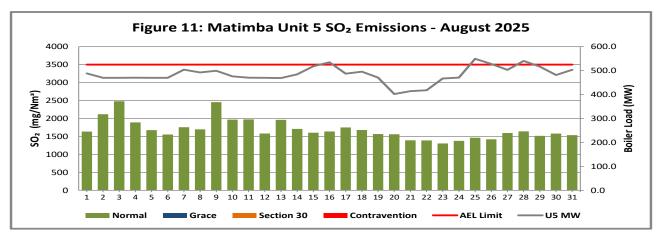


Figure 11: SO2 daily average emissions against emission limit for unit 5 for the month of August 2025 Interpretation: All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

Unit 6 SO₂ Emissions

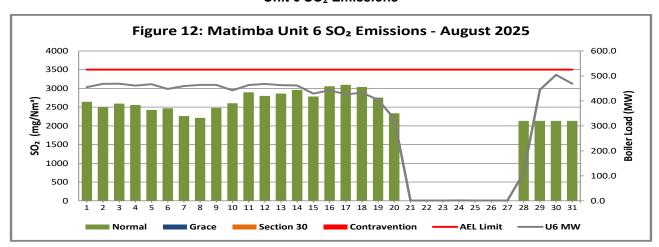


Figure 12: SO2 daily average emissions against emission limit for unit 6 for the month of August 2025 Interpretation: All daily averages below SO₂ emission monthly limit of 3500 mg/Nm³.

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2.3.2.b NOx Emissions

Unit 1 NO_x Emissions

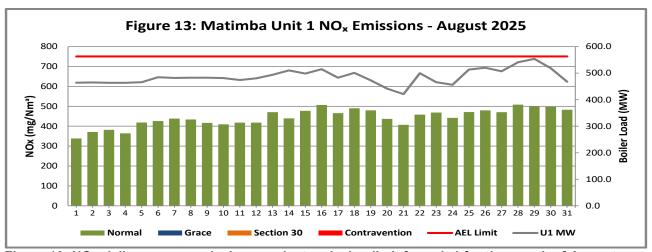


Figure 13: NOx daily average emissions against emission limit for unit 1 for the month of August 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³.

Unit 2 NO_x Emissions

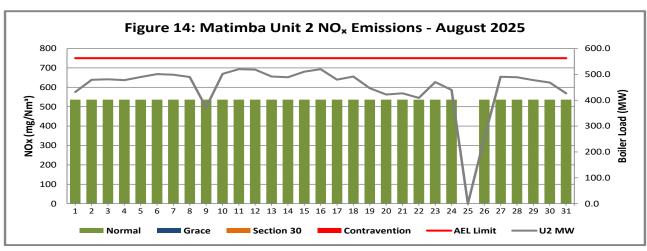


Figure 14: NOx daily average emissions against emission limit for unit 2 for the month of August 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³. SRM (Standard Reference Measurements) were used to calculate the NOx gaseous emissions for unit 2 in August 2025.

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Unit 3 NO_x Emissions

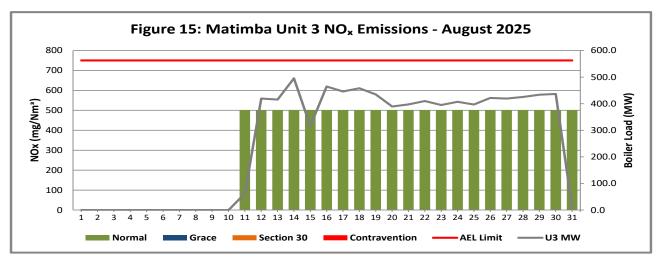


Figure 15: NOx daily average emissions against emission limit for unit 3 for the month of August 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³. SRM (Standard Reference Measurements) were used to calculate the NOx gaseous emissions for unit 3 in August 2025.

Unit 4 NO_x Emissions

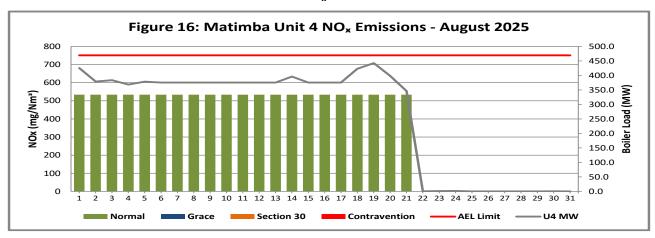


Figure 16: NOx daily average emissions against emission limit for unit 4 for the month of August 2025

Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³. SRM (Standard Reference Measurements) were used to calculate the NOx gaseous emissions for unit 4 in August 2025.

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Unit 5 NO_x Emissions

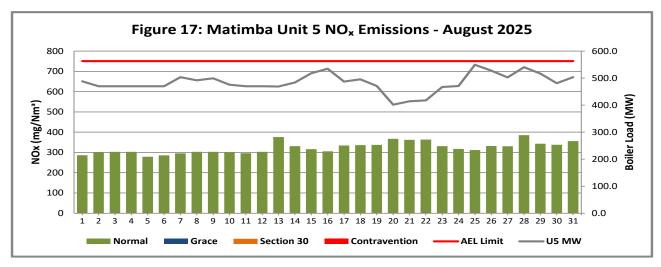


Figure 17: NOx daily average emissions against emission limit for unit 5 for the month of August 2025 Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³.

Unit 6 NO_x Emissions

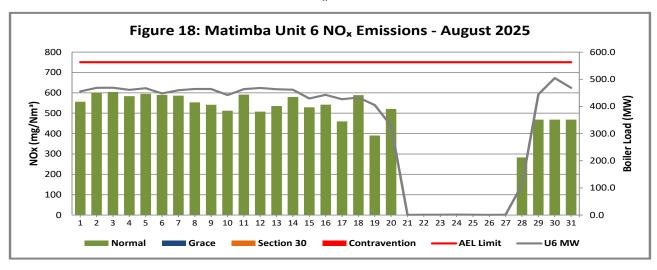


Figure 18: NOx daily average emissions against emission limit for unit 6 for the month of August 2025 Interpretation: All daily averages below NOx emission limit of 750 mg/Nm³.

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2.3.3 Total Volatile Organic Compounds

Table 4: Total volatile compound estimates



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

Date:	Tuesday, 30 September 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 <u>blue cells</u> below Choose from a dropdown menu in the <u>green cells</u>

The total VOC emissions for the month are in the <u>red cells</u>

IMPORTANT: Do not change any other cells without consulting the AQ CoE

MONTH:	September				
GENERAL INFORM	ATION:		Data	Unit	
Total number of fu	el oil tanks:		4	NA	
Height of tank:			13.34	m	
Diameter of tank:			9.53	m	
Net fuel oil through	put for the month:		<u>1995.732</u>		
Molecular weight o	f the fuel oil:		166.00	Lb/lb-mole	
METEROLOGICAL	DATA FOR THE MONTH		Data	Unit	
Daily average ambi	ent temperature		23.43	°C	
Daily maximum am	bient temperature		31.06	°C	
Daily minimum amb	pient temperature		16.52	°C	
Daily ambient temp	erature range		14.54	°C	
Daily total insolation	n factor		4.41	kWh/m²/day	
Tank paint colour			<u>Grey/medium</u>	NA	
Tank paint solar ab	osorbtance		0.68	NA	
FINAL OUTPUT:		Result	Unit		
Breathing losses:			0.54	kg/month	
Working losses:			0.06 kg/month		
TOTAL LOSSES (T	otal TVOC Emissions for the month):		0.60	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.

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2.3.4 Greenhouse gas (CO₂) emissions

CO₂ 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 August 2025

Date	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
2025/08/01	10173.5	9291.09	Unit off	9268.67	10516	9816.72
2025/08/02	10181.4	10363.4	Unit off	8228.71	10149.4	10139.8
2025/08/03	10160.4	10410.7	Unit off	8349.55	10161.8	10154.7
2025/08/04	10142.6	10327.2	Unit off	8013.33	10156.7	9988.11
2025/08/05	10174.2	10577	Unit off	8238.52	10147.4	10123.8
2025/08/06	10595.3	10812.8	Unit off	8151.45	10154.4	9673.96
2025/08/07	10544.4	10767.7	Unit off	8159.74	10912.3	9962.31
2025/08/08	10554.6	10595.6	Unit off	8174.37	10658.8	10081.9
2025/08/09	10552	7888.39	Unit off	8169.78	10799.4	10083.3
2025/08/10	10494	10808.2	Unit off	8158.03	10267.9	9576.71
2025/08/11	10315.8	11194.4	778.665	8135.28	10151.2	10059.3
2025/08/12	10486.1	11179.2	9011.83	8135.06	10178.4	10168.9
2025/08/13	10792.4	10602.1	8894.48	8122.98	10140.6	10070.6
2025/08/14	11149.7	10540.3	10715.1	8585.55	10471.9	10018.6
2025/08/15	10897.7	11017.1	6701.94	8125.33	11197.2	9290.18
2025/08/16	11264.9	11239.1	10037.1	8124.81	11566.3	9601.05
2025/08/17	10533.2	10324.1	9616.73	8134.48	10516.8	9243.71
2025/08/18	10943.9	10599.3	9889.94	9179.91	10700.7	9384.49
2025/08/19	10315.2	9569.32	9365.04	9620.81	10147.7	8751.83
2025/08/20	9609.56	9002.23	8324.49	8626.18	8637.17	7001.92
2025/08/21	9143.44	9136.55	8489.39	7390.76	8909.31	Unit off
2025/08/22	10904.8	8721.3	8818.9	Unit off	8991	Unit off
2025/08/23	10149.8	10113.7	8493.18	Unit off	10048.2	Unit off
2025/08/24	9936.91	9379.51	8754.65	Unit off	10139.9	Unit off
2025/08/25	11225.1	Unit off	8513.22	Unit off	11864.6	Unit off
2025/08/26	11371.1	5124.29	9081.4	Unit off	11393.3	Unit off
2025/08/27	11086.1	10568.9	9028.87	Unit off	10847.2	Unit off
2025/08/28	11841.7	10519.2	9159.97	Unit off	11655.5	Unit off
2025/08/29	12134.7	10249.8	9355.43	Unit off	11126.3	9587.22
2025/08/30	11354	10044.7	9427.87	Unit off	10369.7	10863.1
2025/08/31	10210.5	9132.11	Unit off	Unit off	10828.2	10075.9

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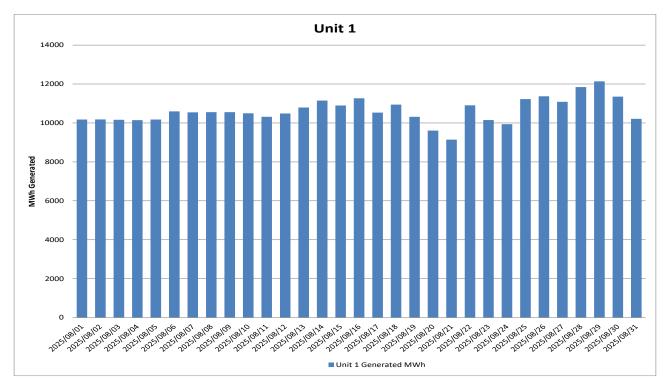


Figure 19: Unit 1 daily generated power in MWh for the month of August 2025

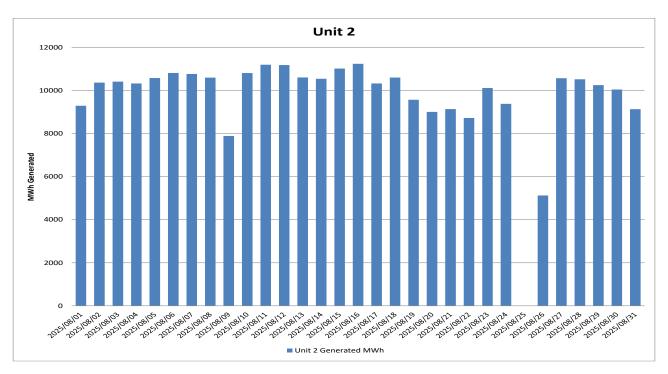


Figure 20: Unit 2 daily generated power in MWh for the month of August 2025

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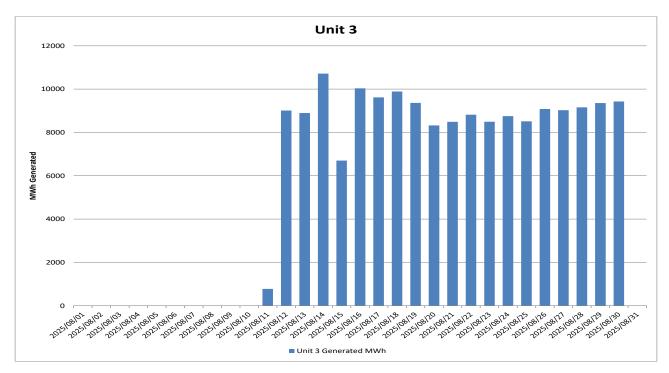


Figure 21: Unit 3 daily generated power in MWh for the month of August 2025

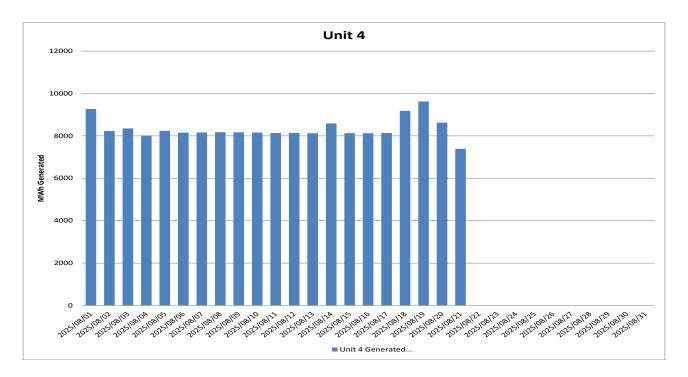


Figure 22: Unit 4 daily generated power in MWh for the month of August 2025

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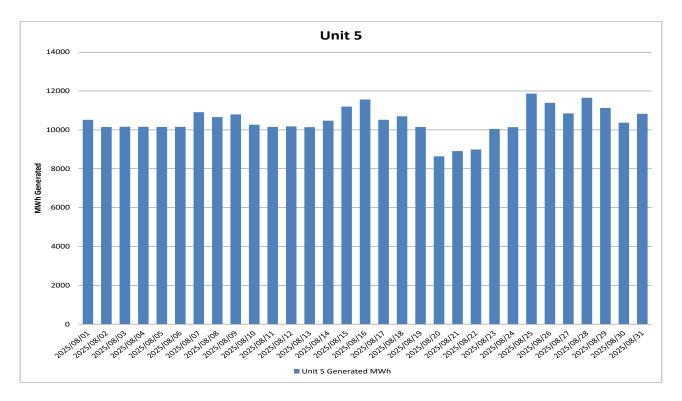


Figure 23: Unit 5 daily generated power in MWh for the month of August 2025

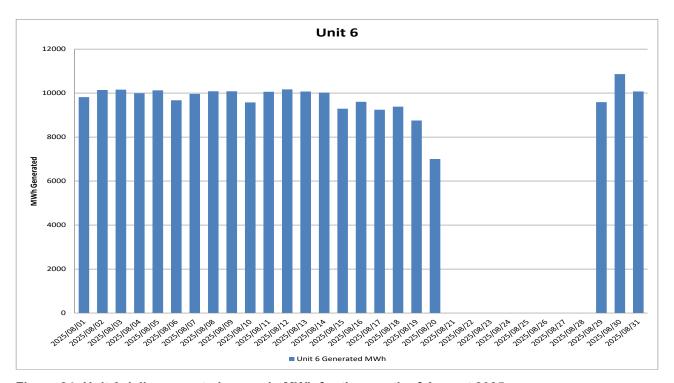


Figure 24: Unit 6 daily generated power in MWh for the month of August 2025

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2.5 Pollutant Tonnages

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

Table 6: Pollutant tonnages for the month of August 2025

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	772.2	5 092	839
Unit 2	816.7	8 047	1 343
Unit 3	506.4	3 292	532
Unit 4	9 480.4	5 709	991
Unit 5	455.2	3 125	599
Unit 6	174.5	2 675	553
SUM	12 205.44	27 940	4 857

2.6 Operating days in compliance to PM AEL Limit

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

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	3	2	0	24	26	415.3
Unit 2	0	3	0	26	29	376.0
Unit 3	1	4	0	15	19	594.6
Unit 4	0	0	0	21	21	5 109.4
Unit 5	0	0	0	31	31	246.4
Unit 6	3	0	0	20	20	172.6
SUM	7	9	0	137	146	

2.7 Operating days in compliance to SOx AEL Limit

Table 8: Operating days in compliance with SOx AEL limit of August 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	2 695.7
Unit 2	30	0	0	0	0	3500	3 214.1
Unit 3	21	0	0	0	0	3500	3 100.0
Unit 4	21	0	0	0	0	3500	3 072.7
Unit 5	31	0	0	0	0	3500	1 693.2
Unit 6	24	0	0	0	0	3500	2 577.4
SUM	158	0	0	0	0		

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2.8 Operating days in compliance to NOx AEL Limit

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

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm³)
Unit 1	31	0	0	0	0	444.7
Unit 2	30	0	0	0	0	536.4
Unit 3	21	0	0	0	0	501.2
Unit 4	21	0	0	0	0	533.4
Unit 5	31	0	0	0	0	323.7
Unit 6	24	0	0	0	0	527.2
SUM	158	0	0	0	0	

2.9 Continuous Emission Monitors

Table 10: Monitor reliability percentage (%)

Associated Unit/Stack	РМ	SO ₂	NO	O ₂
Unit 1	64.9	100.0	99.9	100.0
Unit 2	71.8	100.0	100.0	100.0
Unit 3	62.3	100.0	100.0	100.0
Unit 4	9.5	100.0	100.0	100.0
Unit 5	92.1	94.6	63.4	63.8
Unit 6	73.1	83.3	84.3	100.0

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, 3,4 and 6 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 3 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 6 PM monitor reliability was low due to the number of times the monitor kept maxing out of the monitors' range. Unit 2, 3 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, 3 and 4.

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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.

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2.10.2 Sampling dates and times

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

Name of serv	rice provider:	Stacklabs Environmental Services CC				
Address of s	ervice 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, SO₂ and NOx for unit 1, 5 and 6)

Name of serv	ervice 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, SO₂ 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 serv	service provider: Levego Environmental services			
Address of s	ervice 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

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2.10 Units Start-up information

Table 14: Start-up information

Unit	2	
Fires in	2025/08/09	18h10
Synchronization with Grid	2025/08/09	21h55
Emissions below limit	2025/08/31	15h03
Fires in, to synchronization	3.45	HOURS
Synchronization to < Emission limit	89.8	HOURS

Unit	2		
Fires in	2025/08/26	04h50	
Synchronization with Grid	2025/08/26	10h05	
Emissions below limit	2025/08/26	13h08	
Fires in, to synchronization	5.15	HOURS	
Synchronization to < Emission limit	3.3	HOURS	

Unit	3	
Fires in	2025/08/11	02h00
Synchronization with Grid	2025/08/11	18h40
Emissions below limit	2025/08/11	21h00
Fires in, to synchronization	16.40	HOURS
Synchronization to < Emission limit	2.20	HOURS

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Unit	3		
Fires in	2025/08/15	10h47	
Synchronization with Grid	2025/08/15	12h20	
Emissions below limit	2025/08/15	23h00	
Fires in, to synchronization	1.33	HOURS	
Synchronization to < Emission limit	10.40	HOURS	

Unit	6	
Fires in	2025/08/28	03h00
Synchronization with Grid	2025/08/28	15h15
Emissions below limit	2025/08/15	15h15
Fires in, to synchronization	12.15	HOURS
Synchronization to < Emission limit	0	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	744.0	654.7	410.5	510.6	744.0	533.8
Days over the Limit during Emergency Generation	26	29	19	21	31	20

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

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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

The August 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 SO₃ plant is operating normally with no abnormalities observed.

Unit 2

- High hopper levels cause a decline in precipitator performance.
- The SO₃ plant is operating normally with no abnormalities observed.

Unit 3

Unit returned to service from outage.

Unit 4

- High hopper levels cause a decline in precipitator performance.
- The SO₃ plant is operating normally with no abnormalities observed.

Unit 5

- High hopper levels cause a decline in precipitator performance.
- The SO₃ plant is operating normally with no abnormalities observed.

Unit 6

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High hopper levels cause a decline in precipitator performance.

The SO₃ plant is operating normally with no abnormalities observed.

SO₃ common plant

The SO₃ 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. S23° 40' 2.8" E027° 36' 34.8" 175m from ground level and 75m from the top.
 - b. Gas:
 - i. S23° 40' 2.8" E027° 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. S23° 40' 14.8" E027° 36' 47.5" 175m from ground level and 75m from the top.
 - b. Gas:
 - i. S23° 40' 14.8" E027° 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 dust fall out monitoring report and fugitive dust exceedance action plan.
- 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

GENERAL MANAGER: MATIMBA POWER STATION

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