Eskom	Monthly Report	Matla Power Station

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Content

1. Introduction

MATLA POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2025

This document serves as the monthly emissions report required in terms of Section 7.6 of Matla Power Station Provisional Atmospheric Emission License (AEL), **17/4/AEL/MP312/11/14**

This report reflects Unit 1 to Unit 6 gaseous and particulate emissions performance against the AEL limit for the month of August 2025 only.

2. Raw Materials and Products

Table 1- Quantity of Raw Materials and Products Consumption in 08/2025

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption – 08/2025
	Coal	Tons/month	1 475 000	767 713
	Fuel Oil	Tons/month	3 500	375
Production Rates	**Product/ By-Product Name**	**Unit**	**Maximum Production Capacity Permitted (Quantity)**	Production Rate in Month of 08/2025
	Energy	GWh	2 745	1 369
	Ash Produced	Tons/month	471 000	213 731

3. Abatement Technology

Table 2-Abatement Equipment Control Technology Efficiency in 08/2025

Associated Unit/Stack	Technology Type	Efficiency	ESP Utilization
South Stack (Unit 1, 2 and 3)	Electrostatic Precipitators (ESP)	99.644%	100%
	Electrostatic Precipitators (ESP)		
	Electrostatic Precipitators (ESP)		
Unit 4	Electrostatic Precipitators (ESP)	99.545%	100%
Unit 5	Electrostatic Precipitators (ESP)	99.817%	100%
Unit 6	Electrostatic Precipitators (ESP)	Off	Off

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

4. Energy Source Characteristics

Table 3: Energy Source Material Characteristics for 08/2025

Characteristic	Stipulated Range (% by weight on a dry basis)	Monthly Average Content (% by weight on a dry basis)
	Coal	
Sulphur Content	0.8-1.1	0.80
Ash Content	21-40	27.84

5. Emissions Reporting

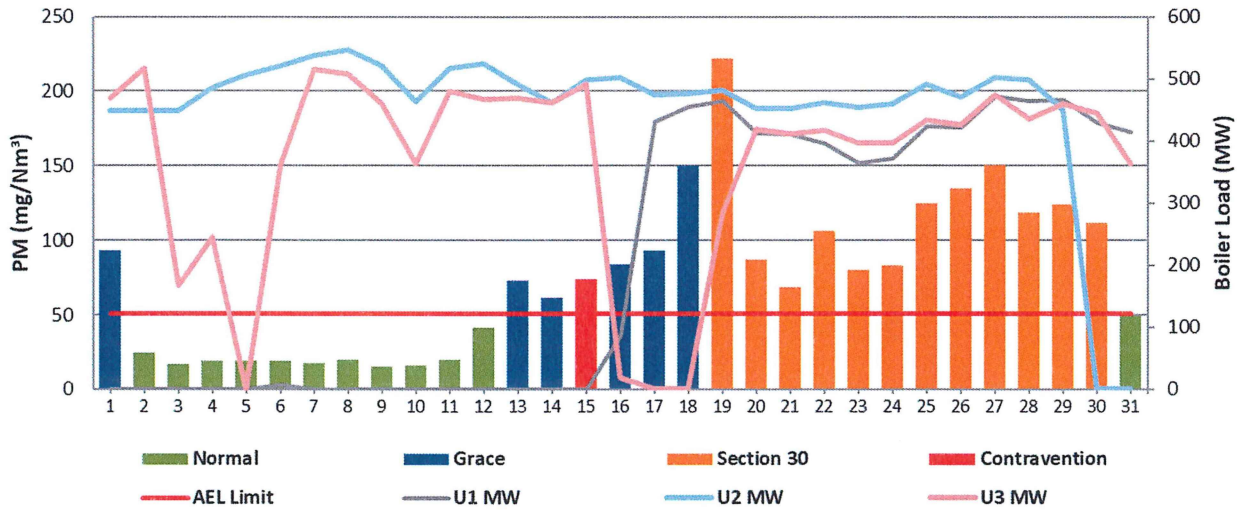
In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) a decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01st April 2025.

Table 4- New Minimum Emission Limits are as follows:

SO_2 Monthly = 2600 mg/Nm^3	Dust Daily= 50 mg/Nm^3 (South Stack) Dust Daily= 100 mg/Nm^3 (Unit 4, 5 and 6)	NO_2 Daily= 1100 mg/Nm^3

5.1 PM Daily Averages

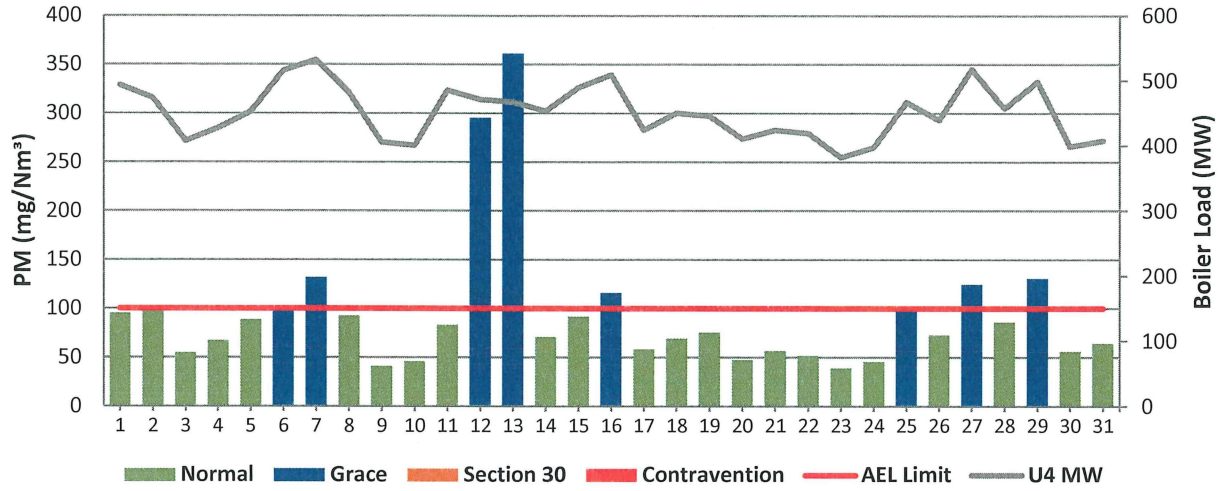
Figure 1: Matla South Stack PM Emissions - August 2025



Matla Power Station South Stack exceeded PM MES limit of 50mg/Nm^3 on the 01st of August 2025 due to Unit 1 shutdown and forced cooling, from 13 – 15 August 2025, the exceedances were due to Unit 3 SO3 burner temperature warm up delays. From 16 - 18 August 2025, the PM exceedances were due to Unit 1 light up and Unit 3 shutdown. From 19 - 30 August 2025, the station incurred a

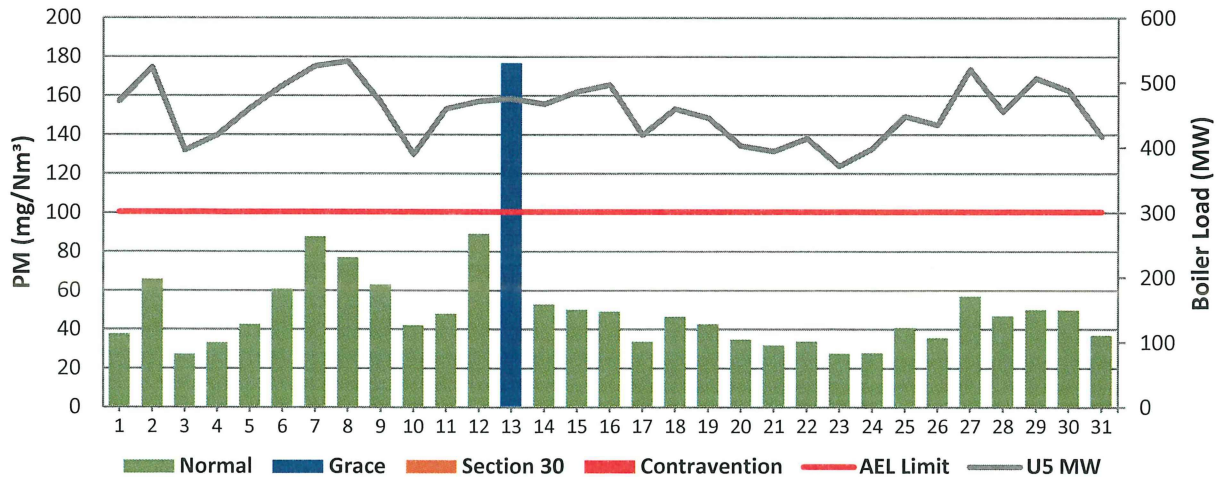
section 30 due to Unit 1 steam leak into the SO_3 burner, and the section 30 report was shared with Nkangala District Municipality. The corrective actions taken to address the burner SO_3 steam leak entails: Replacement of the sulphur injection lance, Steam leak pipe repair, extension of burner thermo pocket and SO_3 blower was ran to get rid of the unburnt sulphur.

Figure 2: Matla Unit 4 PM Emissions - August 2025

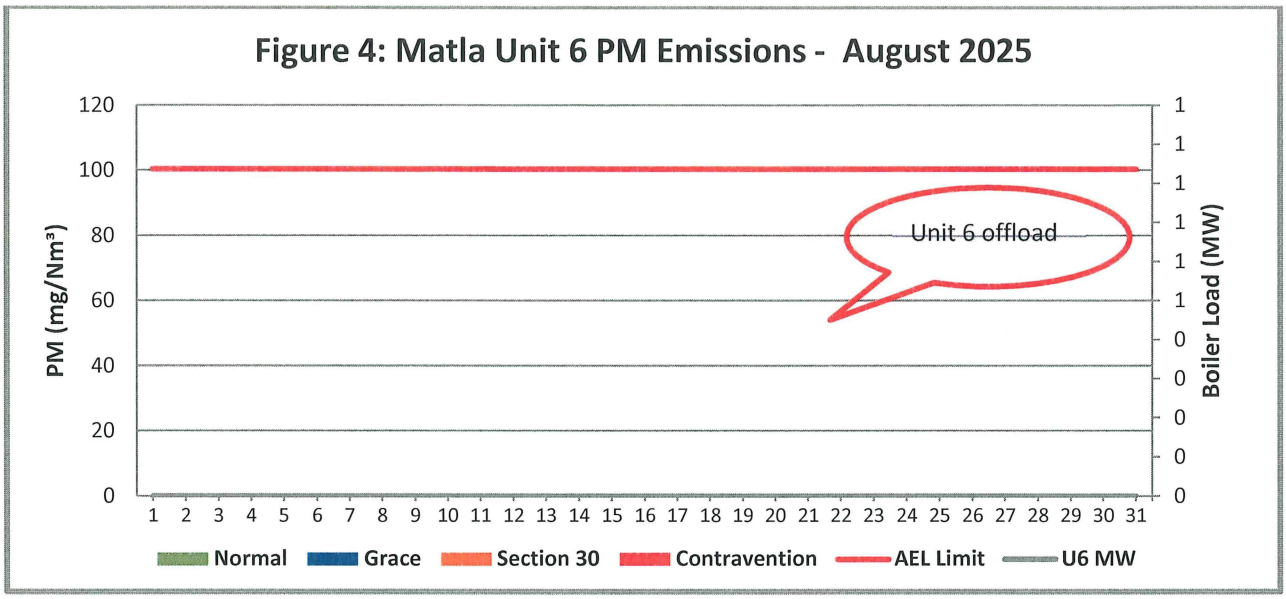


Matla Power Station Unit 4 exceeded PM MES limit of 100 mg/Nm^3 from 06 – 07 August 2025 due to challenges to operate within PM emission limit on full load (<450MW). On the 13th of August 2025, the exceedance was due to unavailability of SO3 common plant. On the 16th of August 2025 the exceedance was due to RH1 precip that kept on tripping under voltage. PM exceedances on the 25th, 27th and 29th August 2025 were due to RH precip field 4 that kept on tripping on internal fault and the unit exceeded the limit whenever it was operated on full load.

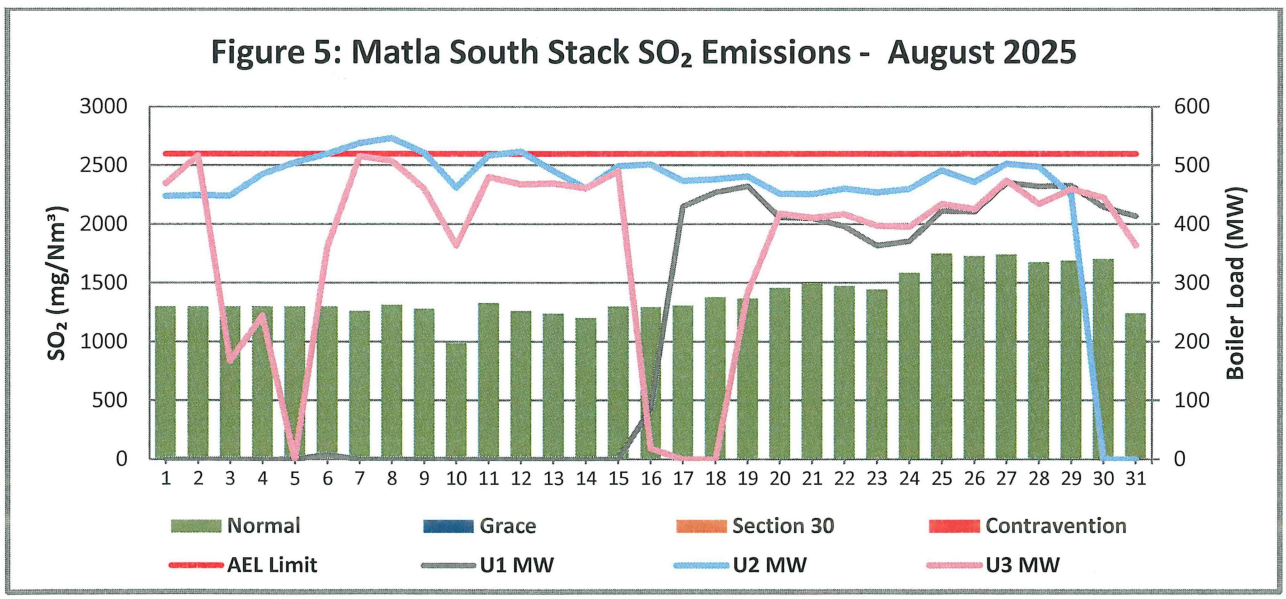
Figure 3: Matla Unit 5 PM Emissions - August 2025



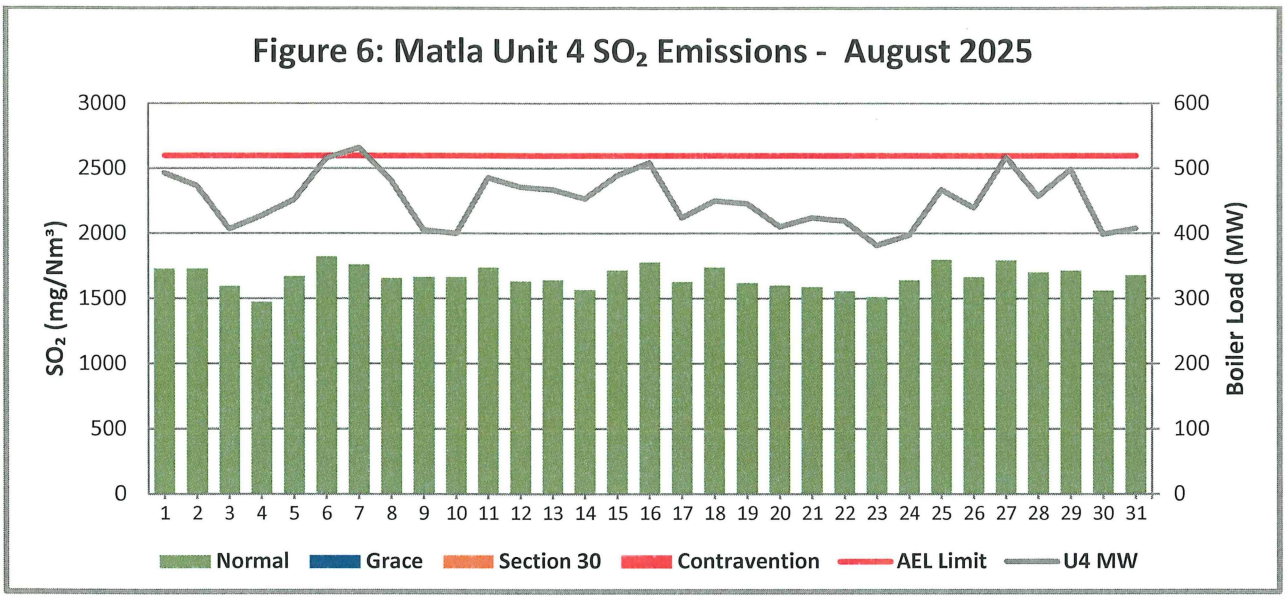
Matla Power Station Unit 5 exceeded PM MES limit of 100 mg/Nm^3 on the 13th of August 2025, due to unavailability of SO3 common plant.



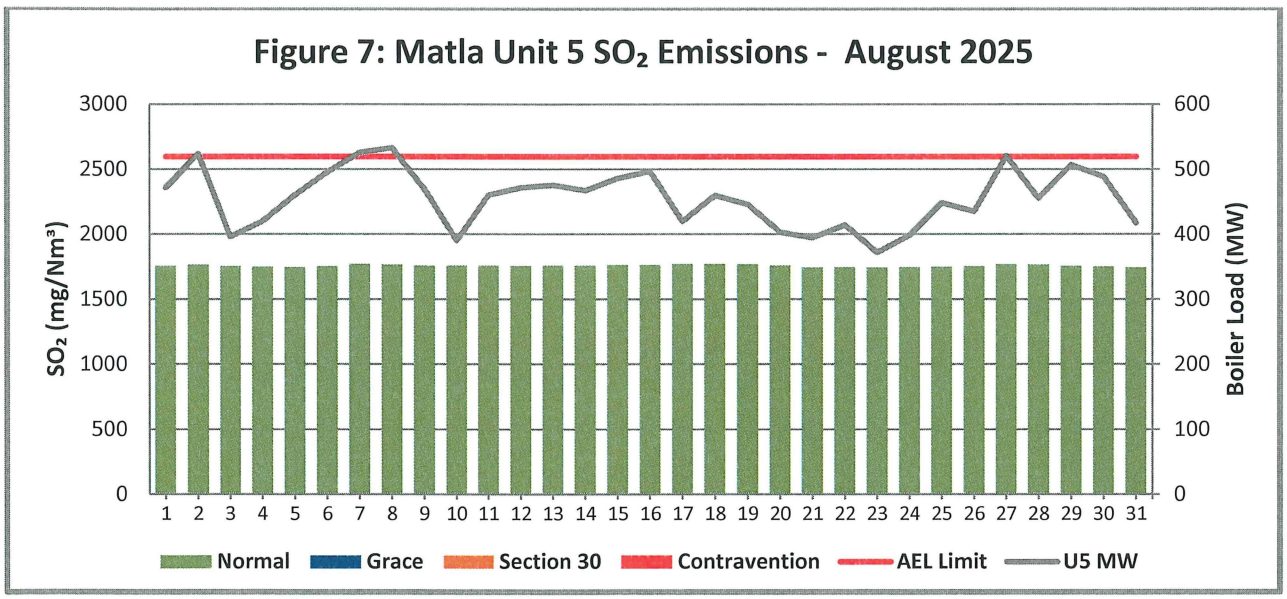
5.2 Sox Daily Averages



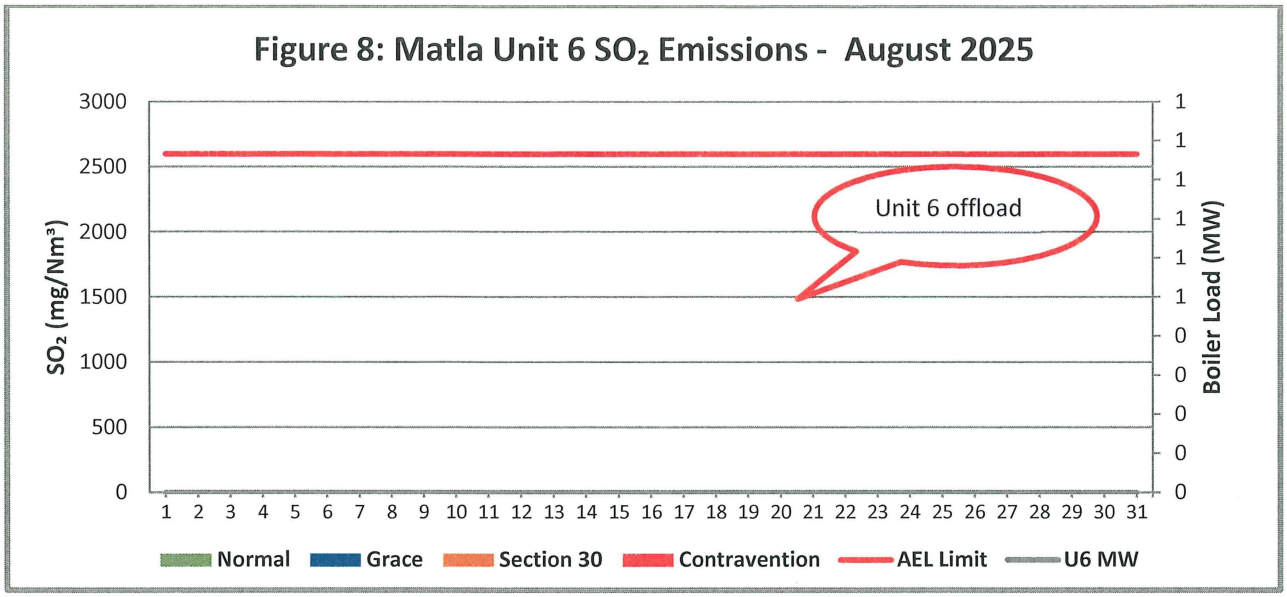
Note: Matla Power Station did not exceed SOx limit.



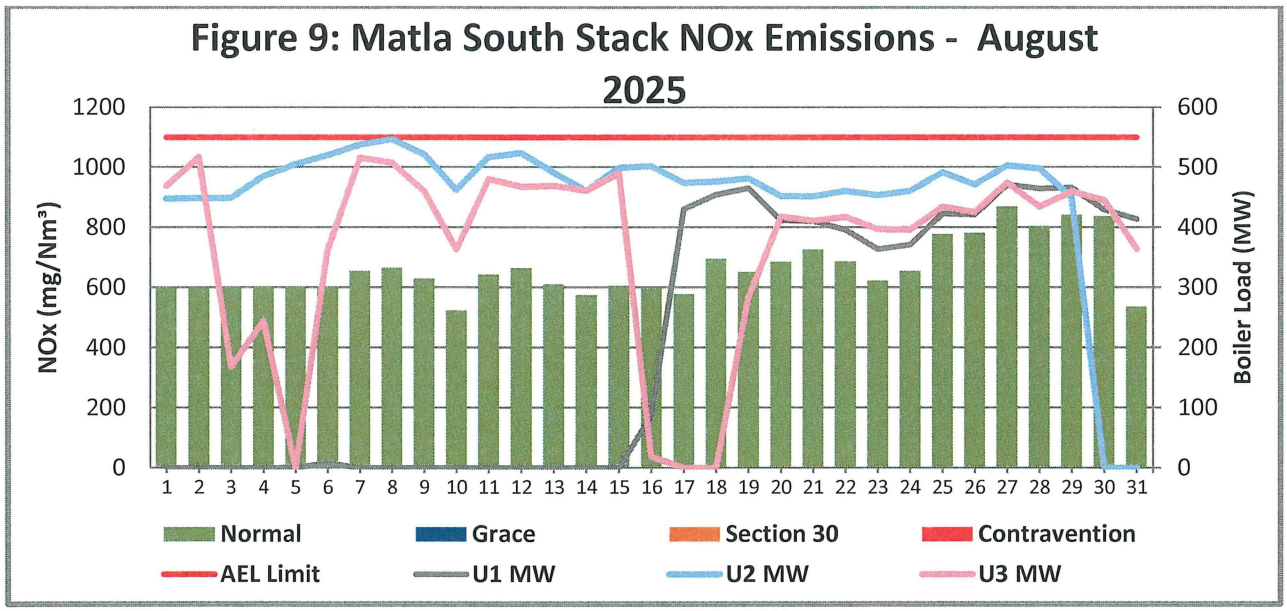
Note: Matla Power Station did not exceed SOx limit



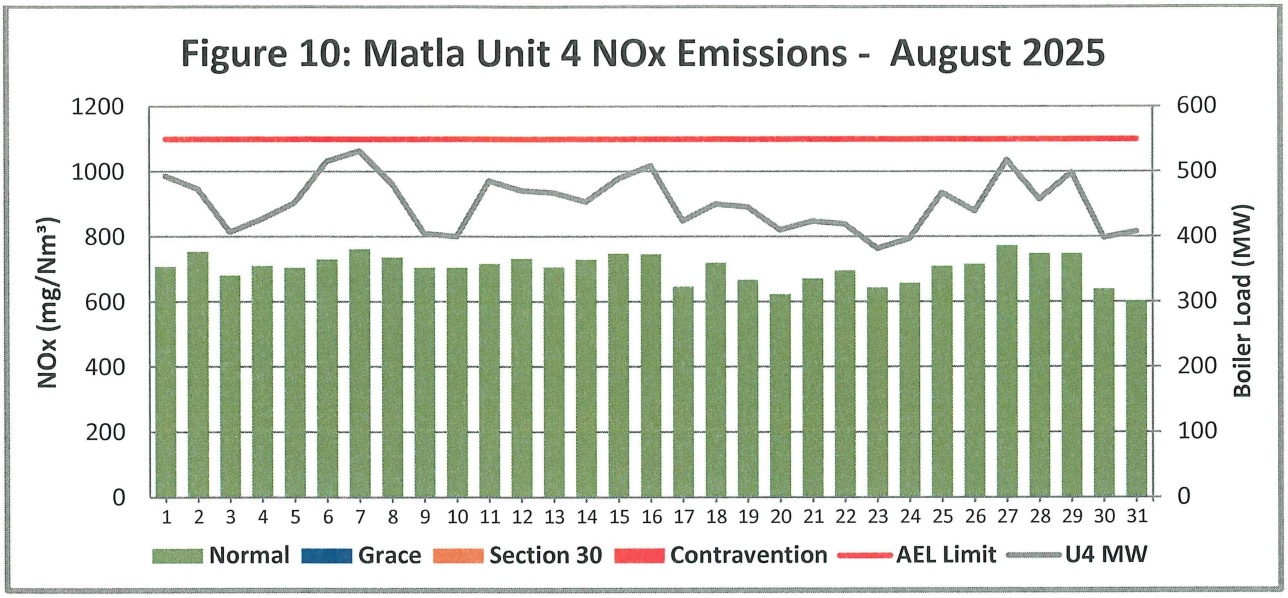
Note: Matla Power Station did not exceed SOx limit



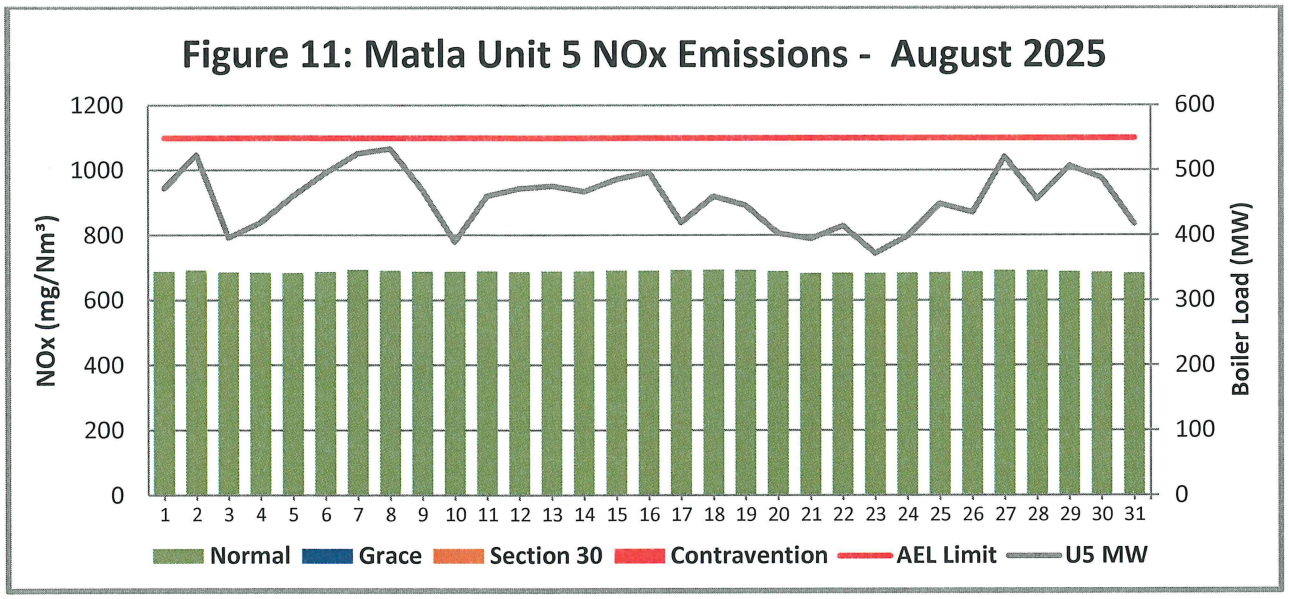
5.3 NOx Daily Averages



Note: Matla Power Station did not exceed NOx limit



Note: Matla Power Station did not exceed NOx limit



Note: Matla Power Station did not exceed NOx limit

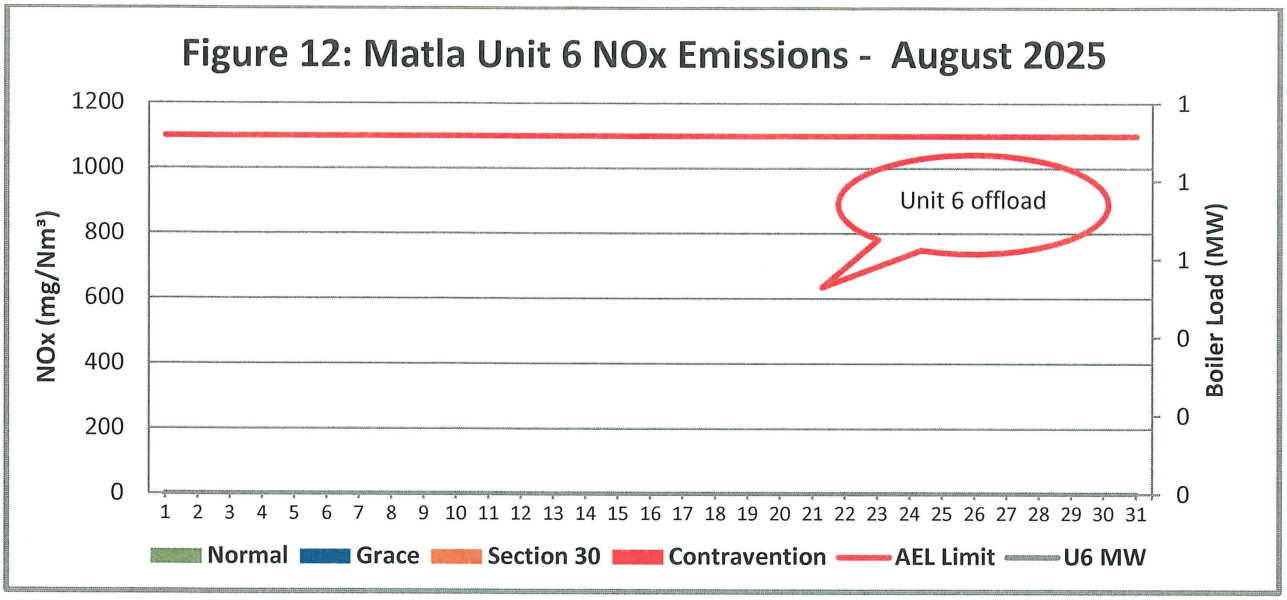


Table 5-Monthly Tonnages for 08/2025

Associated Unit/Stack	PM	SO_2	NO_2
Unit 1	96.2	1 249.4	585.5
Unit 2	133.1	2 407.9	1 123.6
Unit 3	104.6	1 878.5	882.2
Unit 4	192.9	3 361.5	1 421.4
Unit 5	87.2	2 906.5	1 137.6
Unit 6	Off	Off	Off
SUM	614.0	11 803.8	5 150.3

Table 6-Monthly Averages Concentration for 08/2025 in mg/Nm^3

Associated Unit/Stack	PM	SO_2	NO_2
South Stack	76.7	1 379.0	641.4
Unit 4	94.5	1 668.6	705.4
Unit 5	51.7	1 759.7	688.8
Unit 6	Off	Off	Off

6. Continuous Emissions Monitoring System (CEMS)

Table 7- Periods during which was inoperative/malfunctioning.

Date	CEMS status	Comments
August 2025	Malfunctioning	The station gas monitors have been reading inaccurately for South Stack, Unit 4 and Unit 5 however parallel tests averages were used for the purpose of accurate reporting of the gases during this reporting period. The station has placed a contract for gas monitors for 3 years. The station is in a process of sourcing some of components for the gas monitors such Lenses, Zirconium cells for O_2 and Heater gaskets to improve the Monitor reliability and CO_2+O_2 relationship hence the Monitor reliability is not reported on the table above.

Table 8-CEMS Monitor Reliability Percentage

Associated Unit/Stack	PM	SO_2	NO_2	O_2
South Stack	99.0	-	-	-
Unit 4	100	-	-	-
Unit 5	100	-	-	-
Unit 6	Off	Off	Off	Off

Note: Parallel tests averages were used for the purpose of accurate reporting of the gases. The station is in a process of sourcing some of components for the gas monitors such Lenses, Zirconium cells for O_2 and Heater gaskets to improve the Monitor reliability and CO_2+O_2 relationship hence the Monitor reliability is not reported on the table above.

7. CEMS Calibration and Equipment Used for Calibration

Calibration certificates to be made available upon request.

8. Validity of Correlation and Parallel Test

Table 9-Validity of Correlation and Parallel Test.

Associated Unit/Stack	Correlation Test (PM)	Parallel Test (NO_2, CO_2, O_2, SO_2)
South Stack	Valid until 27 February 2027	Valid until 30 October 2025
Unit 4	Valid until 11 August 2025 (Spot check curve). Full correlation test couldn't be performed due to plant performance.	Valid until 11 May 2027
Unit 5	Valid Until 25 August 2026	Valid until 29 May 2027
Unit 6	Valid until 02 August 2026	Valid until 30 June 2025

9. Complaint Register

Table 10-Complaints for the month of 08/2025

Source Code/ Name	Air pollution complaints received	Calculation of Impacts/ emissions associated with the incident	Date of complaint and date of response by the license holder	Action taken to resolve the complaint	Date when the action was implemented.
N/A	Fugitive dust fallout that is still a persistent problem with potential serious health problems for DWS workers residing just few meters of the dust source.	Unknown	05/08/2025	• Dust Suppression and dust binding chemicals were applied to the gravel road next to DWS residents' area. • Removal of old ash lines and replaced with new ones.	• 11/08/2025 (The activity remains continuous to ensure dust suppression). • 15/11/2025 (Work in progress).