Eskom	Monthly Report	Matla Power Station

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		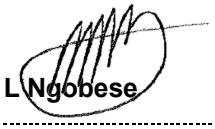	
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Content

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TABLE OF ABBREVIATIONS:

ABBREVIATION	MEANING
AEL	Atmospheric Emission License
CO_2	Carbon Dioxide
CO	Carbon Monoxide
ESP	Electrostatic Precipitator
GWh	Gigawatt-hour
mg/Nm³	Milligrams per Normal Cubic Meter (measurement unit for emissions)
MES	Minimum Emission Standards
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides (NO and NO_2)
O_2	Oxygen
PM	Particulate Matter
SO_2	Sulphur Dioxide
SOx	Sulphur Oxides
SO_3	Sulphur Trioxide
CEMS	Continuous Emissions Monitoring System
%	Percentage
mA	Milliamperes (current measurement for monitor readings)
Unit	Power generation units at Matla Power Station
Precips	Precipitators (referring to electrostatic precipitators or other particulate control devices)
RH	Right-Hand (side) Precipitator/Precip Fields
RHS	Right-Hand Side (precipitation/precip fields)
LH	Left-Hand (side) Precipitator/Precip Fields
LHS	Left-Hand Side (precipitation/precip fields)
MCU	Dust Monitor Main Control Unit

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1. Introduction

MATLA POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF APRIL 2026.

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 April 2026 only.

2. Raw Materials and Products

Table 1- Quantity of Raw Materials and Products Consumption in 04/2026

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption – 04/2026
	Coal	Tons/month	1 475 000	581 426.00
	Fuel Oil	Tons/month	3 500	539.499
Production Rates	**Product/ By-Product Name**	**Unit**	**Maximum Production Capacity Permitted (Quantity)**	**Production Rate in Month of 04/2026**
	Energy	GWh	2 745	1 031.822
	Ash Produced	Tons/month	471 000	154 543.031

3. Abatement Technology

Table 2-Abatement Equipment Control Technology Efficiency in 04/2026

Associated Unit/Stack	Technology Type	ESP Efficiency	ESP Utilization	Technology Type	SO_3 Plant Utilization
Unit 1	Electrostatic Precipitators	99.763%	100%	SO_3 Plant	98.8%
Unit 2	Electrostatic Precipitators	99.777%	100%	SO_3 Plant	98.8%
Unit 3	Electrostatic Precipitators	99.749%	100%	SO_3 Plant	90.1%
Unit 4	Electrostatic Precipitators	99.727%	100%	SO_3 Plant	100.0%
Unit 5	Electrostatic Precipitators	99.793%	100%	SO_3 Plant	100.0%
Unit 6	Electrostatic Precipitators	Off-line	100%	SO_3 Plant	Off-line

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

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4. Energy Source Characteristics

Table 3: Energy Source Material Characteristics for 04/2026

Characteristic	Stipulated Range (% by weight on a dry basis)	Monthly Average Content (% by weight on a dry basis)
	Coal	
Sulphur Content	<1.1	0.9
Ash Content	<40	26.6
	Fuel Oil	
Sulphur Content	<3.5	-
Ash Content	<0.1	-

Note: "The fuel oil analysis report is currently unavailable due to contractual issues with the service provider. The report will be shared as soon as it is received."

5. Emissions Reporting

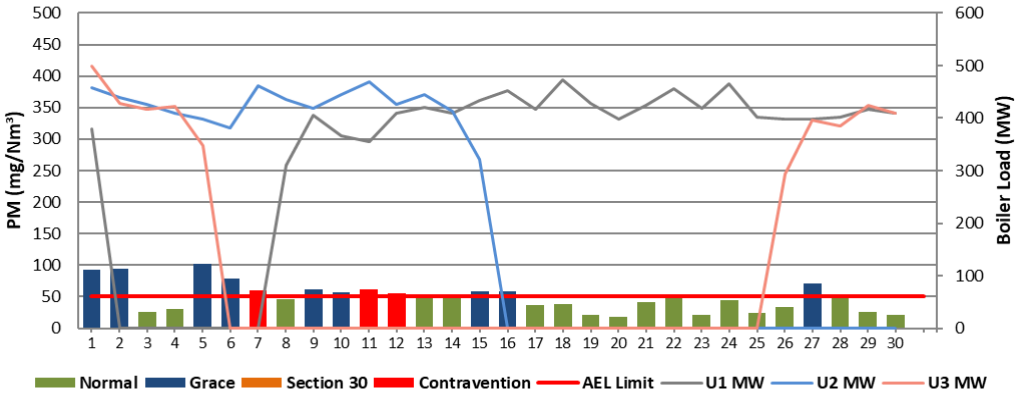
In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) a decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01st April 2026.

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= 50 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 - April 2026



On 1 April 2026, Matla Power Station Unit 1 was placed on cold reserve, followed by Unit 3, which was taken offline on 5 April 2026 for inspection and interim repairs, leaving Unit 2 as the only operational unit connected to the south stack. On 7 April 2026, the south stack exceeded its particulate matter (PM) emission limit following

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the shutdown of Unit 3. During the subsequent light-up of Unit 1, emissions continued to exceed permissible limits beyond the 48-hour grace period, resulting in a legal contravention on 11 April 2026.

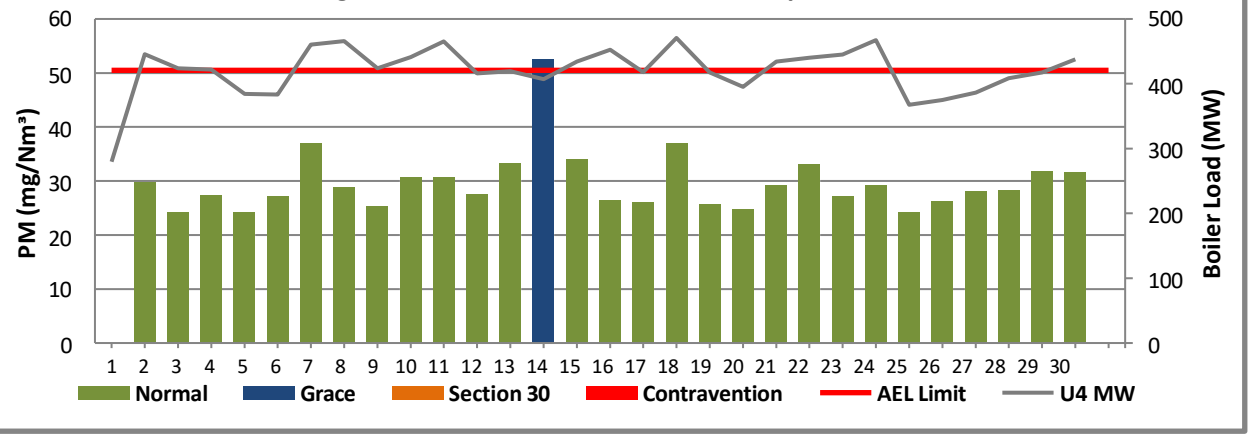
The exceedances were primarily attributed to the poor performance of the electrostatic precipitators (ESPs) upon return to service, which was linked to insufficient sulphur injection that did not correlate with the operational load requirements, resulting in ineffective particulate removal and non-compliance with emission standards. The direct cause was identified as underperforming ESPs, with the root cause being inadequate sulphur injection relative to load conditions. Contributory factors included the unavailability of critical spares required to address constructional and operational defects in the ESPs, as well as the loss of rapping sequence settings during de-isolation.

Key findings supporting these causes included blocked and worn sulphur injection lances and nozzles, a tripping incident on Unit 1 LH7 precipitator field due to undervoltage, double rapping on RHS plate rappers on Unit 1 due to lost sequence settings, misalignment between Unit 2 control valve positioning and sulphur flow and worn inlet and outlet screens. Immediate corrective actions implemented included the cleaning and replacement of blocked and worn sulphur injection lances and nozzles, restoration and optimisation of sulphur injection rates in line with operational load requirements, reinstatement and verification of correct rapping sequence settings, repair and stabilisation of the tripped precipitator fields, alignment of control valve positioning with required sulphur flow, and the prioritised procurement and installation of critical spares to address identified ESP defects, thereby improving overall emission control performance.

Matla Power Station South Stack exceeded PM MES limit of 50mg/Nm^3 on the following days:

- 15/04/2026: Unit 2 Sulphur plant was on PTW for SO3 plant leak repairs
- 16/04/2026: Unit 2 shutdown for repairs
- 27/04/2026: Unit 3 SO_3 was unavailable

Figure 2: Matla Unit 4 PM Emissions - April 2026



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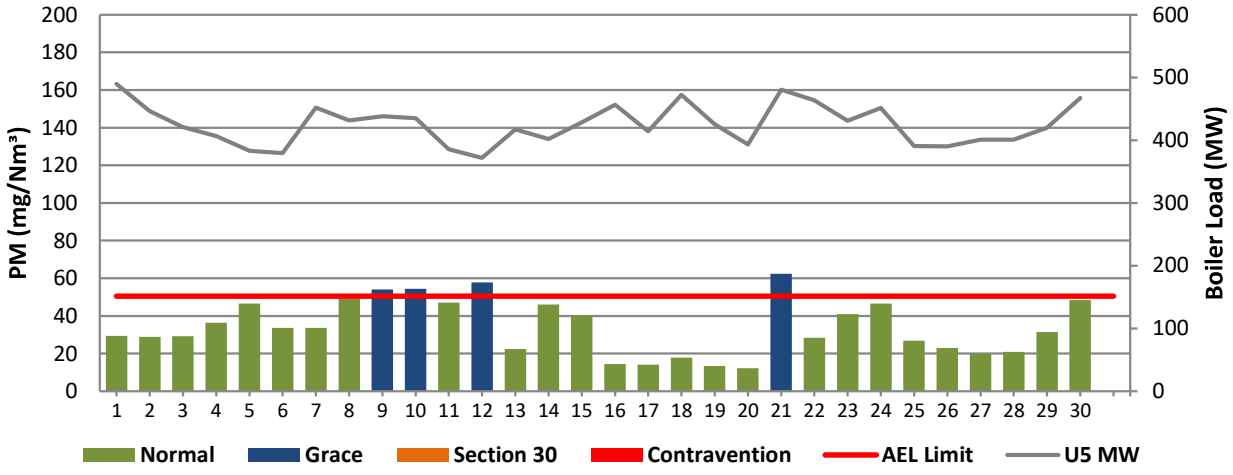
Matla Power Station Unit 4 exceeded PM MES limit of 50 mg/Nm^3 on the following days:

- 14/04/2026: The Unit 4 particulate matter (PM) monitor was found to have significant ash accumulation within the system.

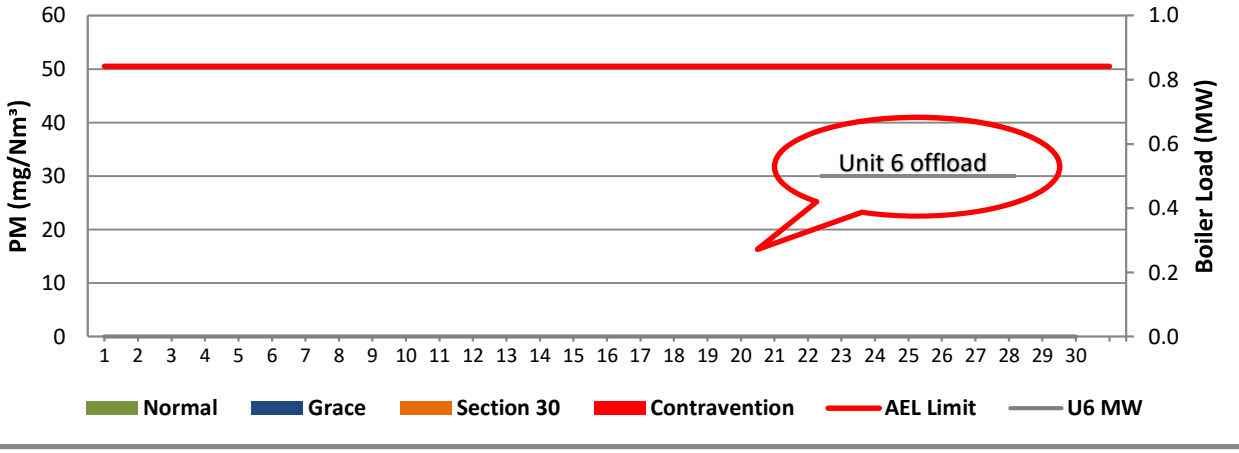
Figure 3: Matla Unit 5 PM Emissions - April 2026



Matla Power Station Unit 5 exceeded PM MES limit of 50mg/Nm^3 on the following days:

- 09 April 2026: The SO_3 plant tripped due to low sulphur steam temperature.
- 10 April 2026: The SO_3 plant tripped because of high converter outlet temperature. Concurrently, a continuous decline in sulphur flow temperature was observed.
- 12 April 2026: Precipitator LH4 tripped due to over-temperature conditions.
- 21 April 2026: The PM monitor was taken offline for calibration, during which clear path checks were conducted.

Figure 4: Matla Unit 6 PM Emissions - April 2026



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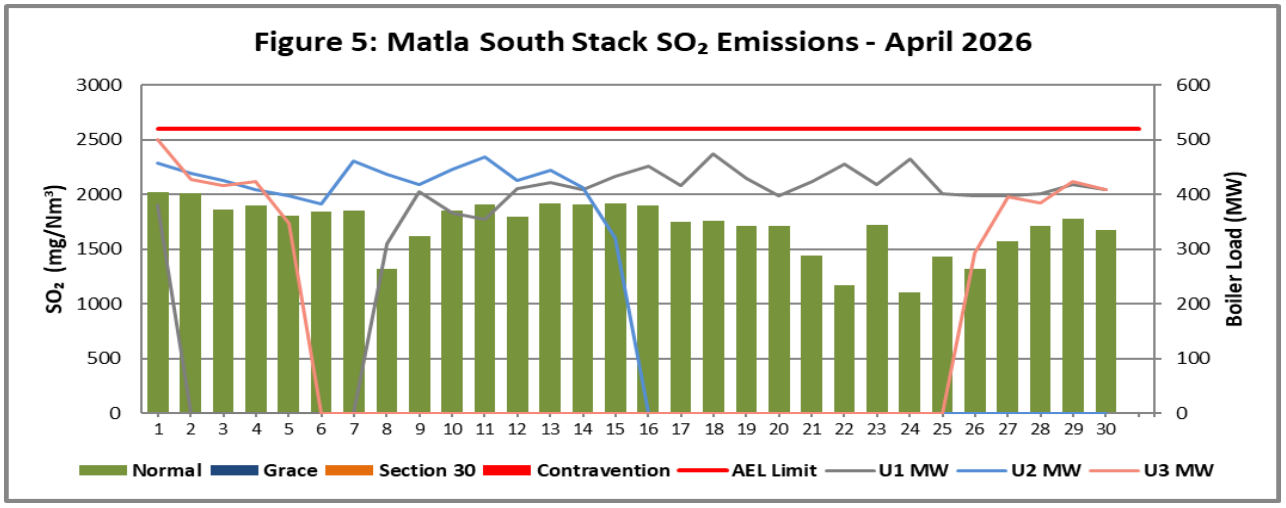
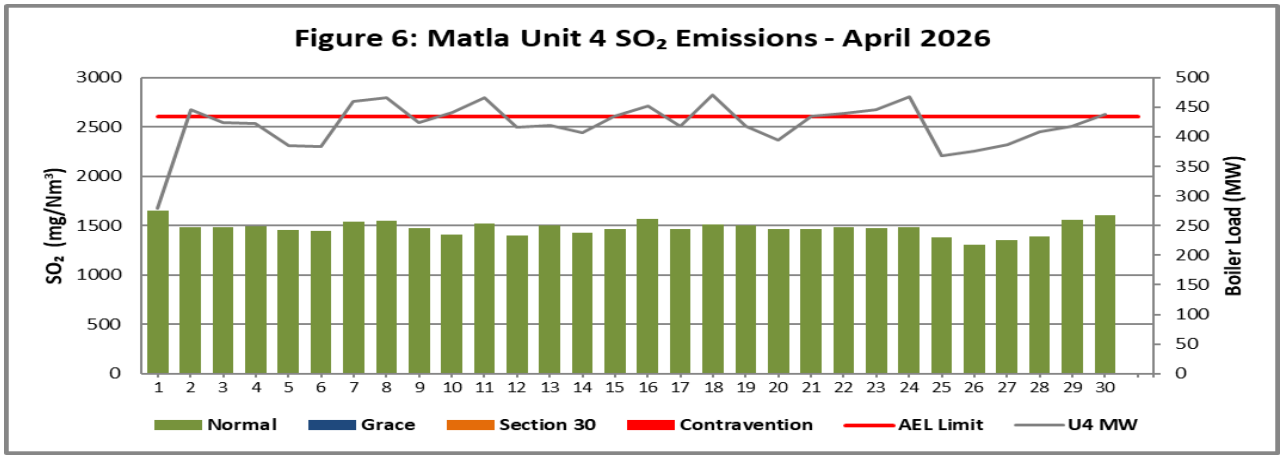
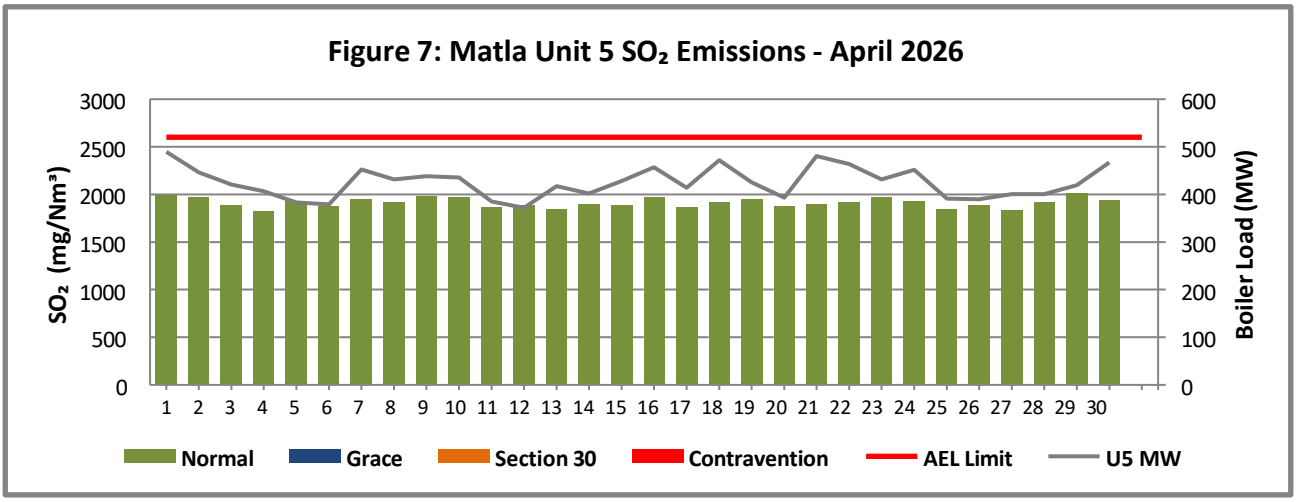
5.2 SOx Daily Averages



Note: Matla Power Station South Stack did not exceed SOx limit.



Note: Matla Power Station unit 4 did not exceed SOx limit



Note: Matla Power Station Unit 5 did not exceed SOx limit

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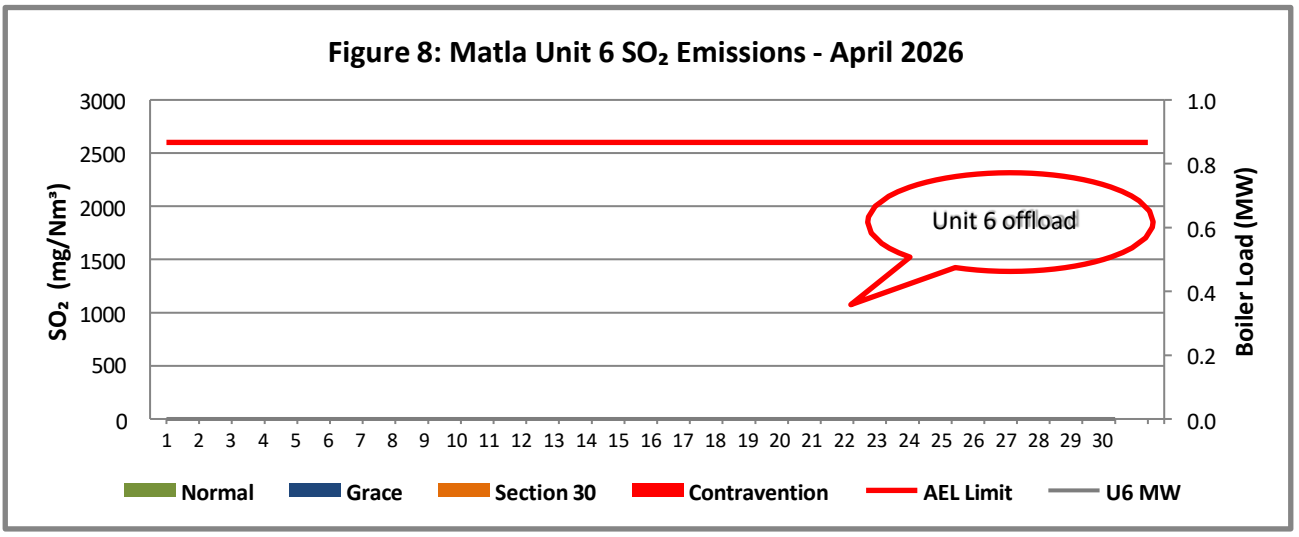
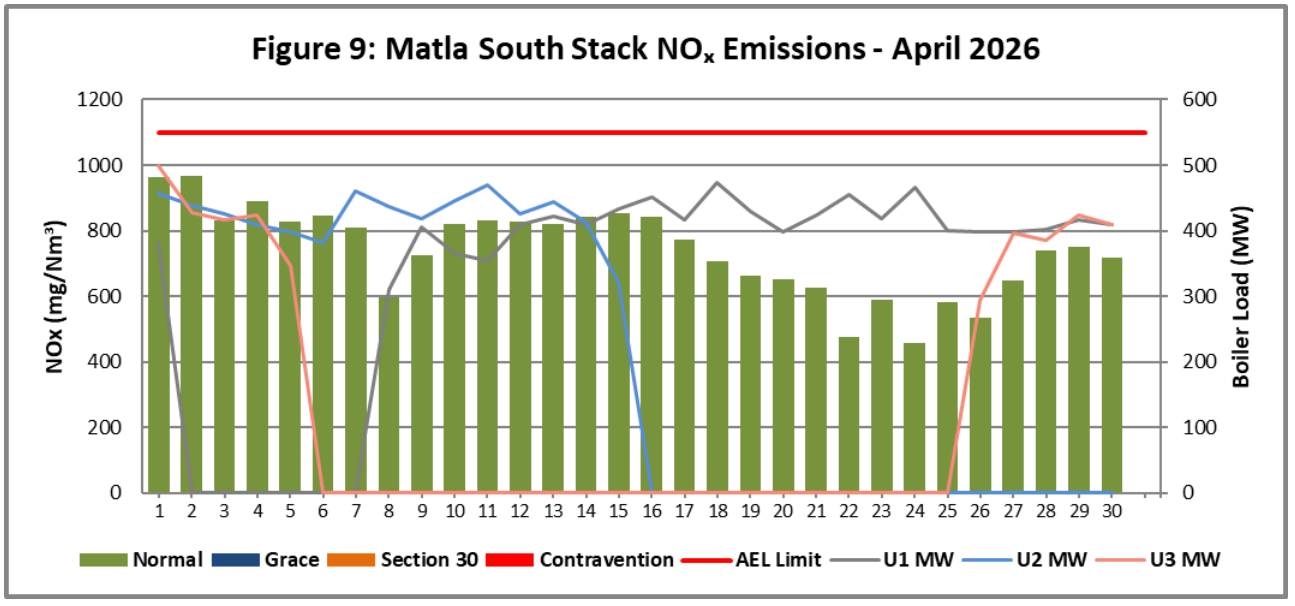


5.3 NOx Daily Averages



Note: Matla Power Station South Stack did not exceed NOx limit

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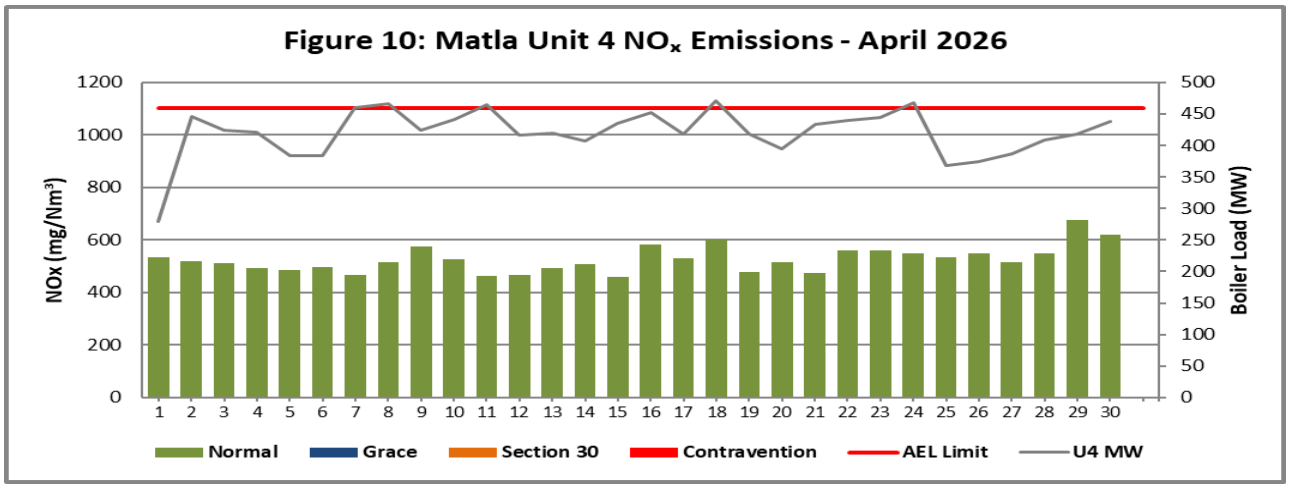
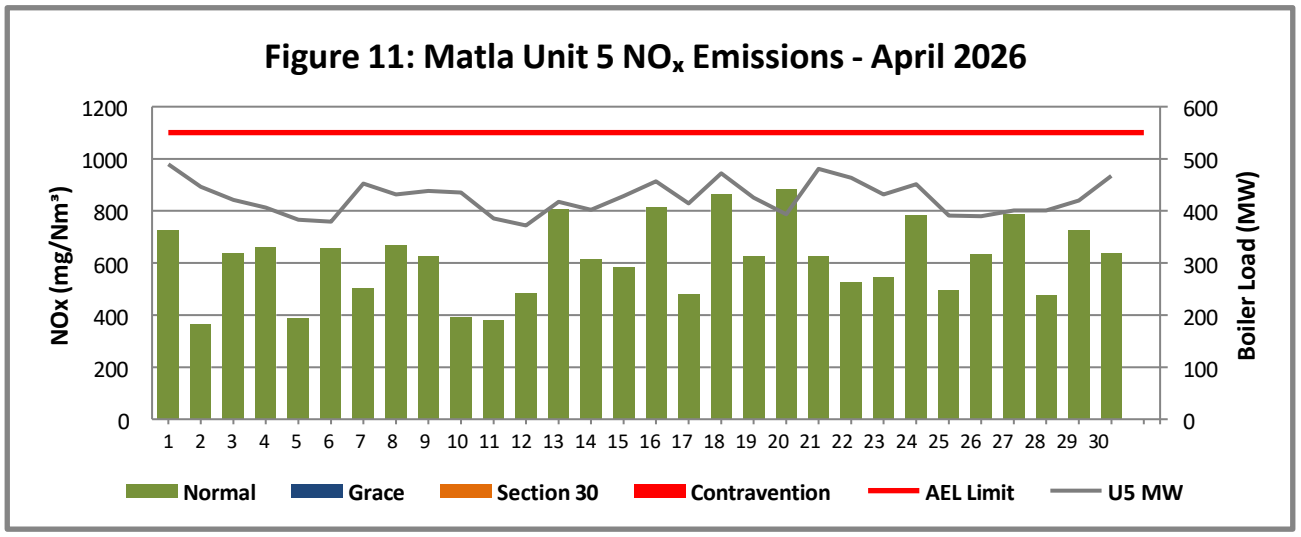


Note: Matla Power Station Unit 4 did not exceed NOx limit



Note: Matla Power Station unit 5 did not exceed NOx limit

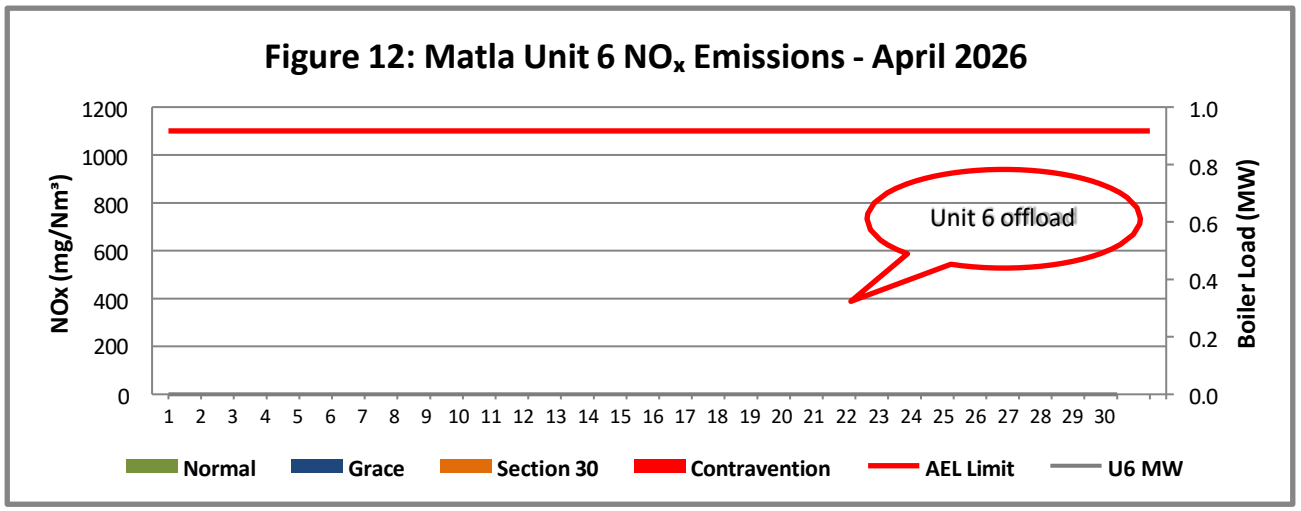


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Table 6 – The number of hours, over a period of 24 hours, for which PM emissions exceeded limit

Associated Unit/Stack	Dates	Number of hours
South Stack	01/04/2026	4 hours
	02/04/2026	18 hours
	05/04/2026	13 hours
	06/04/2026	21 hours
	07/04/2026	7 hours
	09/04/2026	18 hours
	10/04/2026	17 hours
	11/04/2026	24 hours
	12/04/2026	11 hours
	15/04/2026	16 hours
	16/04/2026	18 hours
	27/04/2026	23 hours
Unit 4	01/04/2026	16 hours
	14/04/2026	15 hours
Unit 5	09/04/2026:	13 hours
	10/04/2026	13 hours
	12/04/2026	04 hours
	21/04/2026	12 hours

Table 7-Monthly Tonnages for 04/2026

Associated Unit/Stack	PM (tons)	SO_2 (tons)	NO_x (tons)
Unit 1	51.8	2 162	920
Unit 2	51.8	1 534	696
Unit 3	25.9	948	424
Unit 4	45.3	2 299	822
Unit 5	58.1	3 197	1 035
Unit 6	Off	Off	Off
SUM	232.84	10 139	3 898

Table 8-Monthly Averages Concentration for 04/2026 in mg/Nm^3

Associated Unit/Stack	PM	SO_2	NO_2
South Stack	49.1	1 709.9	740.6
Unit 4	29.7	1 476.7	527.1
Unit 5	34.3	1 911.5	612.5
Unit 6	Off	Off	Off
Monthly average	37.7	1699.4	626.73
Year to date	37.7	1699.4	626.73

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6. Continuous Emissions Monitoring System (CEMS)

Table 9- Periods during which was inoperative/malfunctioning.

Date	CEMS status	Comments
April 2026	Unit 5 PM monitor reliability law	The reliability of the Unit 5 particulate matter (PM) monitor was compromised due to intermittent communication failures, unstable readings, Microcontroller Unit (MCU) failures, and overall performance concerns, which adversely affected emissions monitoring and reporting. Endress+Hauser (OEM) was engaged to provide technical support, including troubleshooting, calibration, linearity verification, parameter validation, and a comprehensive assessment of the monitor's condition and operational performance. The monthly reliability was 64.6% and the monitor reliability was restored on the 29th April 2026.
April 2026	Unit 4 and south Stack CO_2 and O_2 relationship not in spec	Matla PS South Stack and Unit 4 gas monitor CO_2+O_2 relationship not within Specification however parallel tests averages were used for the purpose of accurate reporting of the gases during this reporting period.
24 April 2026	Unit 4	On 14 April 2026, between 09:15 and 11:25, power supply to the Particulate Matter (PM) and gas monitoring systems at the North Stack (Units 4 and 5) was lost, resulting in an absence of emission readings for the duration of this period.

Table 10-CEMS Monitor Reliability Percentage

Associated Unit/Stack	PM	SO_2	NO_2	O_2
South Stack	99.8	83.3	83.7	94.0
Unit 4	99.4	98.5	98.7	99.2
Unit 5	64.6	98.5	96.8	99.2
Unit 6	Off	Off	Off	Off

7. CEMS Calibration and Equipment Used for Calibration

Calibration certificates to be made available upon request.

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8. Validity of Correlation and Parallel Test

Table 11-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 31 March 2028
Unit 4	Valid until 05 March 2028	Valid until 11 May 2027
Unit 5	Valid Until 30 January 2028	Valid until 29 May 2027
Unit 6	Valid until 02 August 2026 (Unit off Since 19 December 2024)	Valid until 30 June 2025: (Unit off Since 19 December 2024)

9. Complaint Register

Table 5-Complaints for the month of 04/2026

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.

Note: No complaints for the month of April 2026

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