| Eskom | Monthly Report | Matla Power Station |
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## Content

## 1. Introduction

### MATLA POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF SEPTEMBER 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 September 2025 only.

## 2. Raw Materials and Products

### Table 1- Quantity of Raw Materials and Products Consumption in 09/2025

| Raw Materials and Products used | Raw Material Type | Unit | Maximum Permitted Consumption/ Rate (Quantity) | Consumption – 09/2025 |
|---|---|---|---|---|
| | Coal | Tons/month | 1 475 000 | 702 589 |
| | Fuel Oil | Tons/month | 3 500 | 553 |
| | | | | |
| **Production Rates** | **Product/ By-Product Name** | **Unit** | **Maximum Production Capacity Permitted (Quantity)** | **Production Rate in Month of 09/2025** |
| | Energy | GWh | 2 745 | 1 181 |
| | Ash Produced | Tons/month | 471 000 | 194 055 |

## 3. Abatement Technology

### Table 2-Abatement Equipment Control Technology Efficiency in 09/2025

| Associated Unit/Stack | Technology Type | Efficiency | ESP Utilization |
|---|---|---|---|
| South Stack (Unit 1, 2 and 3) | Electrostatic Precipitators (ESP) | 99.836% | 100% |
| | Electrostatic Precipitators (ESP) | 99.822% | |
| | Electrostatic Precipitators (ESP) | 99.876% | |
| Unit 4 | Electrostatic Precipitators (ESP) | 99.573% | 100% |
| Unit 5 | Electrostatic Precipitators (ESP) | 99.812% | 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 09/2025**

| Characteristic | Stipulated Range (% by weight on a dry basis) | Monthly Average Content (% by weight on a dry basis) |
|---|---|---|
| | Coal | |
| CV Content | 16-24 | 19.76 |
| Sulphur Content | 0.8-1.1 | 0.80 |
| Ash Content | 21-40 | 27.84 |

## 5. Emissions Reporting

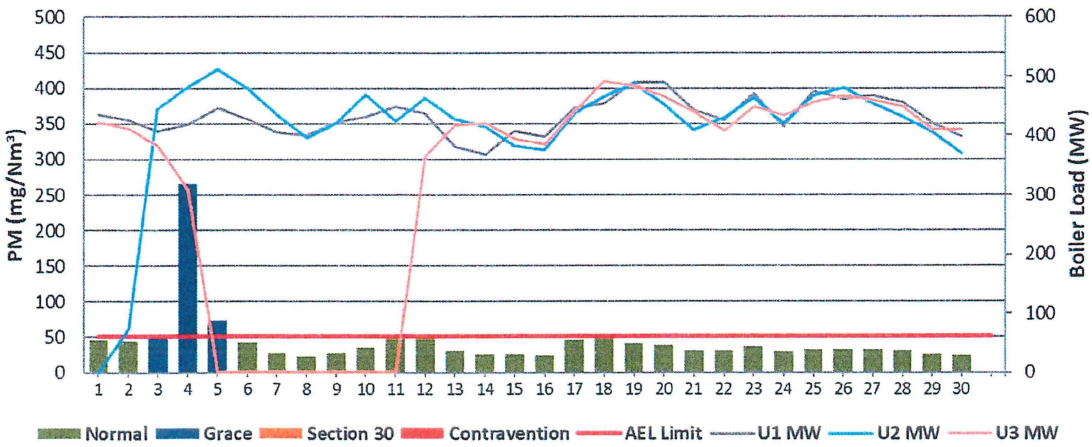
In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) a decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01st April 2025.

**Table 4- New Minimum Emission Limits are as follows:**

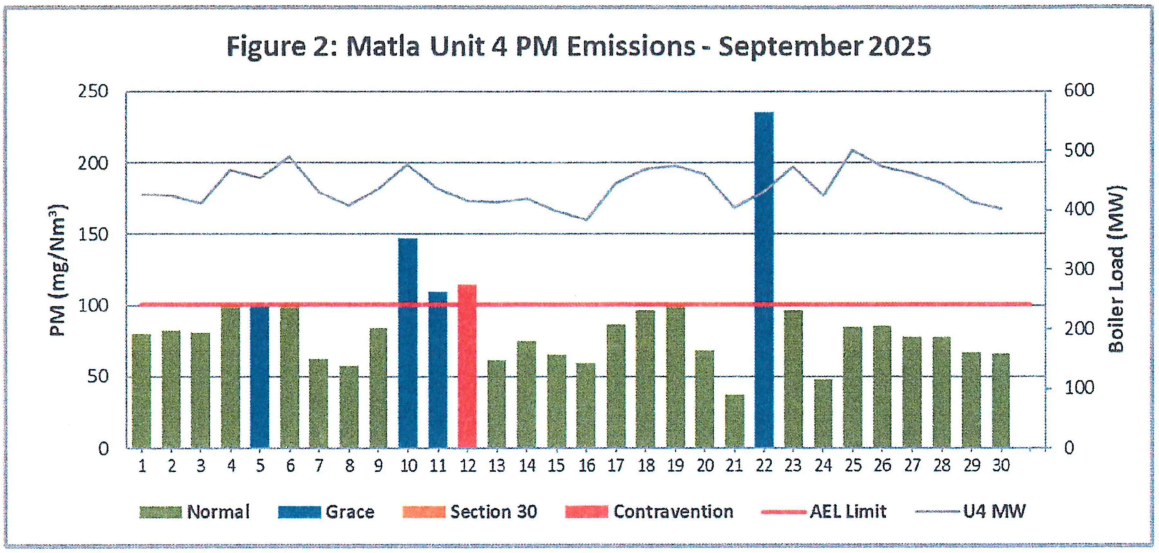
| | | |
|---|---|---|
| $SO_2$ Monthly = 2600 mg/Nm$^3$ | Dust Daily= 50 mg/Nm$^3$ (South Stack)<br>Dust Daily= 100 mg/Nm$^3$ (Unit 4, 5 and 6) | $NO_2$ Daily= 1100 mg/Nm$^3$ |

### 5.1 PM Daily Averages

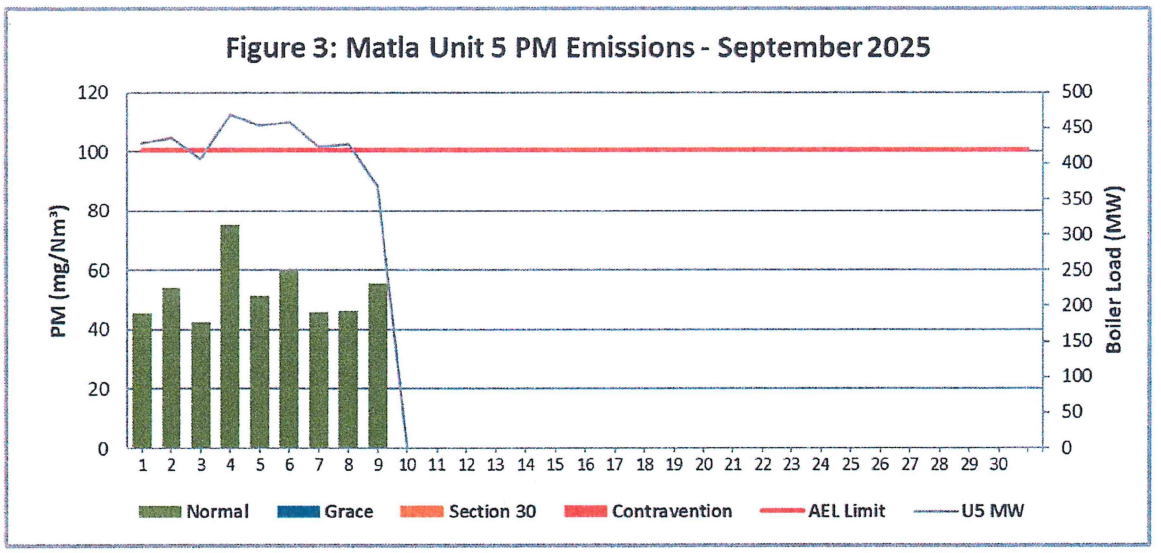
**Figure 1: Matla South Stack PM Emissions - September 2025**



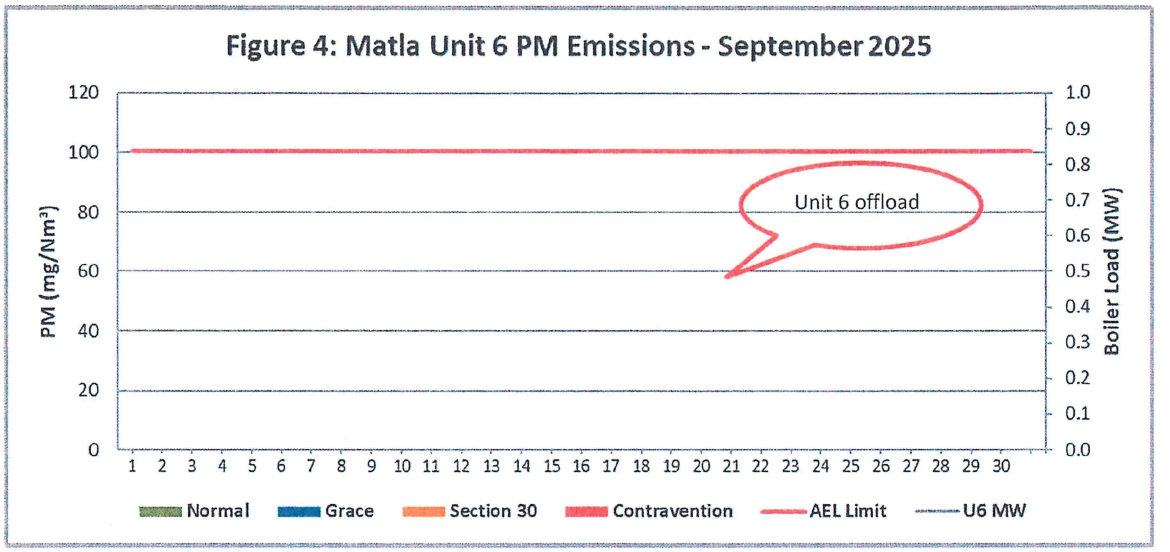

Matla Power Station South Stack exceeded PM MES limit of 50mg/Nm$^3$ on the 03rd of September 2025 due to Unit 2 light up and from 03rd of September 2025, the exceedances were due to Unit 3 shutdown. The exceedances were within a grace period.



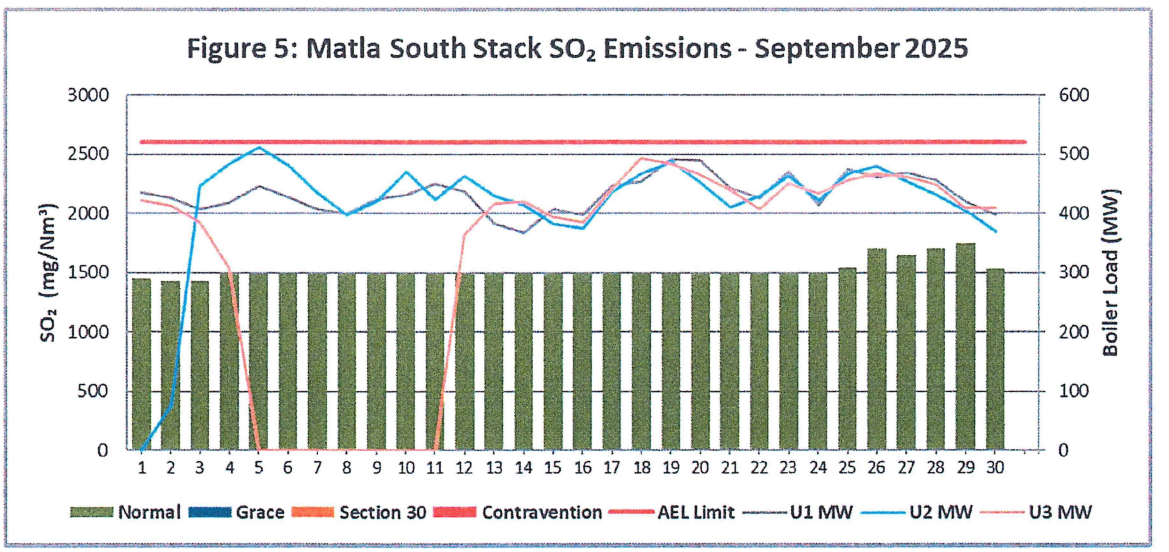

Matla Power Station Unit 4 exceeded PM MES limit of 100 mg/Nm$^3$ from 10 – 12 September 2025 due to Low injection of sulphur and poorly performing precips. The station incurred a Legal Contravention for this incident. The station exceeded PM MES limit of 100 mg/Nm$^3$ on the 5 and 22 September 2025 due to poorly performing precip fields when the unit operates at full load.



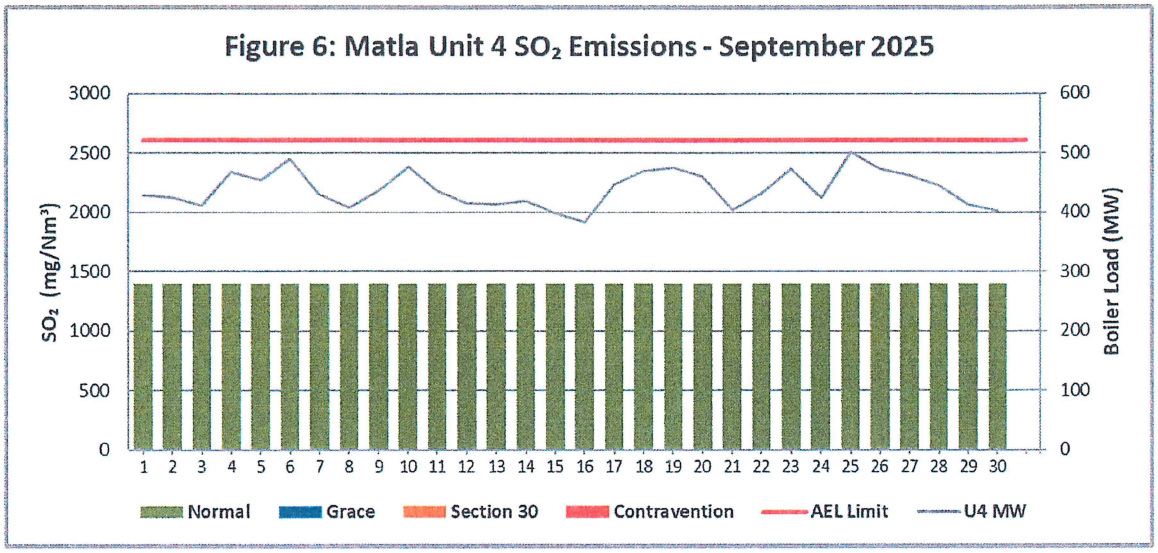

Note: Matla Power Station Unit 5 did not exceed PM limit.



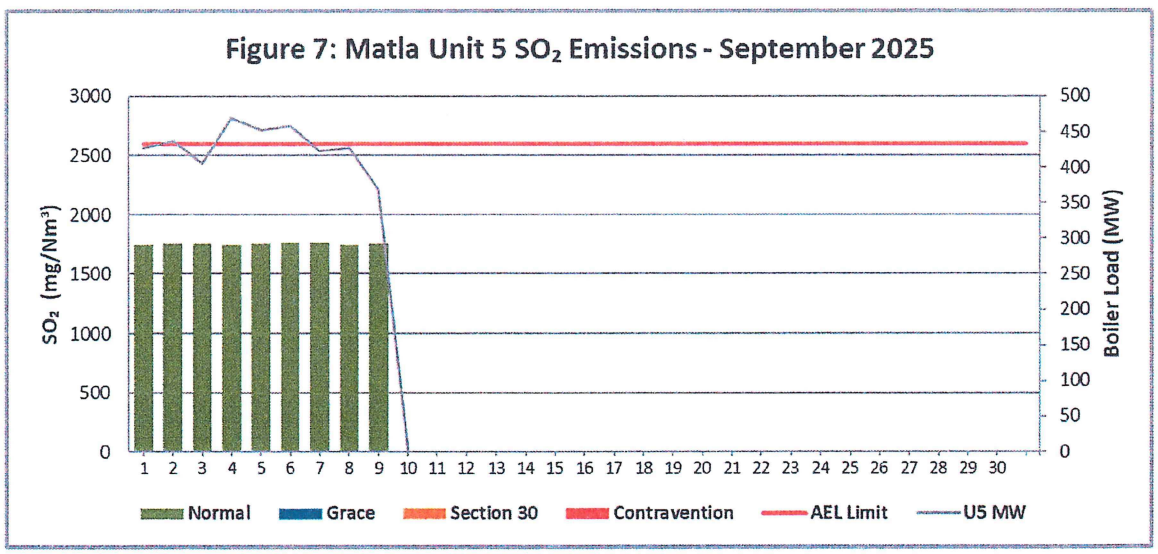

## 5.2 SOx Daily Averages



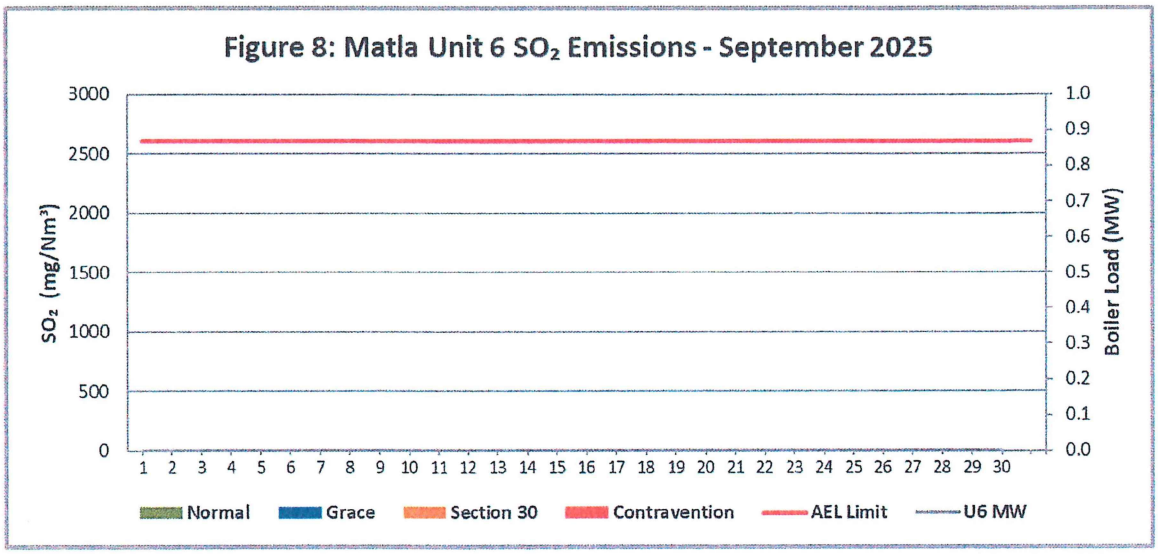

Note: Matla Power Station South Stack did not exceed SOx limit.



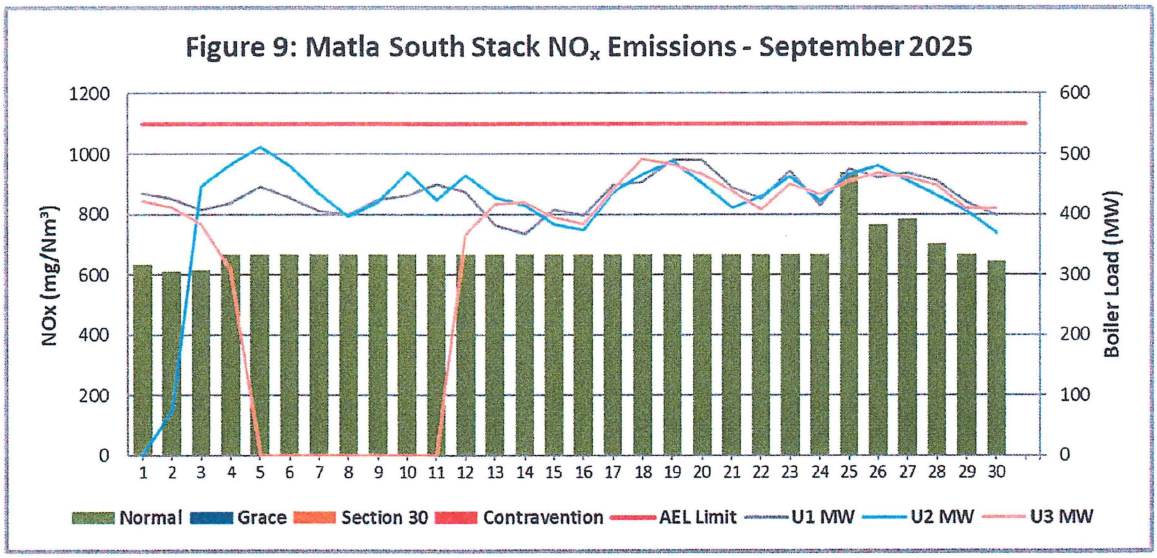

Note: Matla Power Station Unit 4 did not exceed SOx limit



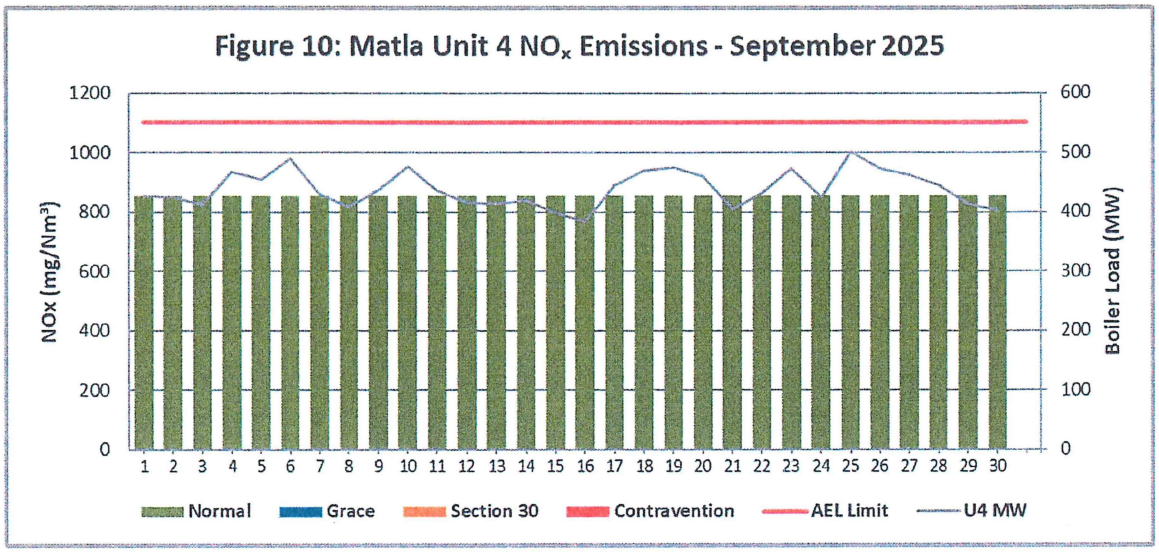

Note: Matla Power Station Unit 5 did not exceed SOx limit



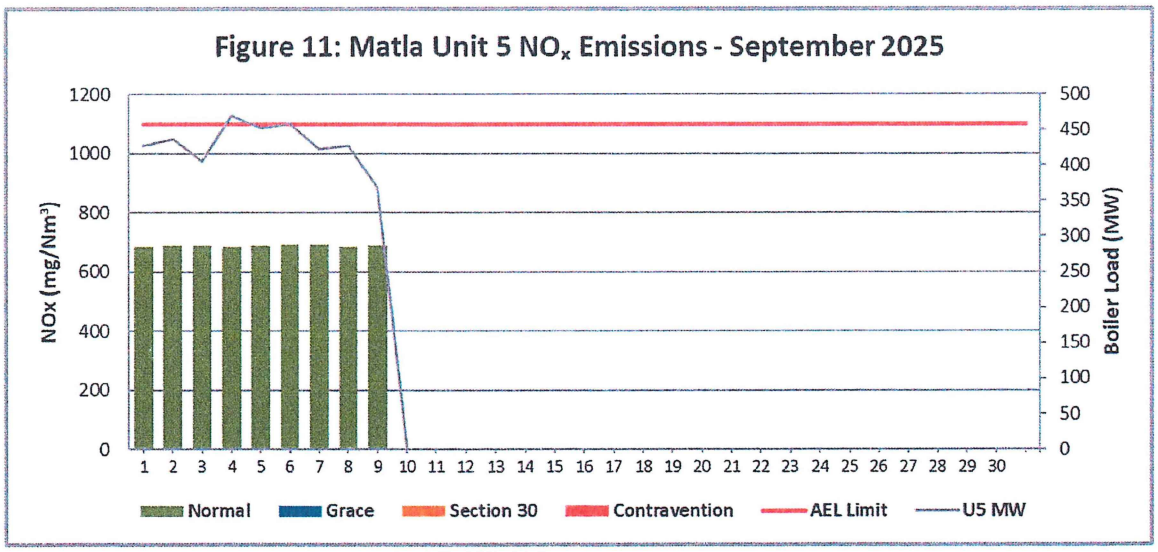

## 5.3 NOx Daily Averages



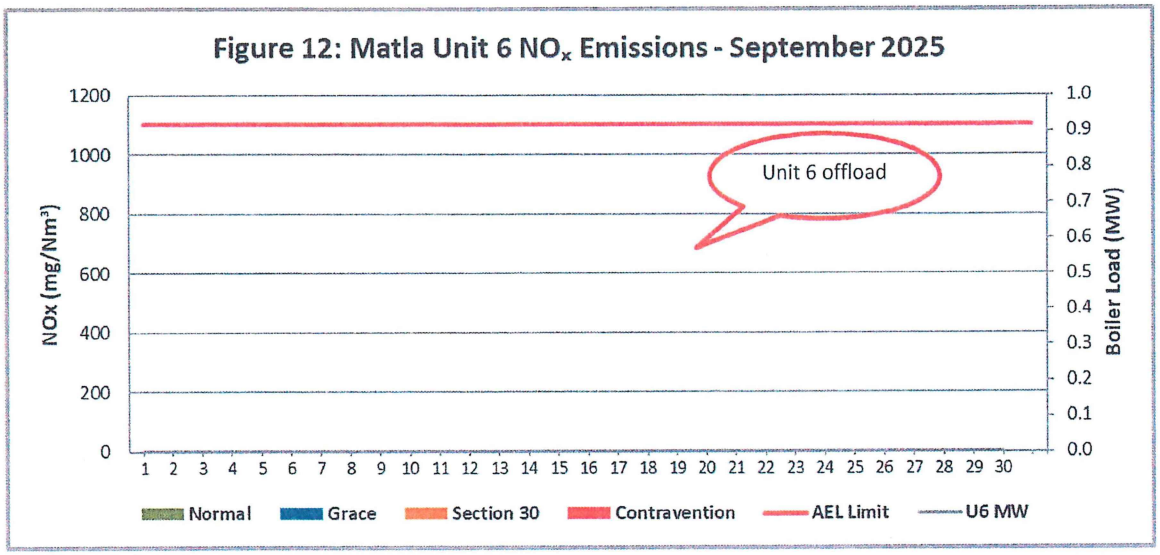

Note: Matla Power Station South Stack did not exceed NOx limit




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




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




## Table 5-Monthly Tonnages for 09/2025

| Associated Unit/Stack | PM | $SO_2$ | $NO_2$ |
|---|---|---|---|
| Unit 1 | 77.3 | 2 643 | 1 189 |
| Unit 2 | 71.7 | 2 469 | 1 113 |
| Unit 3 | 40.5 | 1 939 | 872 |
| Unit 4 | 177.7 | 2 786 | 1 704 |
| Unit 5 | 24.3 | 761 | 298 |
| Unit 6 | Off | Off | Off |
| SUM | 391.59 | 10 598 | 5 177 |

## Table 6-Monthly Averages Concentration for 09/2025 in $mg/Nm^3$

| Associated Unit/Stack | PM | $SO_2$ | $NO_2$ |
|---|---|---|---|
| South Stack | 43.9 | 1 514.3 | 679.6 |
| Unit 4 | 86.8 | 1 400.9 | 857.0 |
| Unit 5 | 53.0 | 1 755.1 | 687.0 |
| Unit 6 | Off | Off | Off |

## 6. Continuous Emissions Monitoring System (CEMS)

**Table 7- Periods during which was inoperative/malfunctioning.**

| Date | CEMS status | Comments |
|---|---|---|
| September 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.<br>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 below. |

**Table 8-CEMS Monitor Reliability Percentage**

| Associated Unit/Stack | PM | $SO_2$ | $NO_2$ | $O_2$ |
|---|---|---|---|---|
| South Stack | 98.9 | - | - | - |
| Unit 4 | 100.0 | - | - | - |
| Unit 5 | 100.0 | - | - | - |
| 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 (Unit offload) |

## 9. Complaint Register

**Table 10-Complaints for the month of 09/2025**

| 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 | N/A | N/A | N/A | N/A | N/A |