Eskom

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Nkangala District Municipality
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Date:
28 May 2026

Enquiries:
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Tel +27 16 457 5836

Ref: *Matla Power Station Annual Report FY2025/2026*

Dear Ms. Nompumelelo Simelane

**MATLA POWER STATION'S ANNUAL EMISSIONS REPORT FOR APRIL 2025 TO MARCH 2026**

This report serves as the Annual Emissions Report required in terms of Section 7.6 of the Atmospheric Emission Licence (AEL) (Ref No: 17/4/AEL/MP312/11/14) issued to Eskom Holdings SOC Ltd for the operation of Matla Power Station**.** The report provides a comprehensive atmospheric emissions performance for the Matla Power Station over the reporting period 01 April 2025 to 31 March 2026**.** It has been compiled in accordance with the conditions stipulated in the AEL and relevant legislative requirements.

Annual reporting- Section 7.6 AEL (Ref No: 17/4/AEL/MP312/11/14)**.** The license holder must complete and submit to the licensing authority an annual report. The report must include information for the year under review (i.e. annual year-end of the company). The annual report must include, amongst others, the following items:

(a) Pollutant emissions trend.
(b) Compliance audit report(s).
(c) Major upgrades projects (i.e. abatement equipment or process equipment); Action taken to address complaints received; and
(d) Annual report on implementation of Highveld Priority Areas Air Quality Management Plan, projects and/or offset programs.
(e) Name, description, and reference number of plant as specified in the AEL: (Ref No: 17/4/AEL/MP312/11/14),

| **Name of facility** | **Eskom Holdings SOC limited- Matla Power Station** |
|---|---|
| Description of facility | Power Generation, Electricity generation, Matla Power station, Delmas Road, Kriel, Mpumalanga |
| Reference number of plant | 2002\015527\06 |

**Generation Division**
Matla Power Station
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## 1. Raw Materials

### 1.1 Fuel Oil Burnt

Matla Power Station uses fuel oil during Unit light up, the maximum allowable tons of fuel oil to be used by Matla Power Station is 3 500 tons/month. The Station monitors the monthly usage and report to Nkangala District Municipality, figure 1 indicates that the Station complies with the requirements of the AEL limit of 3 500 tons per month.

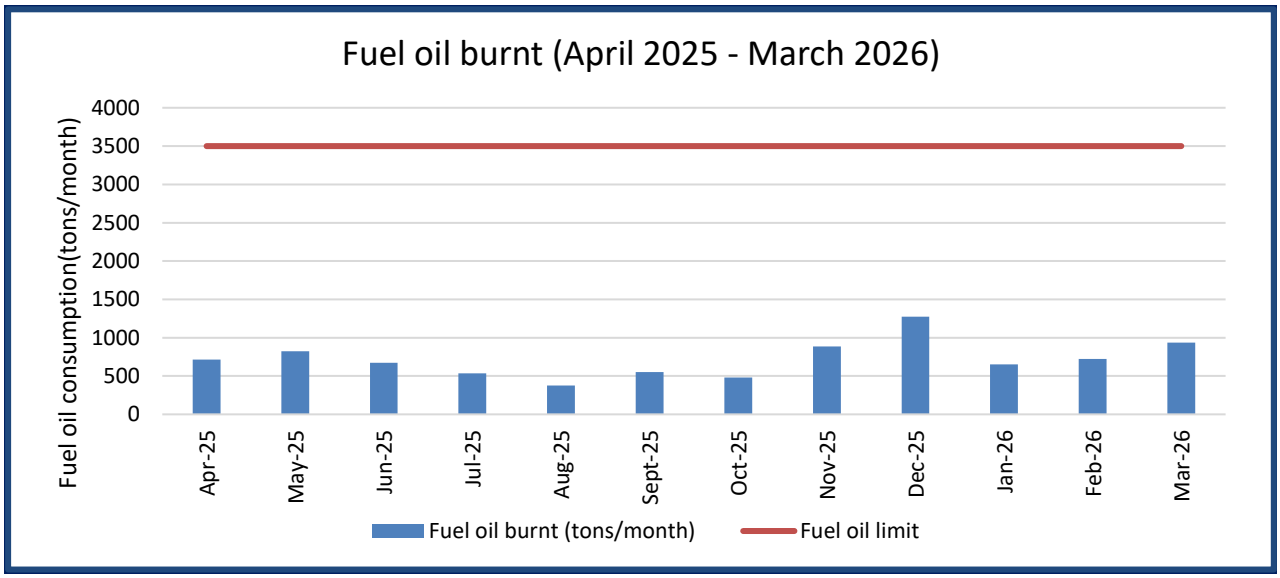


*Figure 1: Monthly Fuel Oil Burnt in Tonnages from Matla Power Station April 2025 – March 2026.*

### 1.2 Coal Burnt

Matla Power Station AEL prescribes the limits for raw materials consumption for coal. Matla Power Station coal consumption rate was within the limit of 1 475 000 tons/month as prescribed by the AEL for the reporting period of April 2025 – March 2026.

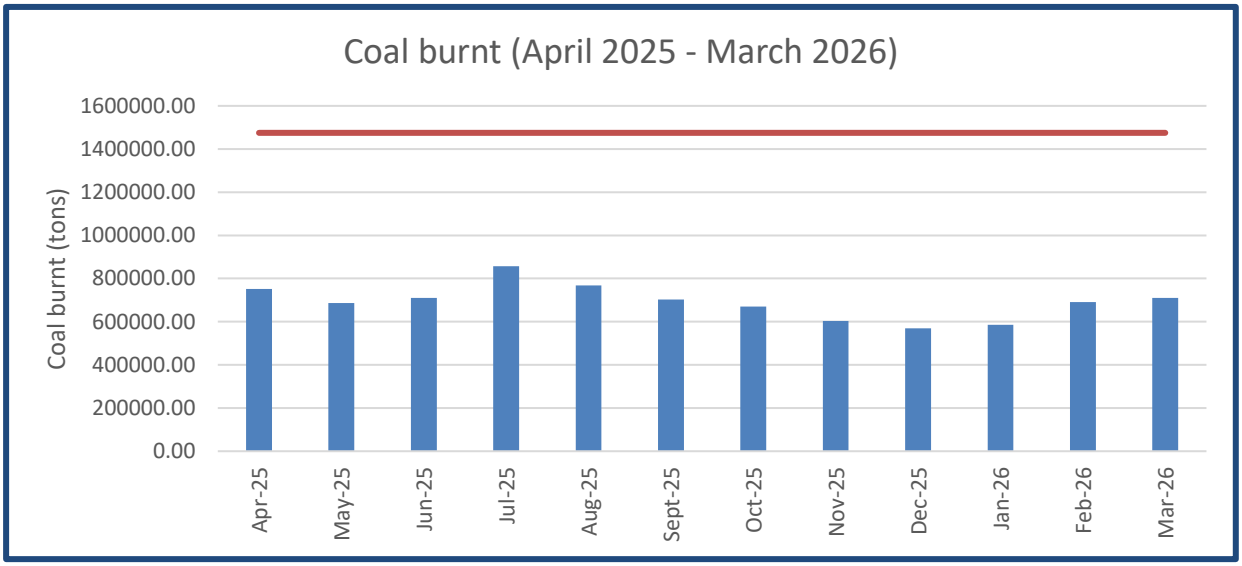


*Figure 2: Monthly Coal Burnt in Tonnages from Matla Power Station April 2025 – March 2026.*

## 2. Pollution Emission Trends

Continuous emission monitors are installed for all stacks/units.

### 2.1 The emissions tonnages in the table below are those of the Annual (April 2025 - March 2026).

Table 1. Total emissions at Matla Power Station – April 2025 - March 2026

| Power Station | Coal-fired emissions (tones/annual) |
|---|---|
| Eskom Matla Power Station | **PM:** 6624.51<br>**$SO_2$:** 137502.42<br>**$NO_2$:** 60496.04 |

Table 2: Pollutant Emission Tonnages for April 2025 – March 2026

| Month | PM (tons) | $SO_2$ (tons) | $NO_2$ (tons) |
|---|---|---|---|
| Apr-25 | 814.33 | 12004 | 5970 |
| May-25 | 708.89 | 11213.71 | 5008.94 |
| Jun-25 | 610.04 | 12003 | 5043.00 |
| Jul-25 | 647.07 | 14098.00 | 6310.00 |
| Aug-25 | 634.23 | 10943.00 | 4758 |
| Sep-25 | 381.56 | 10 550 | 4 515 |
| Oct-25 | 474.93 | 9816.04 | 4505.63 |
| Nov-25 | 726.20 | 11043.68 | 4843.47 |
| Dec-25 | 403.84 | 10 175 | 4 398 |
| Jan-26 | 354.22 | 10780.00 | 4443.00 |
| Feb-26 | 466.22 | 12810 | 5417 |
| Mar-26 | 402.97 | 12066 | 5284 |
| **Sum** | 6624.51 | 137502.42 | 60496.04 |

Note: Matla Power Station monthly reported tonnages for February and March 2026 were revised following the implementation of a new correlation test curve for Unit 5. The updated correlation resulted in an approximate 1% variance in the reported values.

### 2.2 Particulate Matter (PM) and gaseous ($NO_x$ and $SO_x$) emission concentration trends for the reporting Annual (April 2025 – March 2026).

#### 2.2 1. South Stack -PM emissions trends

South Stack – PM emission trends" presents daily/periodic particulate matter (PM) concentrations (mg/Nm³) from 01 April 2025 to 31 March 2026, with a constant PM limit line (red). In FY2024–2025, Matla South Stack operated against a 200 mg/Nm³ limit, whereas from 01 April 2025 the stack was required to comply with a limit of 50 mg/Nm³. This change represents a significant compliance step-change. Against 50 mg/Nm³ requirement, the graph indicates that most measured points remain above the limit, particularly during April to August 2025, demonstrating that compliance was not consistently achieved immediately after the limit change. From about September 2025 into March 2026, the baseline appears to improve, with more readings trending closer to (or occasionally near) 50 mg/Nm³, although episodic spikes still occur (notably in February 2026, where several peaks rise to roughly ~150–350 mg/Nm³, and again toward late March 2026). Overall, the dataset reflects a

system transitioning toward improved performance but still impacted by intermittent defects and conditioning instability that drive exceedances under the tighter standard.

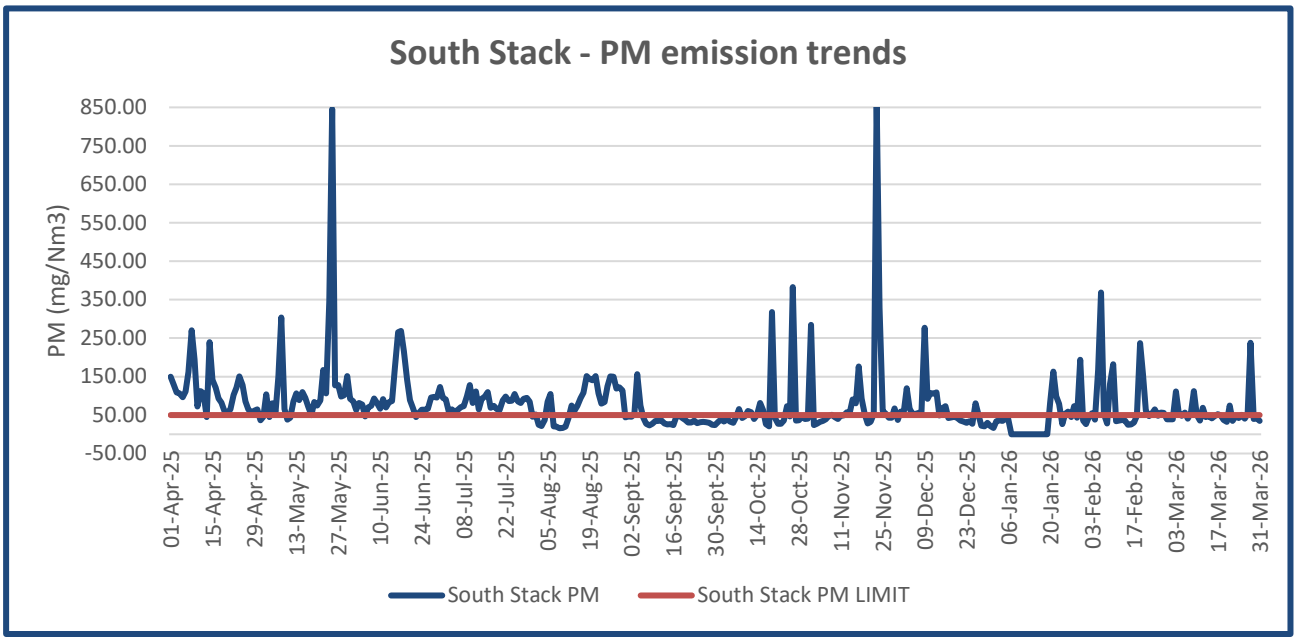


*Figure 4: South Stack PM Averages* - April 2025 – March 2026.

### 2.2.2 Unit 4-PM emissions trends

Unit 4 PM emissions were generally compliant under the previous 200 mg/Nm³ limit, with exceedances linked to abnormal events. Following the implementation of the stricter 100 mg/Nm³ limit from April 2025**,** compliance was not consistently achieved, especially between April and August 2025. During this period, emissions fluctuated between 120–300 mg/Nm³, with a peak of approximately 450 mg/Nm³, indicating poor ESP performance. Performance improved from September 2025 onwards, with more readings trending closer to the 100 mg/Nm³ limit. A significant excursion occurred in November 2025 (~950–1000 mg/Nm³), From December 2025 to February 2026, emissions stabilized, with several readings at or below the limit due to corrective actions. Overall, improvements were driven by defects rectification and Plant optimization.

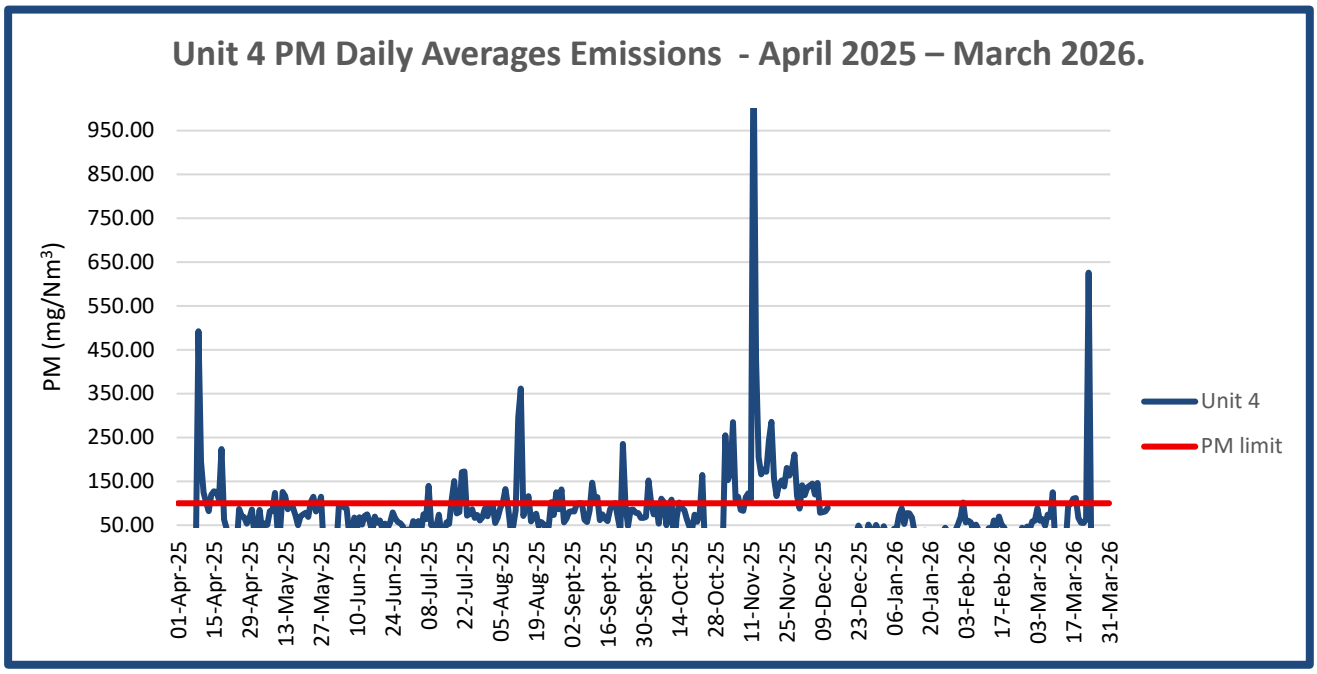

Figure 5: Unit 4 Daily Averages - April 2025 – March 2026.

### 2.2.3 Unit 5-PM emissions trends

The Unit 5 limit for FY 2025-2026 was set at 100 mg/Nm³, with several sporadic spikes during the year indicating intermittent operational upsets.

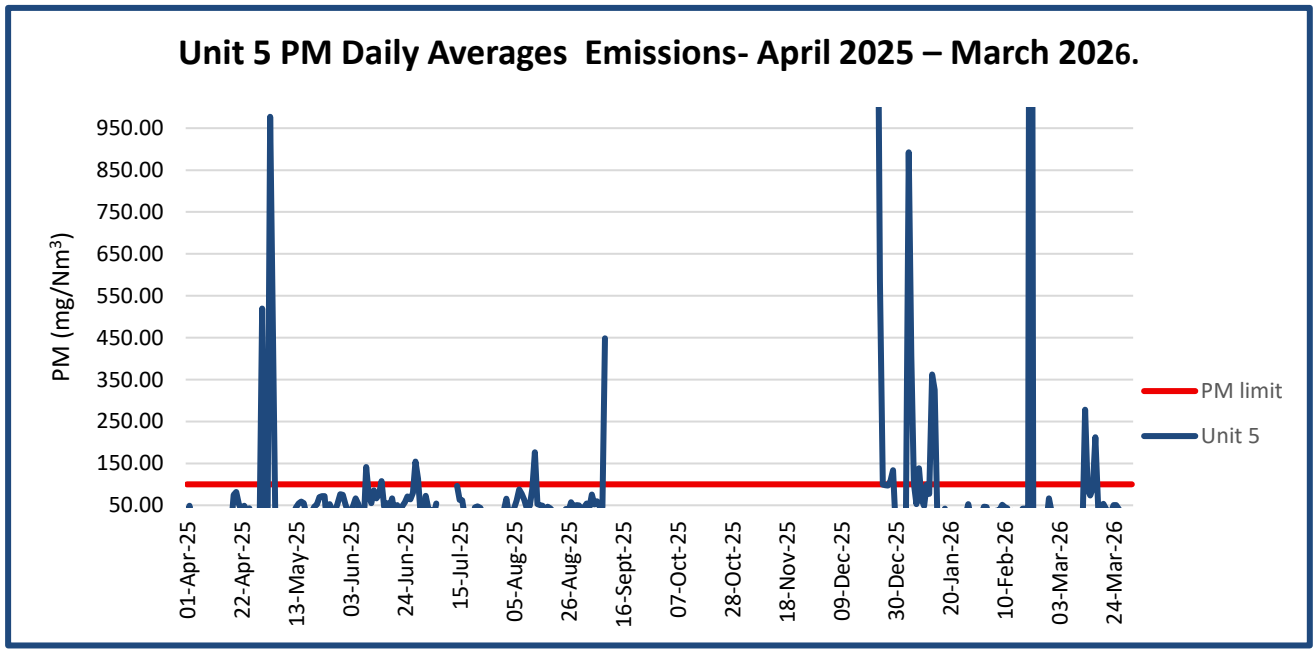

Figure 6: Unit 5 PM Daily Averages - April 2025 – March 2026.

### 2.2.4 South Stack, Unit 4 and Unit 5 SOx Emission trends

Matla Power Station South Stack and North Stack operated against 3500 mg/Nm³ limit, whereas from 01 April 2025 the stacks were required to comply with a limit of 2 600 mg/Nm³. The $SO_x$ emission trend shows that all units generally operated below the emission limit (~2500 mg/Nm³), indicating overall compliance. The South Stack, Unit 4, and Unit 5 display moderate fluctuations, typically ranging between 1200–2000 mg/Nm³, reflecting normal operational variability. Overall, $SO_x$ emissions consistently stay within permitted limits, with fluctuations mainly caused by changes in load, the Sulphur content of coal, and various operational factors

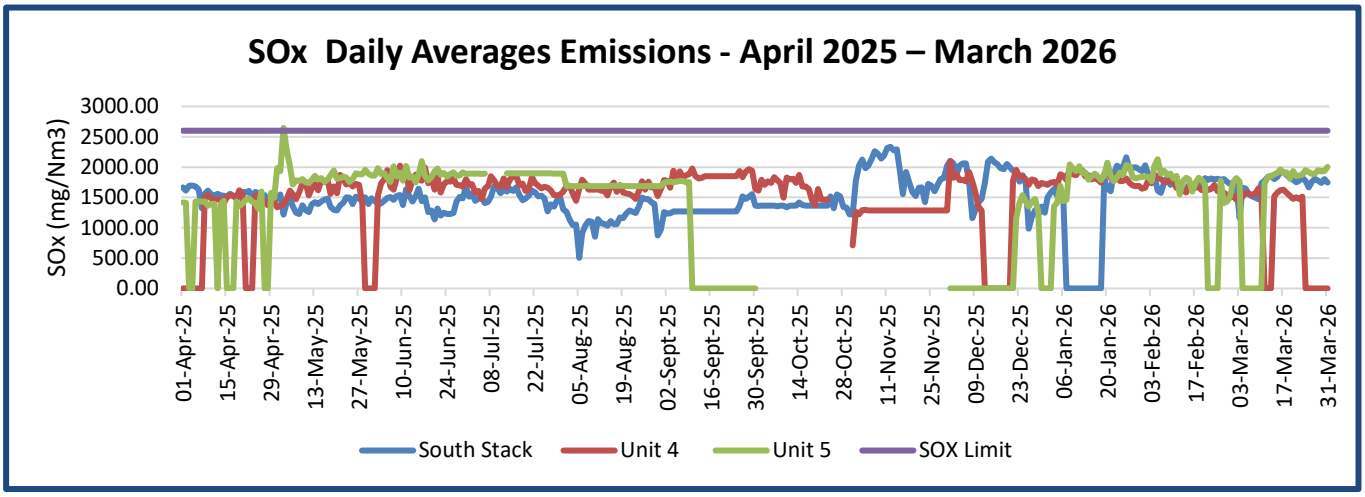


Figure 7: Daily SOx Averages Emissions - April 2025 – March 2026.

### 2.2.4 South Stack, Unit 4 and Unit 5 NOx Emissions trends

The South Stack and North Stack at Matla Power Station operated in accordance with the applicable emission limit of 1 200 mg/Nm³ until 31 March 2025. Effective 01 April 2025, the applicable emission limit for both stacks was revised to 1 100 mg/Nm³l The $NO_x$ emission trend indicates that all units generally operated below the limit (~1100 mg/Nm³), demonstrating overall compliance for the reporting period. Unit 5 displays higher variability, with occasional spikes (up to ~1300 mg/Nm³) in January 2026.

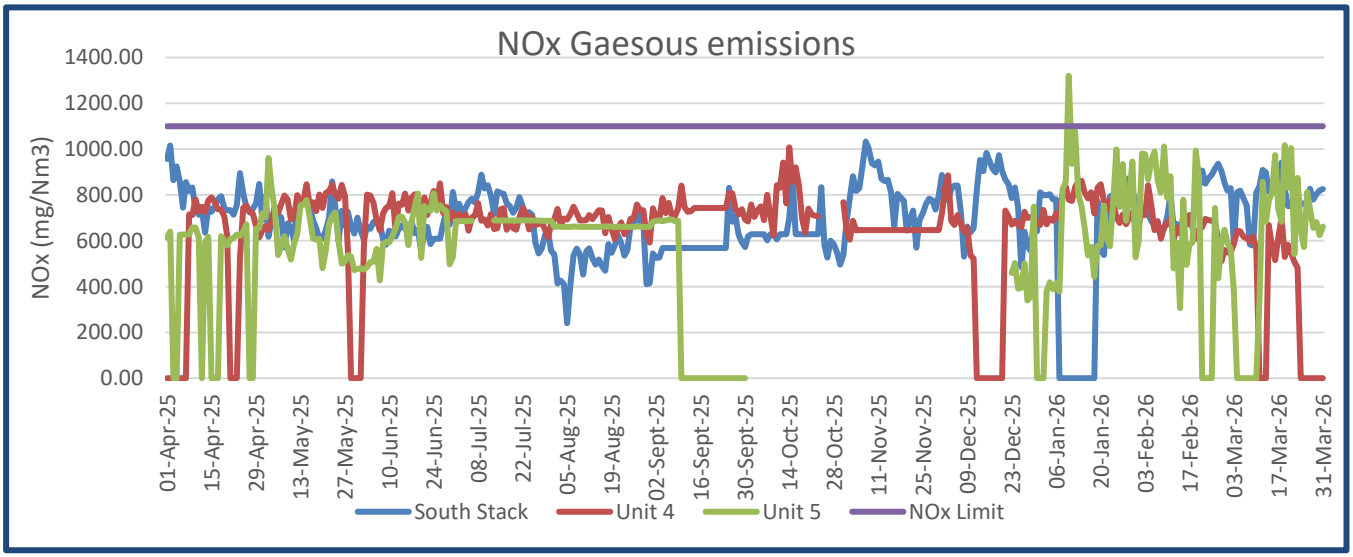


*Figure 7: Daily NOx Averages Emissions - April 2025 – March 2026*

### 3. Legal Contraventions and Section 30 Incidents for FY2025/2026 (April 2025 - March 2026)

Table 3: Reasons of Exceedance that resulted to either Section 30 or Legal Contravention.

| South Stack Particulate Exceedances | | |
|---|---|---|
| **Date** | **Reason for Exceedance** | **Corrective Action** |
| 03 – 12 April 2025<br>16 – 30 April 2025<br>07 – 09 May 2025<br>14 – 17 May 2025<br>21 – 31 May 2025<br>01 – 04 June 2025<br>08 – 21 June 2025<br>25 – 30 June 2025<br>01 – 30 July 2025 | South Stack exceeded PM AEL limit of 50 $mg/Nm^3$ due to the units struggling to operate within limit on full load. Defective CE rapping gear/ design at Unit 1. | • ESP performance was optimized through increased $SO_3$ injection rates.<br>• The DE rapping gear was inspected and ensured to be in proper working condition to support reliable operation.<br>• The ESP rapping regime on Units 1, 2, and 3 was optimized |
| 15 August 2025 | Exceedances were due to Unit 3 $SO_3$ burner temp warm up delays after repairs were done on the Sulphur common plant. | • The Unit 3 $SO_3$ plant was placed into service<br>• The damaged heater on the Unit 3 $SO_3$ plant was replaced<br>• A thermocouple was installed directly downstream of the de-superheater to accurately monitor and maintain the required steam temperature and pressure. |
| 19 – 30 August 2025 | Matla PS incurred a **Section 30** due to Unit 1 steam leak into the $SO_3$ burner | • Burner refractory repairs and burner shell casing repairs were conducted<br>• The Sulphur plant was optimized to enhance operational stability |
| 15 November 2025<br>03 December 2025<br>23 January 2026 | Exceedances were due to the unit 1 rapping system that loses settings from time to time that affect the precip field performance. | • A preventive maintenance (PM) plan for the rapping system was developed and implemented.<br>• The cracked thermocouple pocket to be repaired target completion date - 30 June 2026<br>• Defects on Precipitator Field RH2 were repaired to improve ESP performance.<br>• The LH and RH 2M4 rapping systems were repaired, including a |

| | | |
|---|---|---|
| | | review and improvement of the existing design configuration to enhance reliability. |

| Unit 4 Particulate Exceedances | | |
|---|---|---|
| **Date** | **Reason for Exceedance** | **Corrective Action** |
| 10 – 12 April 2025<br>16 – 18 April 2025 | The new Minimum Emission Standards (MES) became effective on 01 April 2025 following approval by the relevant authority. During the reporting period, Unit 4 recorded PM emissions above 100 mg/Nm³, primarily attributable to suboptimal electrostatic precipitator (ESP) performance, specifically linked to an inefficient rapping system. | • The Unit 4 precipitator was optimized to achieve improved operational performance and emissions control.<br>• A Unit 4 correlation test was conducted.<br>• Investigations and repairs were carried out on LH Precipitator Fields 6 and 8 to determine and address the root cause of failure. |
| 12 September 2025 | The exceedances were primarily attributed to insufficient sulphur injection as well as suboptimal electrostatic precipitator (ESP) performance, with specific defects identified in the LH6, LH8, and RH4 precipitator fields. | • Precipitator field performance was optimised to ensure that all fields operated within the required V–I (voltage-current) curves.<br>• $SO_3$ plant performance was optimised to minimise fluctuations when the control valve was operating in automatic mode.<br>• The emission management procedure was reviewed and updated to reflect operational limits.<br>• Awareness of the updated emissions management procedure was communicated to relevant personnel.<br>• Defects in Precipitator Fields LH6, LH8, and RH4 were repaired. |
| 30 November 2025 | Exceedances were primarily attributed to various operational inefficiencies and construction-related defects affecting the electrostatic precipitators (ESPs), which resulted in reduced particulate matter removal efficiency. | • A correlation test was re-conducted.<br>• $SO_3$ nozzles on Cells A to D were cleaned and unblocked, |

| | | |
|---|---|---|
| | | restoring proper injection and flue gas conditioning.<br>• The OEM was engaged to address intermittent loss of settings on the rapping system, improving system reliability.<br>• Turning vanes and the solid base walkway were rectified during the outage to improve gas flow distribution and operational stability. |

| **Unit 5 Particulate Exceedances** | | |
|---|---|---|
| **Date** | **Reason for Exceedance** | **Corrective Action** |
| 05 January 2026 | Exceedances were primarily attributed to plant failures and poor coal quality, which constrained the ability to ramp up unit load. In addition, the electrostatic precipitators (ESPs) exhibited poor performance when brought into service, largely due to the absence of $SO_3$ injection, resulting in reduced particulate matter removal efficiency. | • The $SO_3$ plant was placed into service to support flue gas conditioning and improve ESP performance.<br>• The LH secondary air heater coupling was repaired to restore proper air heating and system functionality.<br>• Awareness was provided to the Operating team on the correct procedures for warming up the $SO_3$ plant to ensure stable operation.<br>• A $SO_3$ plant checklist was developed for both on-load and off-load conditions to enhance operational control and reliability. |

## 4. Emission monitoring information

### 4.1 Monitor Reliability obtained for the CEMS for April 2025 – March 2026.

Table 4. PM monitor reliability for April 2025 – March 2026

| Month | South Stack | Unit 4 | Unit 5 | Unit 6 |
|---|---|---|---|---|
| April-25 | 98.3 | 99.3 | 95.0 | Unit off |
| May-25 | 98.4 | 100 | 97.6 | |
| June-25 | 98.1 | 100 | 99.1 | |
| July-25 | 100 | 99.6 | 98.1 | |
| Aug-25 | 98.9 | 100 | 100 | |
| Sep-25 | 98.9 | 100 | 95.7 | |
| Oct-25 | 98.4 | 99.8 | Unit off | |
| Nov-25 | 93.5 | 91.9 | | |
| Dec-25 | 99.1 | 99.6 | 80.0 | |
| Jan-26 | 98.4 | 86.8 | 76.4 | |
| Feb-26 | 96.0 | 64.7 | 95.6 | |
| Mar-26 | 98.9 | 64.2 | 85.3 | |

- Unit 5 monitor reliability was 76% in January 2026. The unit was on outage in December 2025, during which high-frequency transformers were upgraded. Following the return to service, the monitor began recording values below 4 mA, which were not accommodated within the existing range in the Emission reporting tool. To address this limitation, the station conducted a new correlation test which was completed on the 30 January 2026, resulting in a revised extinction range. This adjustment improved the sensitivity and reliability of the monitor, particularly at low emission levels.

- Unit 4 PM monitor reliability was 64.7% in February 2026 and March 2026 due to Unit 4 that records emissions that are below 4 mA and the monitor does not cater for readings that are below 4 mA. The station optimized PM monitor range for output 1 since it was consistently drifting out of normal range (4-20mA). Unit 4 records emissions that are below 4 mA and the monitor was not catering for readings that are below 4 mA. revised extinction range was obtained, this adjustment improved the sensitivity and reliability of the monitor, particularly at low emission levels.

Table 5. $SO_x$ and $NO_x$ monitor reliability for April 2025 – March 2026

| Month | South Stack | | Unit 4 | | Unit 5 | | Unit 6 | |
|---|---|---|---|---|---|---|---|---|
| | $SO_x$ | $NO_x$ | $SO_x$ | $NO_x$ | $SO_x$ | $NO_x$ | $SO_x$ | $NO_x$ |
| Apr-25 | 99.7 | 99.7 | 92.9 | 92.9 | 80.1 | 80.1 | Unit off | Unit off |
| May-25 | 100 | 100 | 94.9 | 94.9 | 97.0 | 97.0 | | |
| Jun-25 | 99.9 | 100 | 98.1 | 98.1 | 99.9 | 99.9 | | |
| July-25 | 100 | 100 | 100 | 100 | 4.0 | 100 | | |
| Aug-25 | 98.0 | 99.7 | 88.4 | 88.4 | 3.2 | 88.8 | | |
| Sep-25 | 30.6 | 39.6 | 45.1 | 45.3 | 0.0 | 76.1 | | |
| Oct-25 | 31.9 | 32.7 | 95.1 | 91.0 | Unit off | Unit off | | |
| Nov-25 | 100 | 99.6 | 9.4 | 9.4 | | | | |
| Dec-25 | 98.8 | 99.6 | 93.6 | 94.3 | 100 | 77.6 | | |
| Jan-26 | 94.7 | 96.1 | 99.9 | 99.9 | 99.4 | 89.7 | | |
| Feb-26 | 100 | 100 | 99.4 | 99.4 | 95.1 | 93.6 | | |
| Mar-26 | 100 | 100 | 100 | 100 | 97.6 | 98.7 | | |

- Matla Power Station experienced low monitor reliability (below 80%) across various units from July 2025 to November 2025. During this period, the station faced challenges related to the gas monitoring maintenance contract, which resulted in instances where calibration of the monitors was not conducted in accordance with the recommended bi-weekly frequency.

- To address this, the station has since appointed a dedicated service provider for the maintenance of the gas monitoring systems. Following the implementation of this intervention, monitor reliability showed significant improvement from December 2025 onwards.

**4.2 Validity of Correlation and Parallel Tests:**

Overview of Validity of CEMS Correlation and Parallel Tests for PM, $SO_2$ and NOx (Parallel and Correlation test reports attached):

Table 6. Overview of Correlation and Parallel Tests validity

| 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) |

## 5. Compliance Audit Report(s):

Matla Power Station during the 2024/25 financial year, the was no compliance audit conducted for this reporting period; however, the station conducts monthly AEL self-assessments. Matla Power Station conducted Atmospheric Emission Licence (AEL) Compliance Review from 05 – 06 November 2025, assessment period covered 01 April to 31 October 2025. Of the station's 88 AEL conditions, 66 were applicable for the review period. The station achieved compliance with 48 conditions, equating to a 72.7% compliance score. A total of 18 findings were identified and consolidated into nine key findings for ease of closure. The audit report is attached to this submission.

## 6. Major upgrades projects:

Table 7. Matla Major Upgrade Projects.

| Project | Status |
|---|---|
| Retrofitting the existing conventional rectifier/transformers with High Frequency Power Suppliers (HFP's) which is expected to reduce the particulate emissions by approximately 20-30%. | Unit 1-Unit 6: Complete |
| Multi Ash flow project implementation project. | Unit 1- Unit 3 Complete<br>Unit 4: 26/09/2026<br>Unit 5: Complete<br>Unit 6: complete |
| Electrostatic Precipitators upgrade. | Unit 1-Unit 6: Complete |

## 7. Participation in priority areas programs

Matla Power Station is participating in the Highveld Priority Areas (HPA) Multi-stakeholder Reference Group (MSRG) meetings as and when arranged by the Nkangala District Emission Officer.

## 8. Air quality offset program

An Air Quality Offset Implementation Plan progress for the Nkangala District Municipality was submitted on the 30th of March 2026 to the licensing authority.

## 9. Fugitive dust Management

Dust management plan for Matla Power Station has been developed and monitoring is conducted monthly. For the reporting period April 2025 to March 2026, two monitoring points (EM-DWS-N & EM-PS-E) indicated exceedances above the industrial guideline in July 2025 and October 2025.
In July and October 2025. Matla Power Station Dust Management Plan has been revised in accordance with the National Dust Control Regulations.

**Table 8. Dust Fallout Results Table (Apr 2025 – Mar 2026)**

| Site ID | Apr-25 | May-25 | Jun-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Jan-26 | Feb-26 | Mar-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EM-AD-E | 174 | 358 | 596 | 473 | 209 | 442 | 190 | 291 | 192 | 265 | 444 | 231 |
| EM-AD-N | 195 | 368 | 380 | 465 | - | 282 | 323 | 523 | 823 | 317 | 381 | 300 |
| EM-AD-S | 64 | 200 | 345 | 347 | 402 | 286 | 110 | 339 | 310 | 111 | 287 | 121 |
| EM-AD-W | 79 | 219 | 721 | 481 | 527 | 362 | 226 | 320 | 232 | 379 | 369 | 410 |
| EM-PS-E | 686 | 560 | 612 | 663 | 414 | 548 | 2260 | 389 | 369 | 670 | 498 | 862 |
| EM-PS-N | 338 | 545 | 494 | 474 | 458 | 494 | 346 | 313 | 531 | 161 | 821 | 633 |
| EM-PS-S | 207 | 228 | 217 | 318 | 224 | 591 | 183 | 91 | 253 | 183 | 384 | 225 |
| EM-PS-W | 376 | 669 | 420 | 515 | 183 | 333 | 357 | 540 | 505 | 472 | 926 | 549 |
| DWS-E | 271 | 453 | 561 | 252 | 419 | 497 | 518 | 464 | 453 | 284 | 630 | 665 |
| DWS-N | 461 | 665 | 705 | 1570 | 258 | 665 | 405 | 410 | 373 | 282 | 523 | 242 |
| DWS-W | 314 | 502 | 392 | 1080 | 255 | 534 | 885 | 449 | 389 | 462 | 854 | 914 |
| Raw Water | 180 | 241 | 154 | 274 | 317 | 299 | 212 | 128 | 275 | 175 | 343 | 294 |
| Seepage D | 139 | 283 | 260 | 351 | 227 | 325 | 269 | 280 | 559 | 104 | 188 | 283 |

## 10. Complaints register

**Table 9: Complaints register**

| 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. |
|---|---|---|---|---|---|
| Fugitive Dust Fallout Complaint | Fugitive dust fallout 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 (Complaint Date) and 08/08/2025 (Meeting with DWS) | Dust suppression and dust binding chemicals were applied to the gravel road next to DWS residents' area. | Continuous |
| | | | | Removal of old ash lines and replaced with new ones around DWS | 30/12/2025 (Completed) |

## 11. General

**NAEIS Reporting**

- Matla Power Station submits annual emission information on the NAEIS system manually.

**Greenhouse Gas Emissions Reporting**

- Greenhouse gas emissions reporting was submitted on 30 March 2026 to the Department of Forestry, Fisheries and the Environment (DFFE).

Should you require any further information or clarification, please feel free to contact the Environmental Department.

We trust that the above meets your requirements.

**Compiled by** : Lutendo Murovhi
**Designation** : Matla Power Station Senior Advisor Environmental Management
**Signature** : 
**Date** : 28/05/2026

**Supported by**: Lehlogonolo Moreoane
**Designation** : Matla Power Station Environmental Management Manager
**Signature** : 
**Date** : 28/05/2026

**Authorized by**: Bob Phahle
**Designation** : Matla Power Station General Manager
**Signature** : 
**Date** : 2026/05/28