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Date:  
30 May 2025

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Ref: **CAM-ENV/ANNUAL/2025-EM001**

Dear Dr. Patience Gwaze

## **CAMDEN POWER STATION'S ANNUAL EMISSIONS REPORT**

This serves as the annual report required in terms of Section 7.6 (Routine reporting and record keeping) in Camden Power Station's Atmospheric Emission License (Msukaligwa/Eskom H SOC Ltd/CPS/0012/2024/F04). The emissions are for Eskom's 2024/2025 financial year which is from 01 April 2024 to 31 March 2025. Verified emissions of particulates, SO<sub>2</sub>, NO<sub>x</sub> (as NO<sub>2</sub>) and the greenhouse gases CO<sub>2</sub> and N<sub>2</sub>O are also included.

<b>Category of Listed Activity</b>	<b>Sub-Category of Listed Activity</b>	<b>Listed Activity Name</b>	<b>Description of the Listed Activity</b>
Category 1	Sub-category 1.1	Solid Fuel Combustion Installations	Solid fuel combustion installation used primarily for steam raising or electricity generation
Category 2	Sub-category 2.4	Storage and handling of Petroleum Products	Storage and Handling of Petroleum Products.

Category 5	Sub-category 5.1	Storage and handling of ore and coal	Storage and handling of ore and coal not situated on premises of mine or works as defined in the Mines Health and Safety Act 29/1996.
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### Pollutant Emission Trends and Greenhouse Gas Emissions:

Particulate emissions are measured at all power stations with opacity monitors, which are correlated to obtain emission concentrations. Gaseous emissions (CO<sub>2</sub>, N<sub>2</sub>O, SO<sub>2</sub> and NO<sub>x</sub>) are calculated from mass balances for SO<sub>2</sub> and CO<sub>2</sub>, from station-specific emission factors for NO<sub>x</sub> and from a generic emission factor for N<sub>2</sub>O.

Continuous emission monitors are installed on all four stacks and Eskom will report on the gaseous emission measurements in the annual reports once we are satisfied that the continuous emission measurements are at least as accurate as the calculations.

Table 1: General oversight of emissions at Camden Power Station 2024/2025 (tons per annum and mg/Nm<sup>3</sup> per annum) <sup>1</sup>

Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Camden	<b>PM:</b> 1 439.16	<b>PM:</b> not calculated	<b>PM:</b> 1 439.16
	<b>SO<sub>2</sub>:</b> 45 627	<b>SO<sub>2</sub>:</b> 1 213	<b>SO<sub>2</sub>:</b> 46 840
	<b>NO<sub>x</sub>:</b> 37 840	<b>NO<sub>x</sub>:</b> not calculated	<b>NO<sub>x</sub>:</b> 37 840
	<b>CO<sub>2</sub>:</b> 9 230 145	<b>CO<sub>2</sub>:</b> 93 772	<b>CO<sub>2</sub>:</b> 9 323 917
	<b>N<sub>2</sub>O:</b> 47.21	<b>N<sub>2</sub>O:</b> not calculated	<b>N<sub>2</sub>O:</b> 47.21

<sup>1</sup> Source data Eskom Emission Summary report 2024/25

Table 2: General oversight of emissions at Camden Power Station 2024/2025 (mg/Nm3) <sup>2</sup>

Power Station	Coal-fired emissions (mg/Nm3/annum)
Camden	<b>PM:</b> 1 439.16
	<b>SO<sub>2</sub>:</b> 11 676
	<b>NO<sub>x</sub>:</b> 9 022
	<b>CO<sub>2</sub>:</b> 2 374 539

Table 3: Pollutant Emission Trends (tons) for 2024/2025

Month	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	CO <sub>2</sub> (tons)	N <sub>2</sub> O (tons)
April 2024	160.49	3061	2327	585689	2.93
May 2024	187.81	3836	2896	703919	3.58
June 2024	182.33	4488	3445	836123	4.25
July 2024	106.72	4465	3363	813415	4.14
August 2024	133.69	2750	2283	565056	2.83
September 2024	137.80	3966	3201	784750	3.98
October 2024	105.01	3941	3556	873787	4.44
November 2024	111.45	4125	3410	839408	4.26
December 2024	100.59	4099	3549	890712	4.50
January 2025	74.86	4026	3458	865495	4.36
February 2025	86.59	3743	3031	741414	3.75
March 2025	51.82	4338	3321	824150	4.18

Table 3 above provides information on the monthly emissions for PM, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> and N<sub>2</sub>O. This will be further illustrated graphically below:

<sup>2</sup> Source data Eskom Emission Summary 2024/25 (SO<sub>2</sub>, NO<sub>x</sub> & CO<sub>2</sub>) & Station monthly ERT for PM

## CAMDEN POWER STATION'S 2024/25 ANNUAL EMISSIONS REPORT

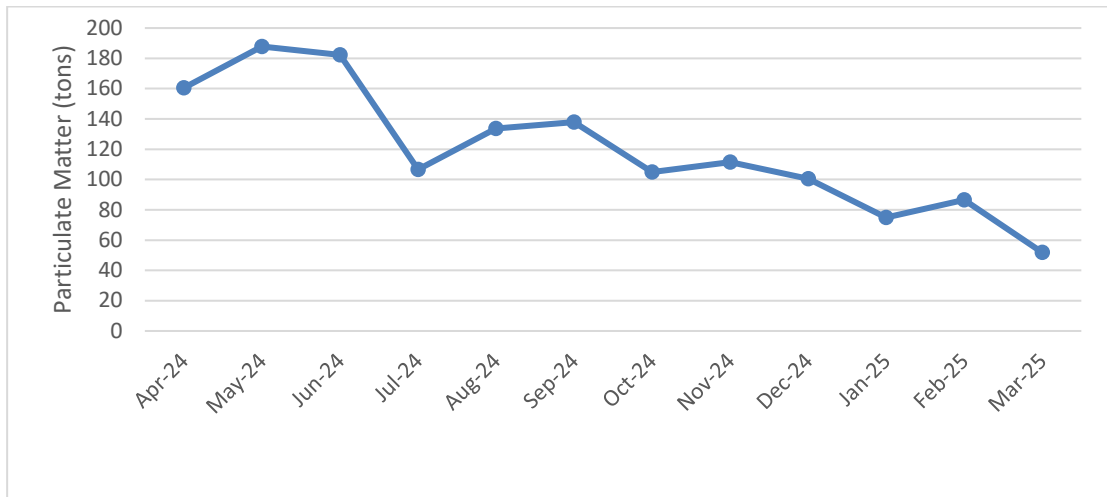


Figure 1: Monthly Particulate Emissions in tons from Camden Power Station 2024/25

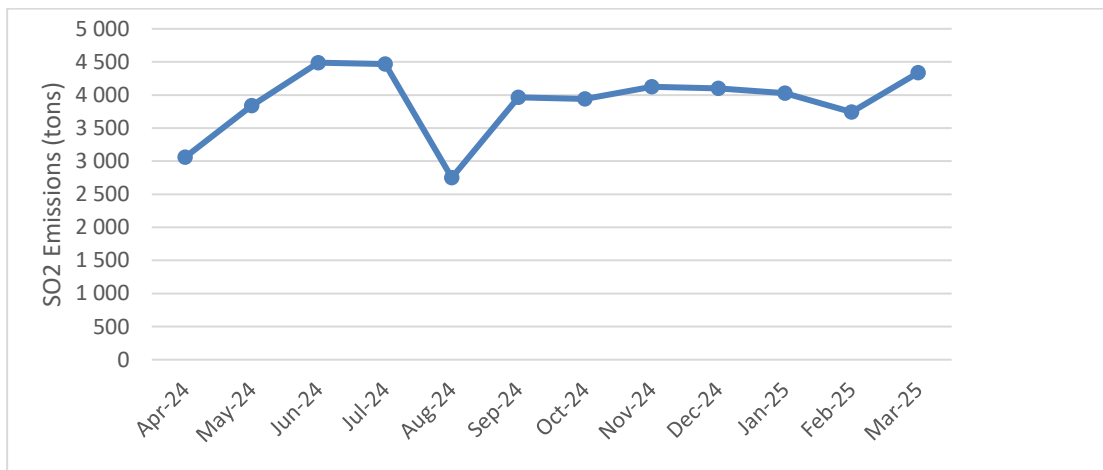


Figure 2: Monthly SO<sub>2</sub> Emissions in tons from Camden Power Station 2024/25

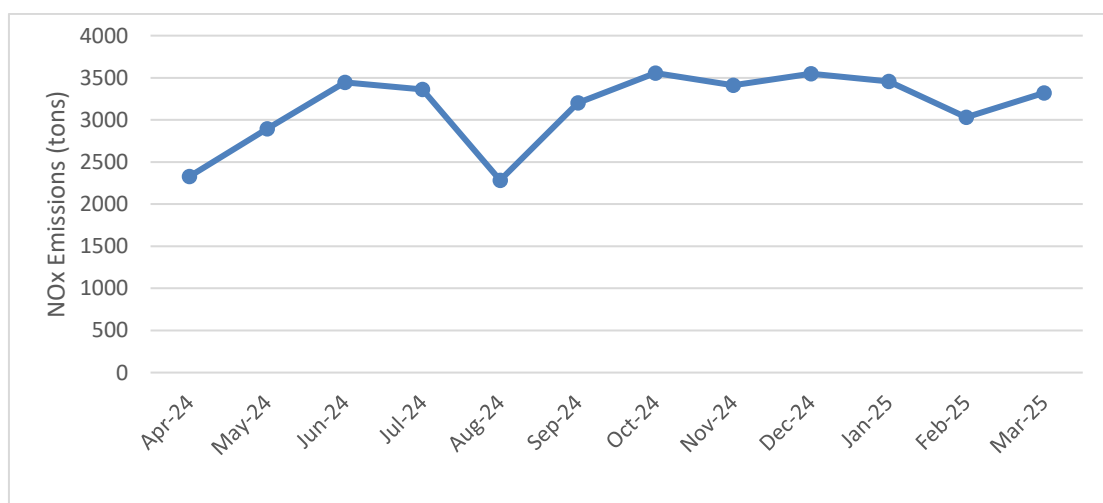


Figure 3: Monthly NO<sub>x</sub> Emissions in tons for Camden Power Station 2024/25

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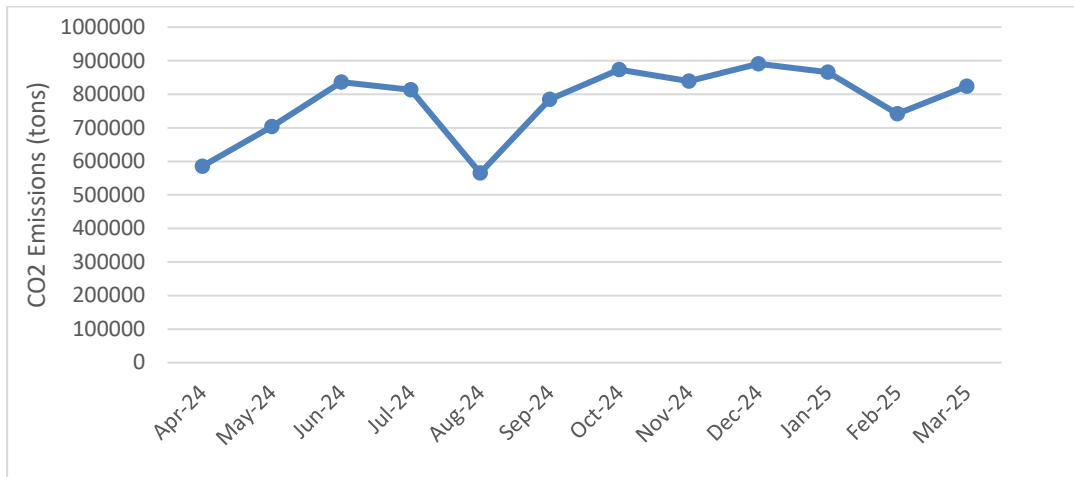


Figure 4: Monthly CO<sub>2</sub> Emissions in tons from Camden Power Station 2024/2025

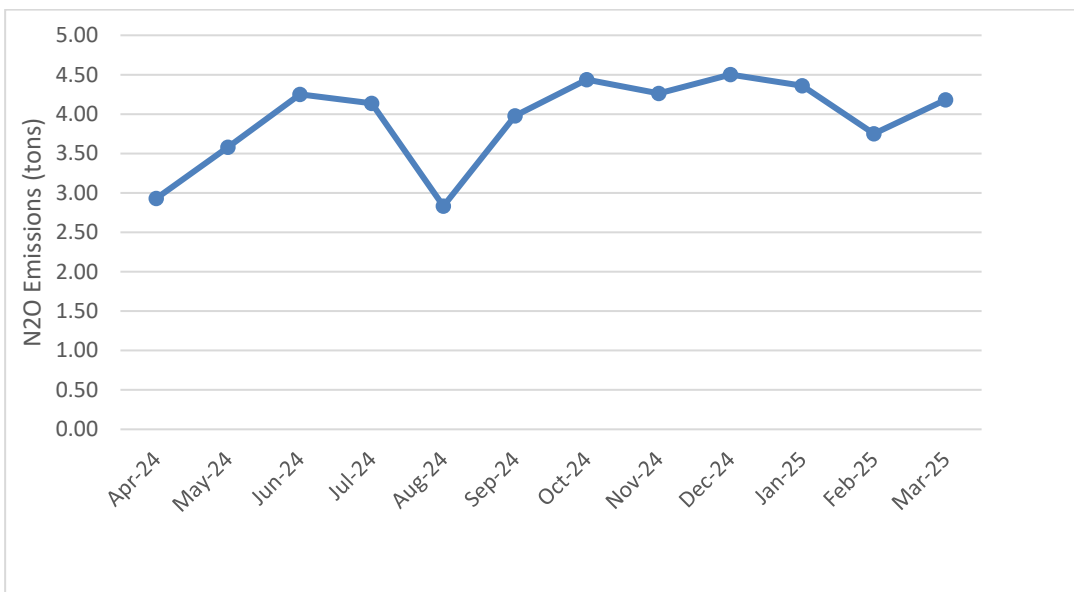


Figure 5: Monthly N<sub>2</sub>O Emissions in tons from Camden Power Station 2024/2025

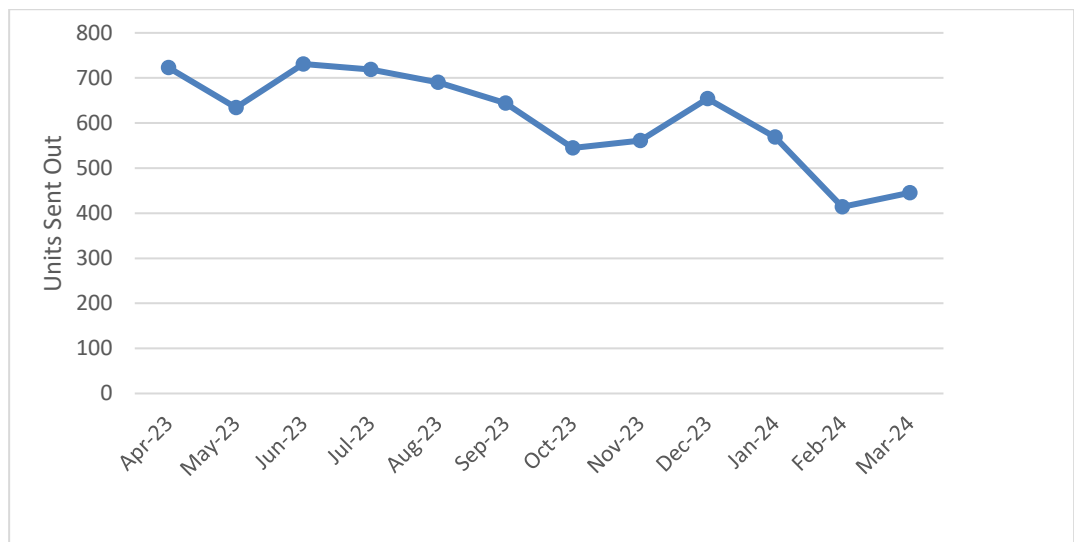


Figure 6: Monthly Energy sent out in GWh at Camden Power Station 2024/2025

Table 4: Pollutant Emission Trends (mg/Nm<sup>3</sup>) for 2024/2025

Month	PM (mg/Nm <sup>3</sup> )	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	CO <sub>2</sub> (mg/Nm <sup>3</sup> )
April 2024	160.49	999	748	198 269
May 2024	187.81	1 052	764	197 648
June 2024	182.33	1 045	764	198 282
July 2024	106.72	1 071	765	198 417
August 2024	133.69	923	759	198 410
September 2024	137.8	975	750	198 542
October 2024	105.008	881	748	198 028
November 2024	111.447	958	749	197 770
December 2024	100.59	886	735	197 367
January 2025	74.86	893	738	197 321
February 2025	86.59	973	762	198 039
March 2025	51.82	1 019	740	196 446

Table 4 above provides information on the monthly emissions for PM, SO<sub>2</sub>, NO<sub>x</sub>. This will be further illustrated graphically below:

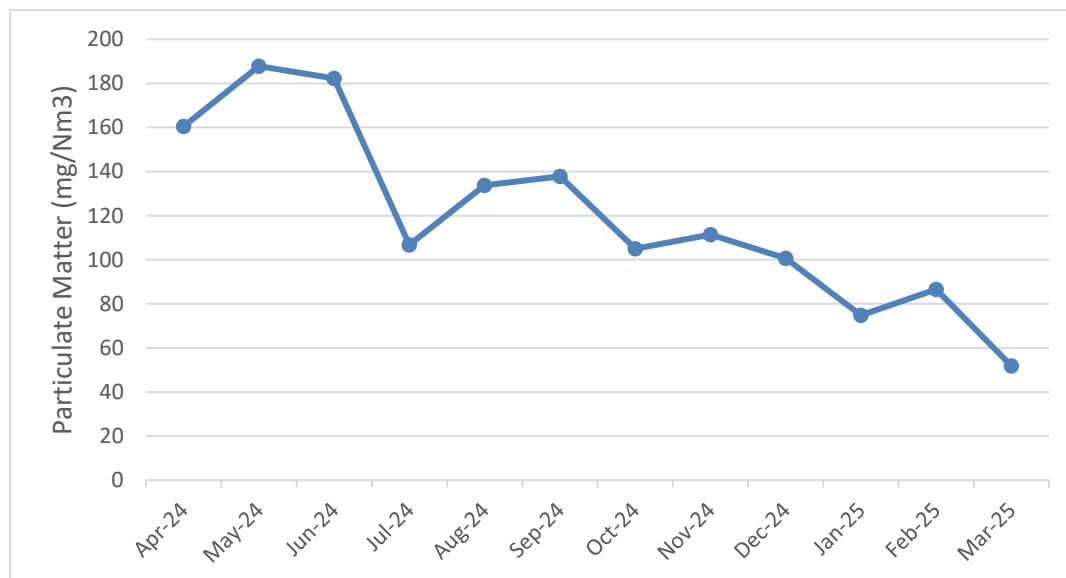


Figure 7: Monthly Particulate Emissions in tons from Camden Power Station 2024/2025

## CAMDEN POWER STATION'S 2024/25 ANNUAL EMISSIONS REPORT

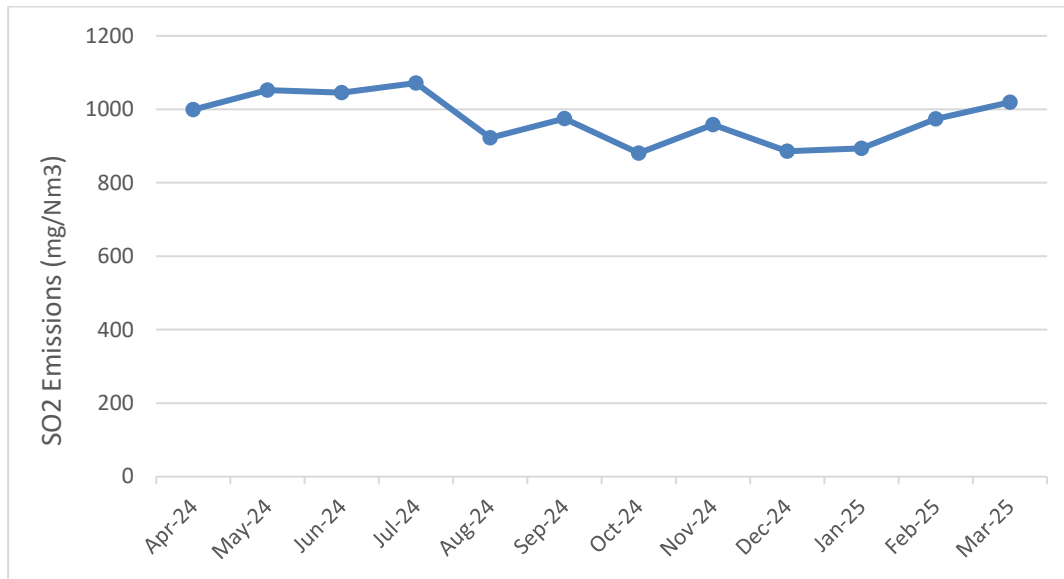


Figure 8: Monthly SO<sub>2</sub> Emissions in tons from Camden Power Station 2024/2025

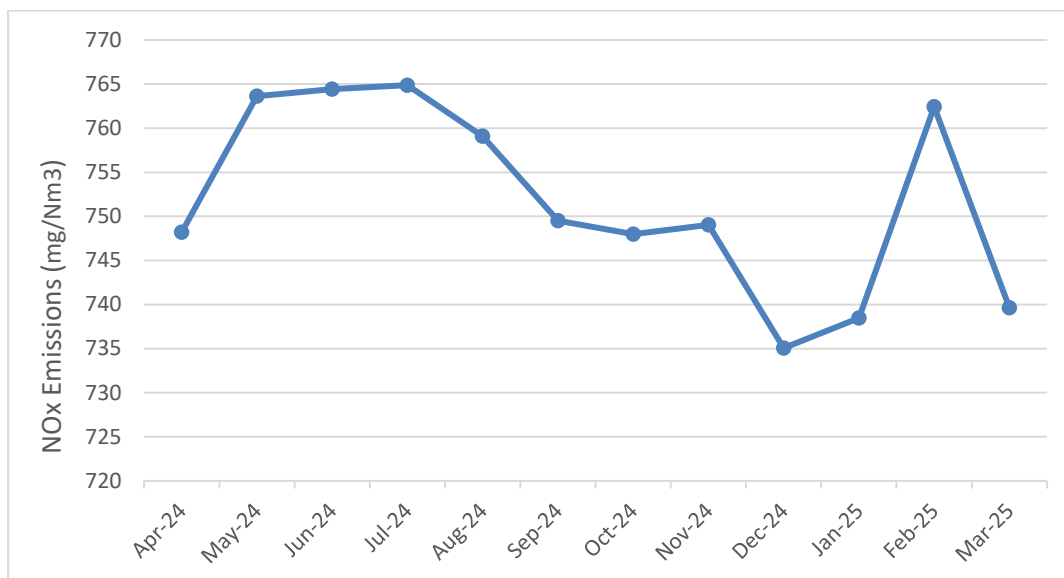


Figure 9: Monthly NO<sub>x</sub> Emissions in tons for Camden Power Station 2024/2025

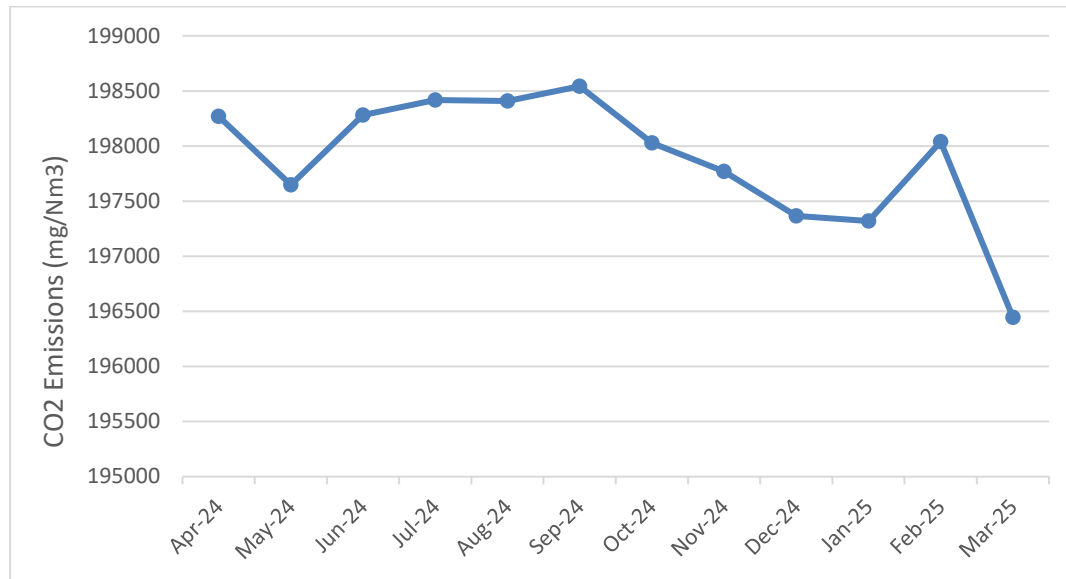


Figure 10: Monthly CO2 Emissions in tons from Camden Power Station 2024/25

### Monitoring data availability:

Below the overall monitor availability per stack

Table 5: Monitoring data availability

	Stack 1	Stack 2	Stack 3	Stack 4
<b>PM</b>	100 %	100 %	100 %	100 %
<b>SO<sub>2</sub></b>	99 %	97 %	94 %	94 %
<b>NOx</b>	99 %	97 %	94 %	94 %

### Compliance Audit Reports:

Camden Power Station compliance audit was conducted in January 2025 by Envirodalytics Pty Ltd. Audit report “*2025 AEL Compliance Audit for Camden Power Station*” and no audit findings was issued. (see attached documentation). Next audit scheduled for January 2026.

### Major Upgrade Projects:

FFP full bag Replacement Project for Units 1, 6, 7 & 8 completed in 2024/25

### Greenhouse Gas Emissions:

Greenhouse gas emissions (CO<sub>2</sub> and N<sub>2</sub>O) are included in Table 2 & Table 3 as well as Figures 4, 5, 9 and 10 above.



**Complaints Register:**

No complaints were received during the reporting period, thus no action or mitigation measures implemented.

**Offset Program**

Annual offset program was submitted on the 20 March 2025 (see attached Document)

**National Atmospheric Emissions Inventory System**

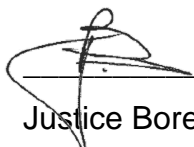
In terms of the pollutants and greenhouse emissions, Camden Power Station has reported manually on the NAEIS portal for 2023, submission for 2024 is due end of June 2025.

**Status of Stratification, Parallel and Correlation test.**

Parallel and Correlation tests on all stacks were conducted and completed in 2024/25, (see attached reports).

Hoping the above will meet your satisfaction.

Yours sincerely



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Justice Bore

**GENERAL MANAGER: CAMDEN POWER STATION**