

CAMDEN POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License CPS/0012/2019/F03


1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption	Actual Consumption Jun-2024
	Coal	Tons	550 000	389 064.29
	Fuel Oil	Tons	5 000	2 218.41
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Jun-2024
	Energy	GWh	1600	690.75
	Ash	Tons	not specified	85 166
	RE PM	kg/MWh	not specified	0.281

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.68
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	21.89

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO _x
Stack 1	100	3500	1100
Stack 2	100	3500	1100
Stack 3	100	3500	1100
Stack 4	100	3500	1100

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Jun-2024
Unit 1	Fabric Filter Plant (FFP)	99.999%
Unit 2	Fabric Filter Plant (FFP)	99.999%
Unit 3	Fabric Filter Plant (FFP)	99.998%
Unit 4	Fabric Filter Plant (FFP)	Off
Unit 5	Fabric Filter Plant (FFP)	99.996%
Unit 6	Fabric Filter Plant (FFP)	99.996%
Unit 7	Fabric Filter Plant (FFP)	99.997%
Unit 8	Fabric Filter Plant (FFP)	99.997%

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

5 MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO	CO ₂	O ₂
Stack 1	100.0	97.6	98.8	90.3	93.1
Stack 2	100.0	98.7	99.9	97.0	100.0
Stack 3	76.9	94.2	97.2	74.9	97.4
Stack 4	100.0	99.3	99.9	99.0	98.9

Note: NO_x emissions is measured as NO in PPM. Final NO_x value is expressed as total NO₂

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of June-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	10.49	1 236	594
2	10.31	1 449	709
3	21.85	835	690
4	Off	Off	Off
5	48.48	983	656
6	44.34	894	598
7	32.81	961	665
8	26.05	833	583
SUM	194.34	7 191	4 495

Table 6.2: Operating days in compliance to PM AEL Limit - June 2024

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	30	0	0	0	0	15.4
Stack 2	29	0	0	0	0	32.4
Stack 3	29	0	0	0	0	65.3
Stack 4	30	0	0	0	0	36.8
SUM	118	0	0	0	0	

Table 6.3: Operating days in compliance to SO₂ AEL Limit - June 2024

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	30	0	0	0	0	1 839.5
Stack 2	29	0	0	0	0	1 197.6
Stack 3	30	0	0	0	0	1 282.0
Stack 4	30	0	0	0	0	1 015.8
SUM	119	0	0	0	0	

Table 6.4: Operating days in compliance to NO_x AEL Limit - June 2024

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	30	0	0	0	0	895.7
Stack 2	28	1	0	0	1	967.1
Stack 3	30	0	0	0	0	854.9
Stack 4	30	0	0	0	0	704.4
SUM	118	1	0	0	1	

Table 6.5: Legend Description

Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contravention		Emissions above ELV but outside grace or S30 incident conditions

Figure 1: Camden Stack 1 PM Emissions - June 2024

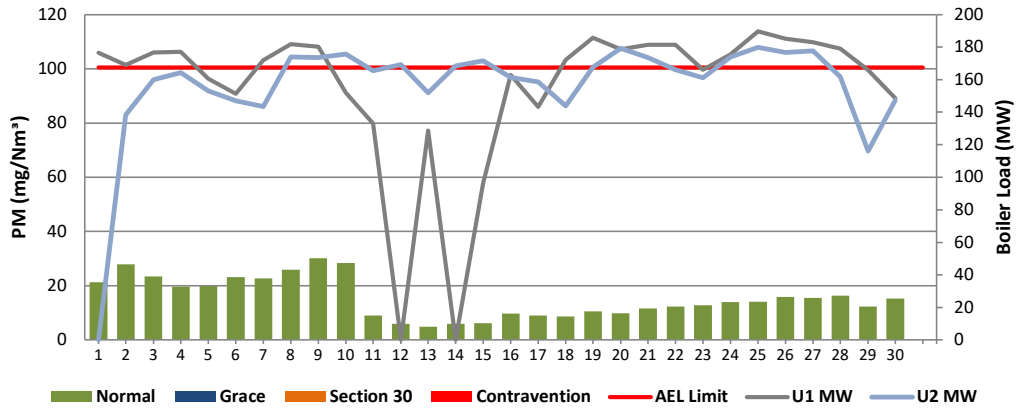


Figure 2: Camden Stack 2 PM Emissions - June 2024

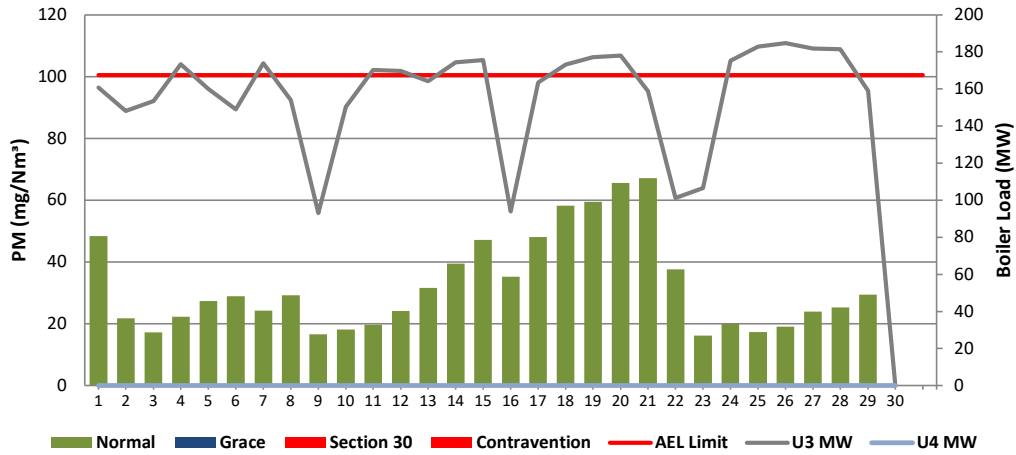


Figure 3: Camden Stack 3 PM Emissions - June 2024

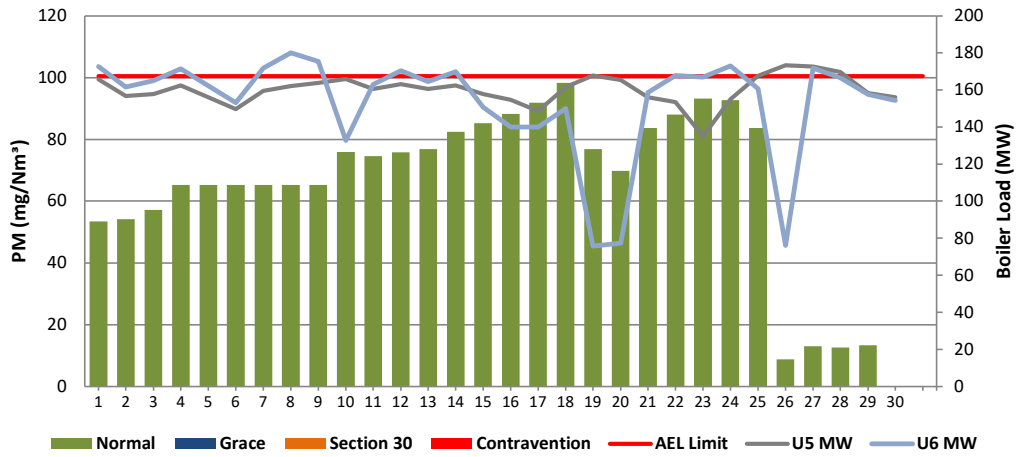


Figure 4: Camden Stack 4 PM Emissions - June 2024

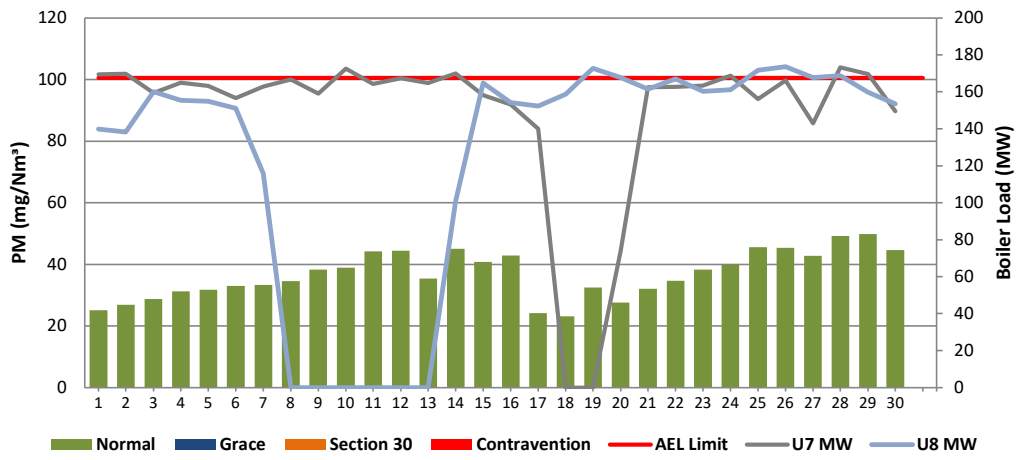


Figure 5: Camden Stack 1 SO₂ Emissions - June 2024

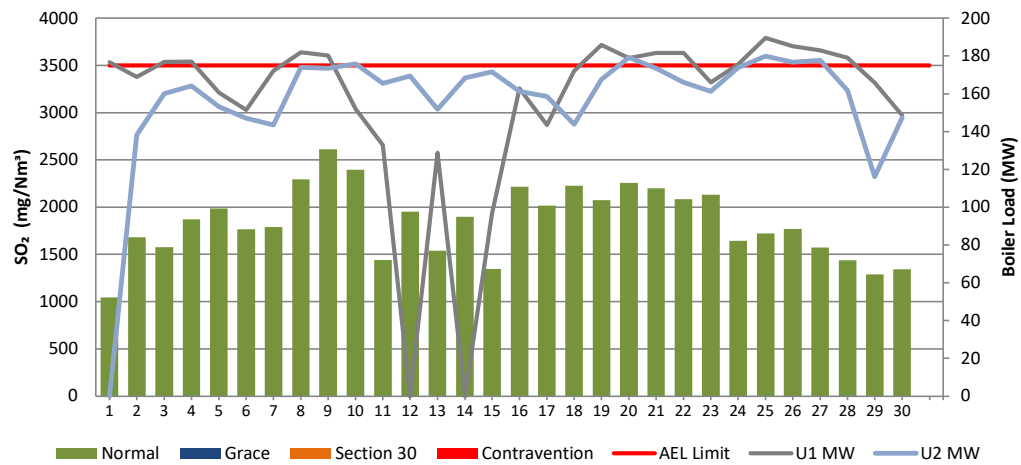


Figure 6: Camden Stack 2 SO₂ Emissions - June 2024

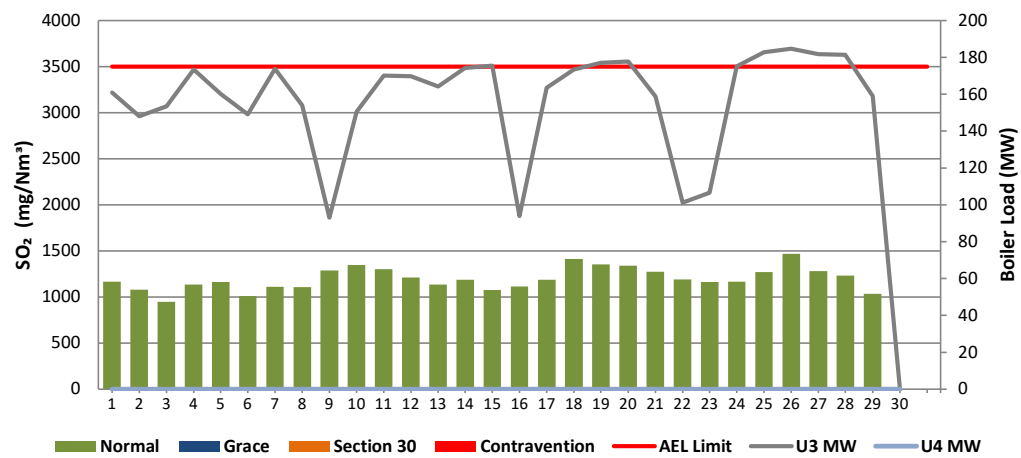


Figure 7: Camden Stack 3 SO₂ Emissions - June 2024

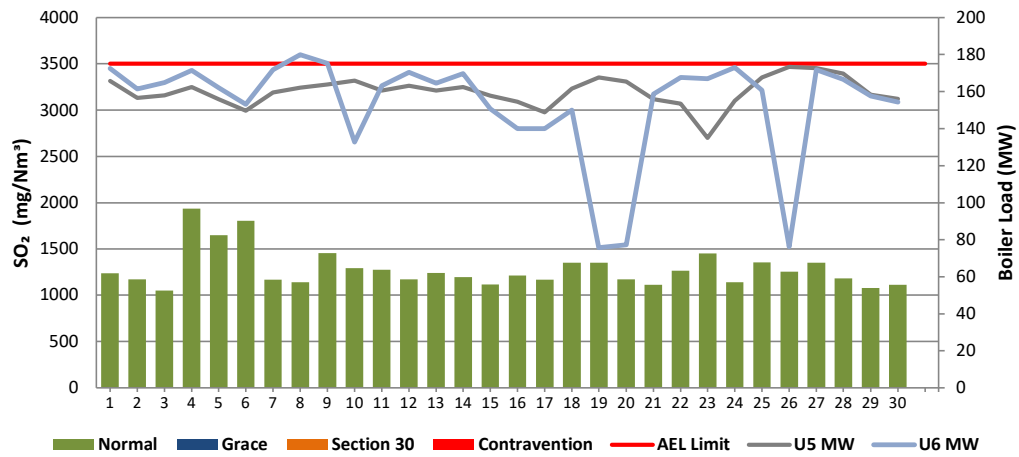


Figure 8: Camden Stack 4 SO₂ Emissions - June 2024

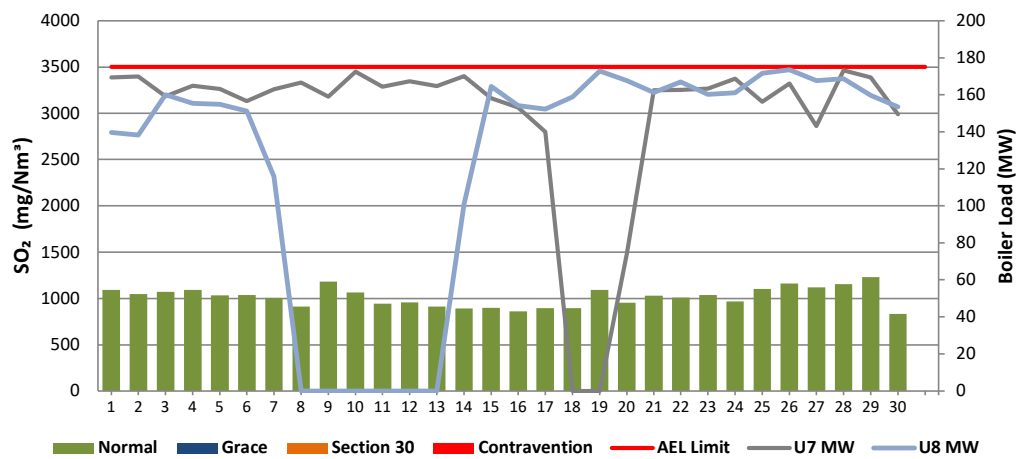


Figure 9: Camden Stack 1 NOx Emissions - June 2024

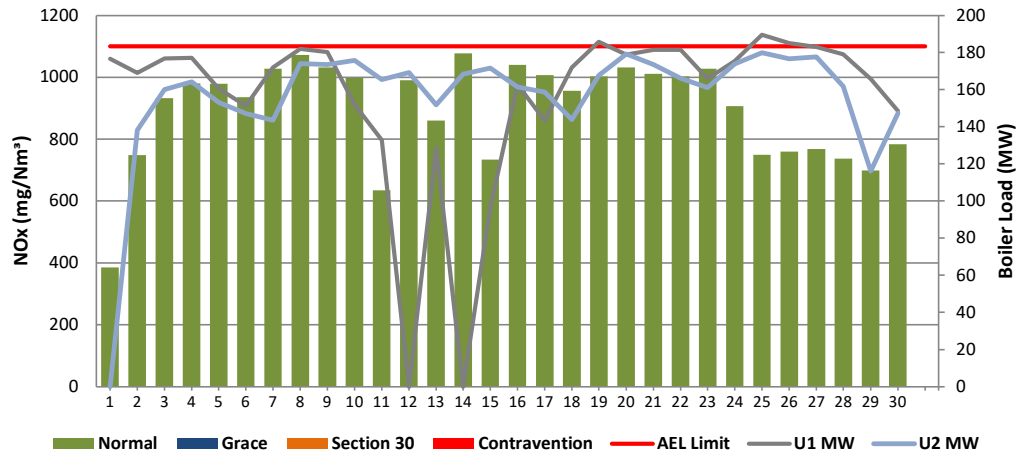


Figure 10: Camden Stack 2 NOx Emissions - June 2024

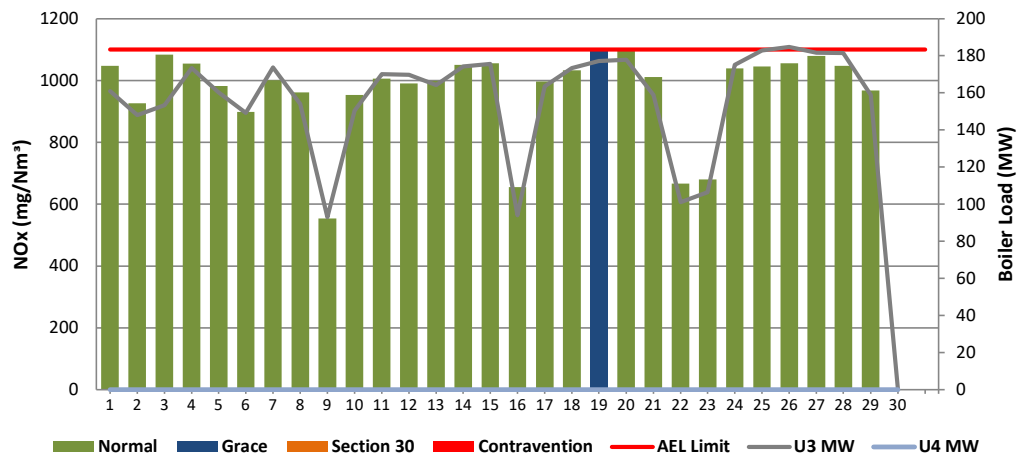


Figure 11: Camden Stack 3 NOx Emissions - June 2024

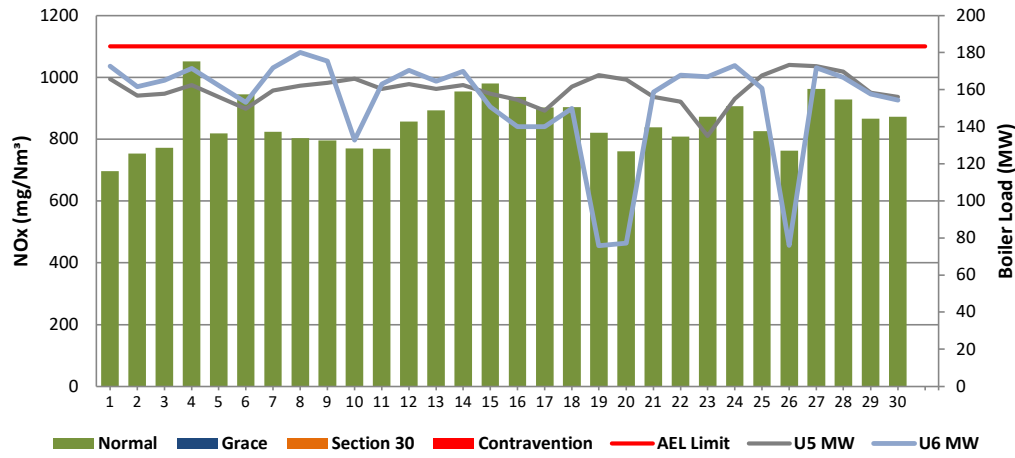
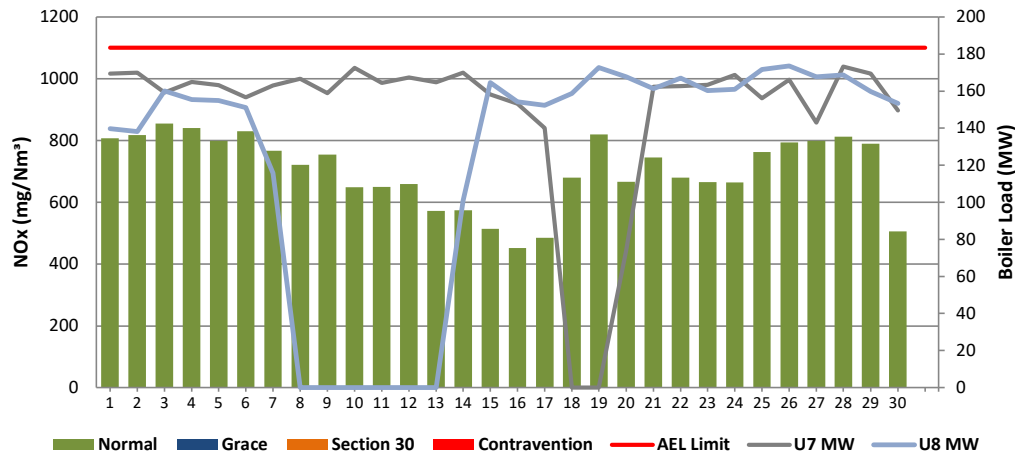


Figure 12: Camden Stack 4 NOx Emissions - June 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

Off for maintenance

Unit 5:

None

Unit 6:

None

Unit 7:

None

Unit 8:

None

Stack 2 O2 monitor O/C for the month. See supporting letter from C&I. Average value from the QAL2 tests used.
Stack 3 PM monitor was O/C from 03/06/2024 16:50 till 10/06/2024 11:30 and on the 18th June from 08:50 to 11:40 due to lens contamination.
This resulted in the monitor reliability falling just below 80%

Stack 3 Gas monitor froze, actions still in progress

Stack 3 Dust monitor froze, letter attached

 p.p.
Engineering Manager

2024/07/19
Date


Environmental Manager

19/07/2024
Date

Compiled by: Environmental Department & verified by Boiler Eng

Env. Practitioner & System Eng

For: Department of Environment, Forestry & Fisheries

Chief Air Pollution Control Officer

Copies: Eskom Environmental Management

D Herbst
B Mccourt

Gx Compliance Management
Gx Asset Management

R Rampiar
E Patel

Camden Power Station:

Engineering Manager
Operating Manager
Maintenance Manager
Production Managers
Boiler Engineering Manager
System Engineer
Environmental Manager
Environmental Officer
P&T and Process Engineering Manager