

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 May-2024
	Coal	Tons	550 000	326 992.05
	Fuel Oil	Tons	5 000	35 457.84
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production May-2024
	Energy	GWh	1600	542.56
	Ash	Tons	not specified	73 279
	RE PM	kg/MWh	not specified	0.371

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.73
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	22.41

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 May-2024
Unit 1	Fabric Filter Plant (FFP)	99.998%
Unit 2	Fabric Filter Plant (FFP)	99.999%
Unit 3	Fabric Filter Plant (FFP)	99.999%
Unit 4	Fabric Filter Plant (FFP)	Off
Unit 5	Fabric Filter Plant (FFP)	99.998%
Unit 6	Fabric Filter Plant (FFP)	99.997%
Unit 7	Fabric Filter Plant (FFP)	99.995%
Unit 8	Fabric Filter Plant (FFP)	99.994%

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	100.0	100.0	96.3	99.2
Stack 2	100.0	99.9	99.9	93.1	100.0
Stack 3	100.0	78.2	99.7	77.6	100.0
Stack 4	99.9	97.4	99.1	96.8	99.9

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 May-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	12.62	871	423
2	10.75	1 080	543
3	14.24	727	588
4	Off	Off	Off
5	12.30	530	254
6	30.85	724	369
7	48.77	909	692
8	71.62	997	779
SUM	201.15	5 839	3 648

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	28	0	0	0	0	22.6
Stack 2	26	0	0	0	0	24.6
Stack 3	26	0	0	0	0	50.2
Stack 4	14	1	0	0	1	71.0
SUM	94	1	0	0	1	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	30	0	0	0	0	1 652.9
Stack 2	27	0	0	0	0	1 157.2
Stack 3	31	0	0	0	0	1 209.9
Stack 4	31	0	0	0	0	1 016.9
SUM	119	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	30	0	0	0	0	818.0
Stack 2	25	2	0	0	2	910.5
Stack 3	31	0	0	0	0	605.7
Stack 4	31	0	0	0	0	785.1
SUM	117	2	0	0	2	

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 - May 2024

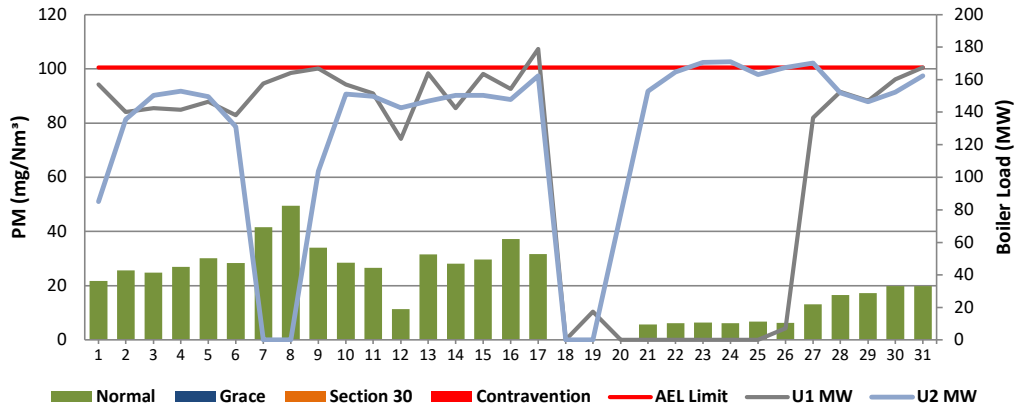


Figure 2: Camden Stack 2 PM Emissions - May 2024

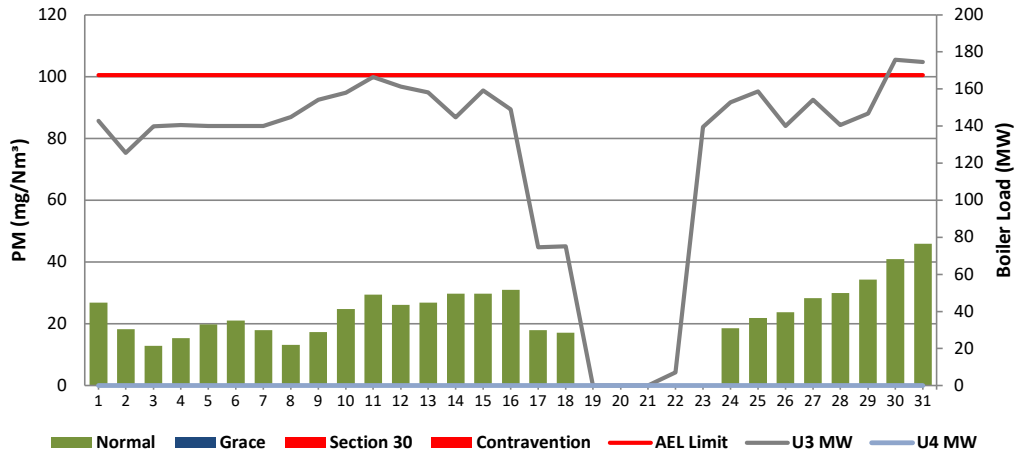


Figure 3: Camden Stack 3 PM Emissions - May 2024

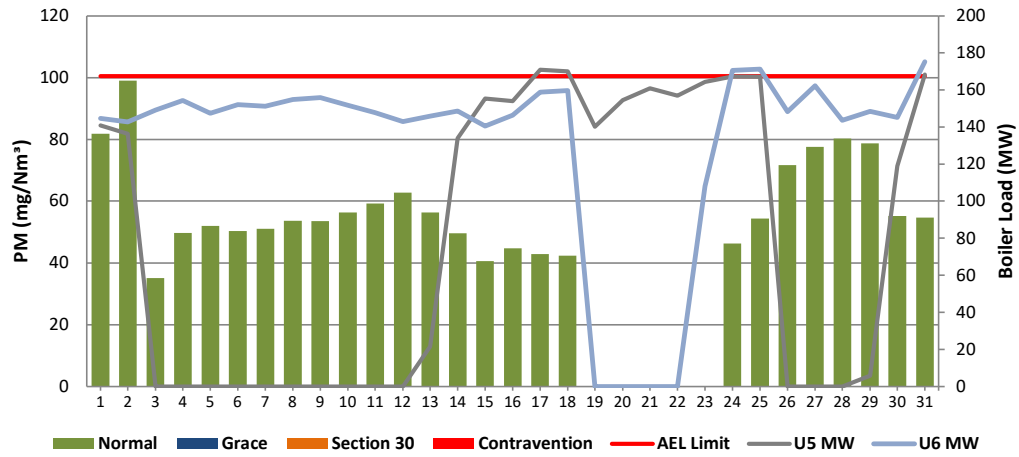


Figure 4: Camden Stack 4 PM Emissions - May 2024

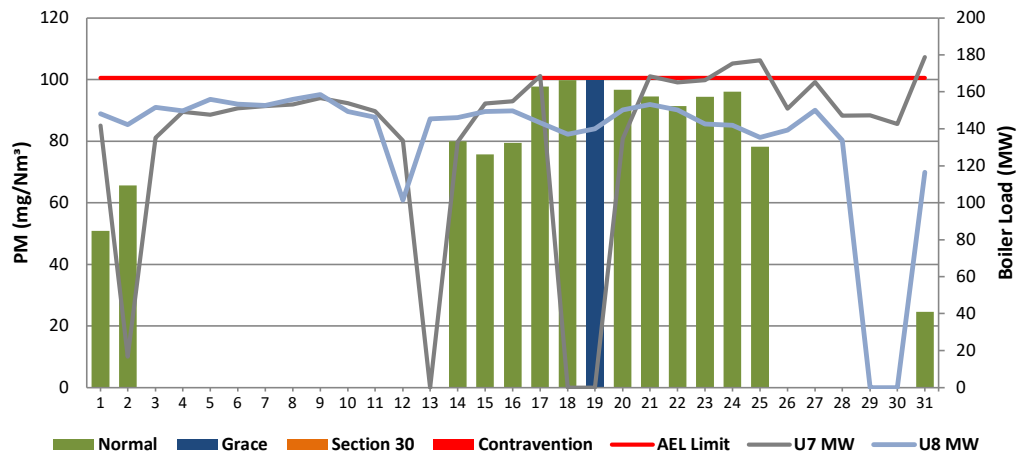


Figure 5: Camden Stack 1 SO₂ Emissions - May 2024

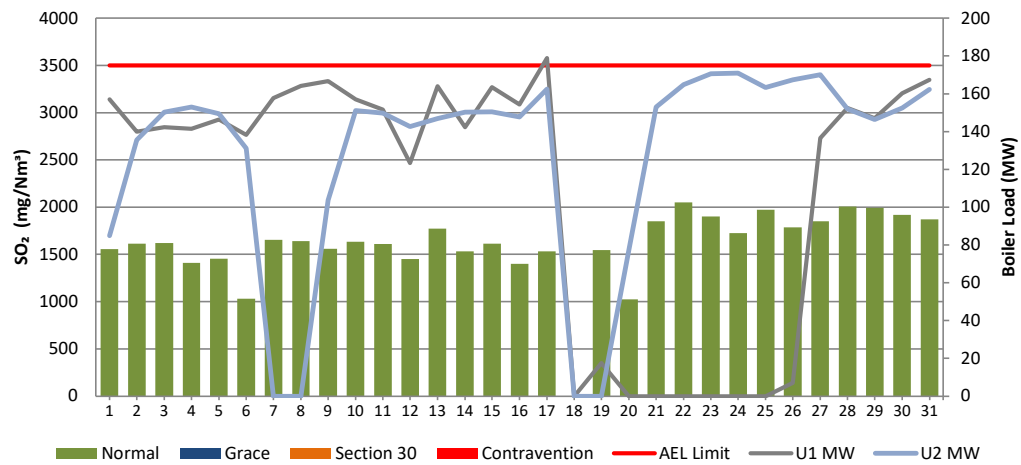


Figure 6: Camden Stack 2 SO₂ Emissions - May 2024

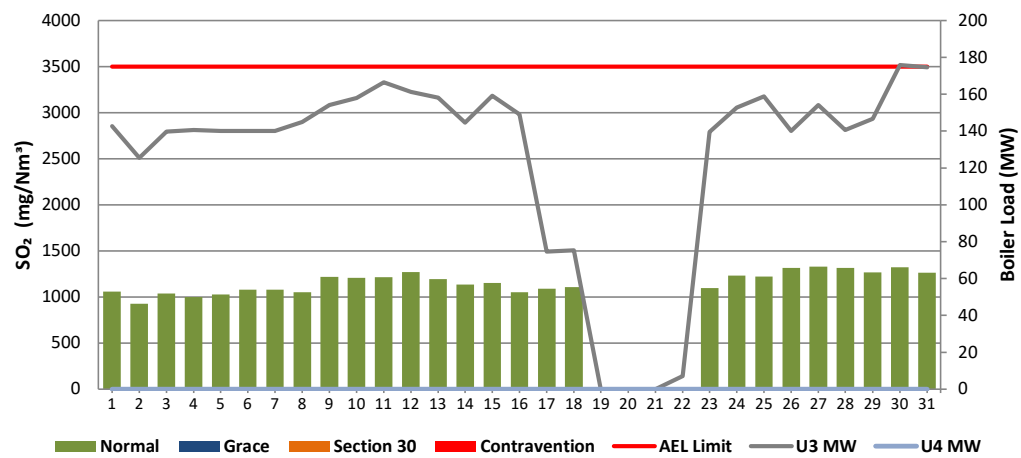


Figure 7: Camden Stack 3 SO₂ Emissions - May 2024

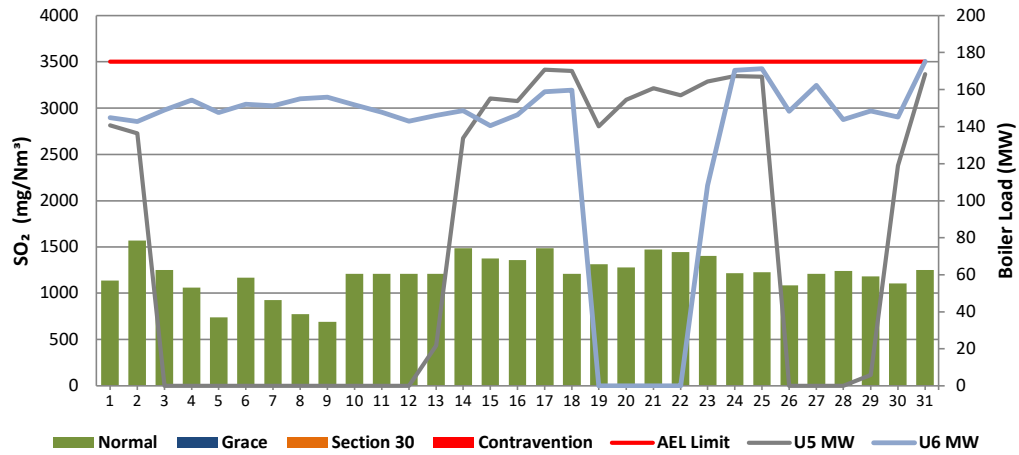


Figure 8: Camden Stack 4 SO₂ Emissions - May 2024

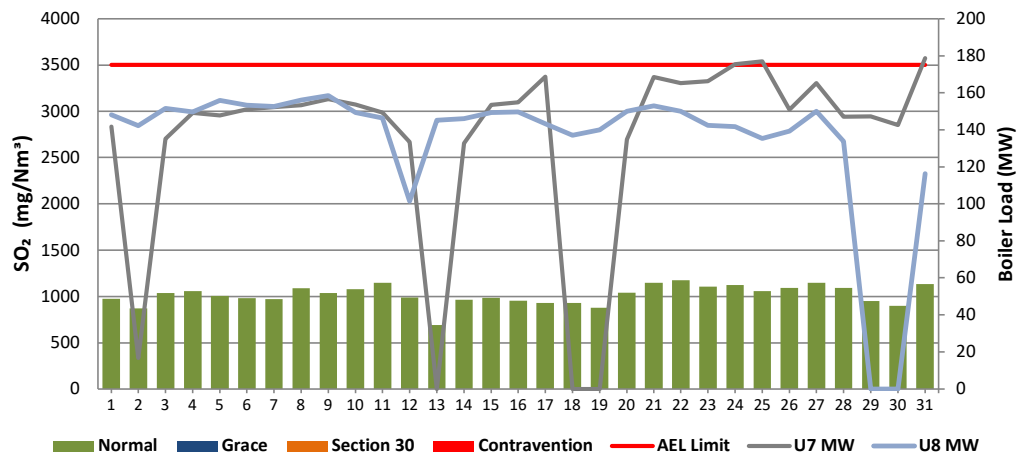


Figure 9: Camden Stack 1 NOx Emissions - May 2024

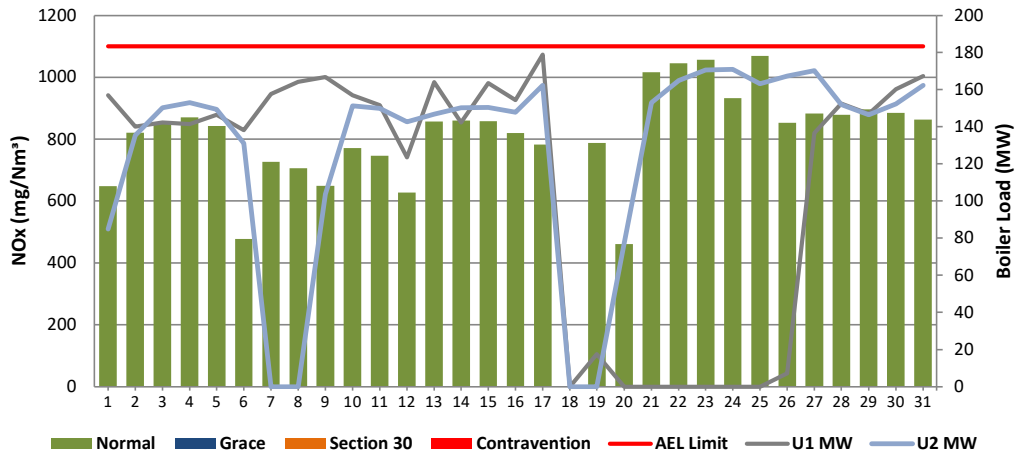


Figure 10: Camden Stack 2 NOx Emissions - May 2024

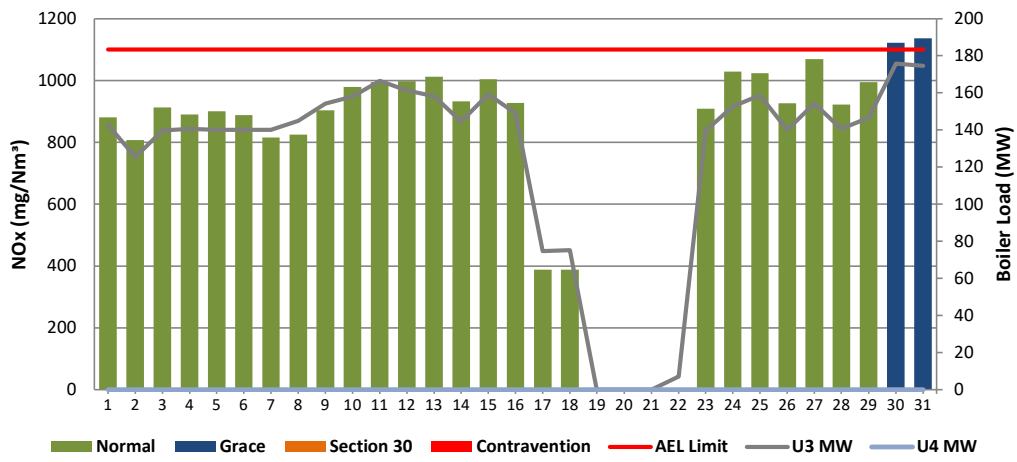


Figure 11: Camden Stack 3 NOx Emissions - May 2024

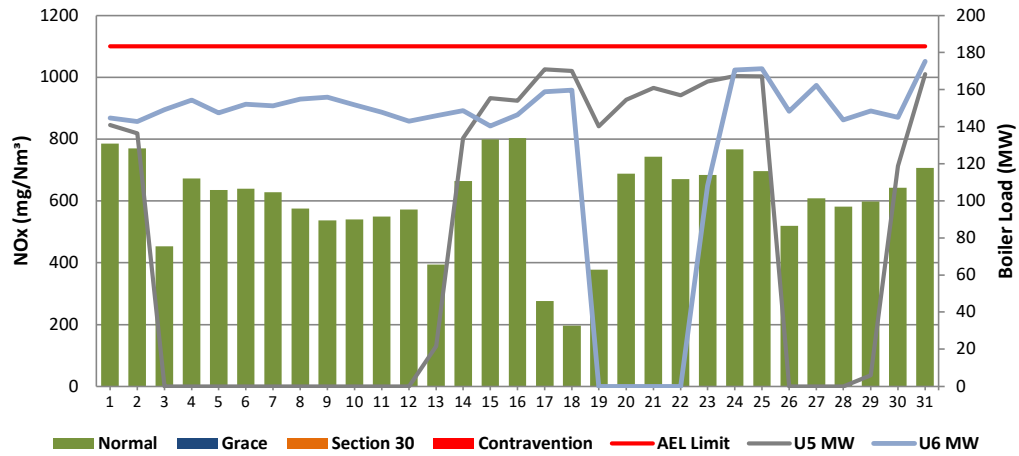
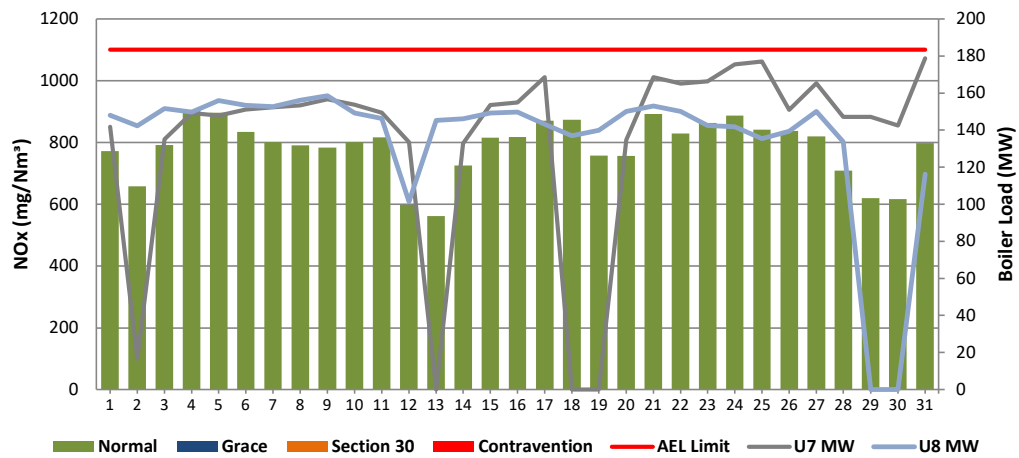


Figure 12: Camden Stack 4 NOx Emissions - May 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

The unit was off-load for the month for Main Oil Pump repairs.

Unit 5:

None

Unit 6:

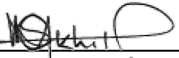
None

Unit 7:

None

Unit 8:

None

p.p. 
Engineering Manager

2024/06/19
Date


Environmental Manager

19/06/2024
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