

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 Sep-2024
	Coal	Tons	550 000	361 540.25
	Fuel Oil	Tons	5 000	1 839.94
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Sep-2024
	Energy	GWh	1600	666.07
	Ash	Tons	not specified	77 948
	RE PM	kg/MWh	not specified	0.207

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.89
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	21.56

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO _x
Stack 1	50	3500	1100
Stack 2	50	3500	1100
Stack 3	50	3500	1100
Stack 4	50	3500	1100

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Sep-2024
Unit 1	Fabric Filter Plant (FFP)	99.998%
Unit 2	Fabric Filter Plant (FFP)	99.999%
Unit 3	Fabric Filter Plant (FFP)	99.998%
Unit 4	Fabric Filter Plant (FFP)	99.999%
Unit 5	Fabric Filter Plant (FFP)	99.999%
Unit 6	Fabric Filter Plant (FFP)	100.000%
Unit 7	Fabric Filter Plant (FFP)	99.996%
Unit 8	Fabric Filter Plant (FFP)	99.996%

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	92.4	95.7	100.0	99.9
Stack 2	100.0	92.4	94.7	100.0	99.0
Stack 3	100.0	99.2	99.9	96.0	96.3
Stack 4	100.0	96.9	98.8	100.0	100.0

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 September-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	9.99	699	420
2	15.20	968	591
3	6.10	267	250
4	15.68	827	683
5	7.96	788	610
6	2.03	295	201
7	42.08	931	715
8	39.09	875	675
SUM	138.12	5 651	4 146

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	29	1	0	0	1	19.7
Stack 2	29	0	0	0	0	21.7
Stack 3	30	0	0	0	0	10.6
Stack 4	28	2	0	0	2	41.5
SUM	116	3	0	0	3	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	30	0	0	0	0	1 202.4
Stack 2	30	0	0	0	0	1 044.3
Stack 3	30	0	0	0	0	1 027.2
Stack 4	30	0	0	0	0	891.0
SUM	120	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	30	0	0	0	0	732.6
Stack 2	30	0	0	0	0	849.4
Stack 3	30	0	0	0	0	795.5
Stack 4	30	0	0	0	0	684.7
SUM	120	0	0	0	0	

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 - September 2024

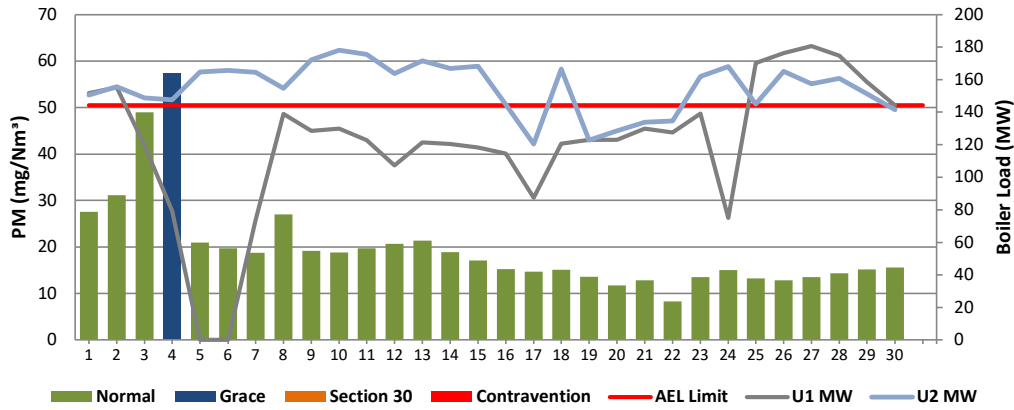


Figure 2: Camden Stack 2 PM Emissions - September 2024

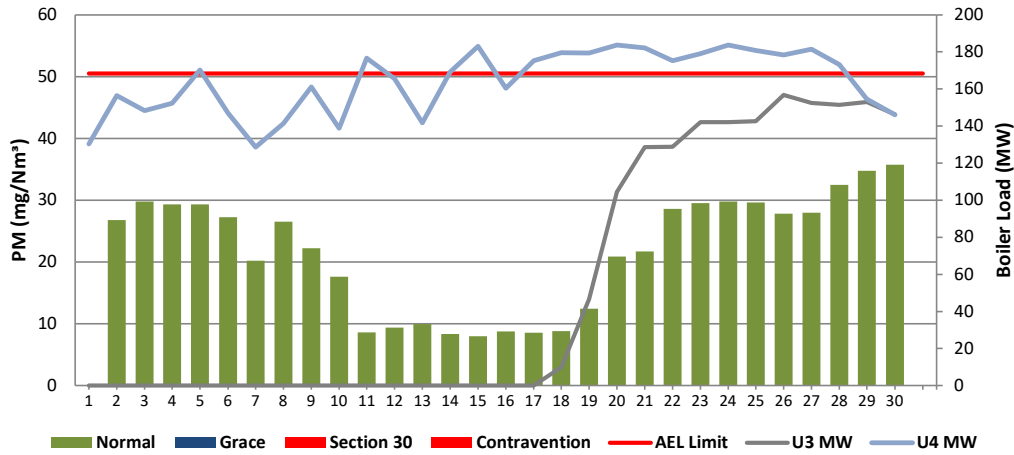


Figure 3: Camden Stack 3 PM Emissions - September 2024

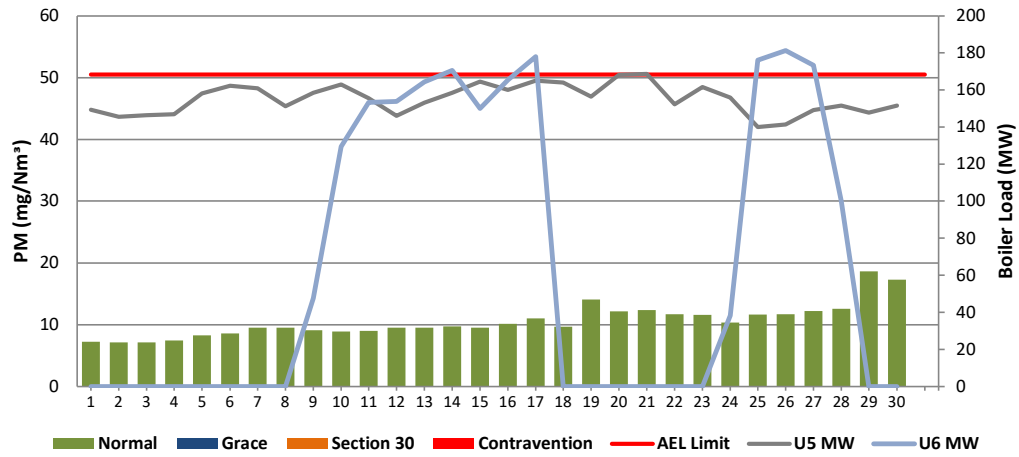


Figure 4: Camden Stack 4 PM Emissions - September 2024

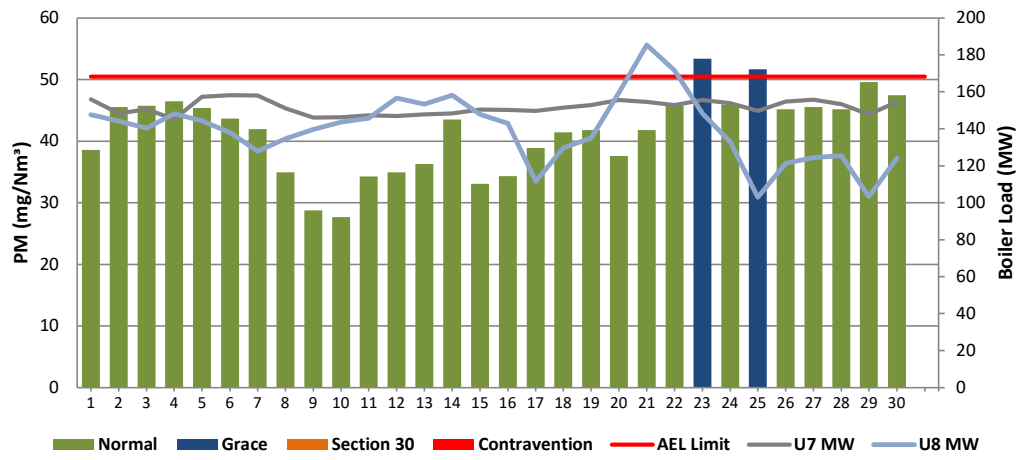


Figure 5: Camden Stack 1 SO₂ Emissions - September 2024

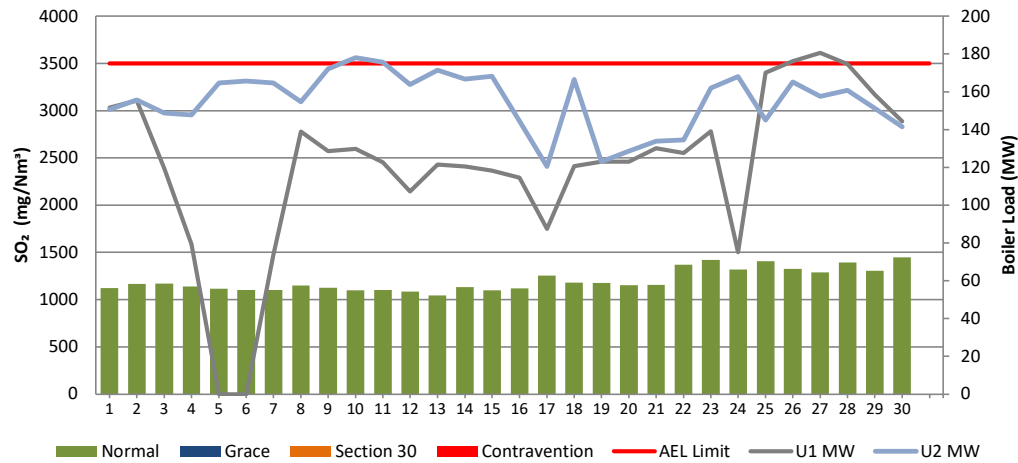


Figure 6: Camden Stack 2 SO₂ Emissions - September 2024

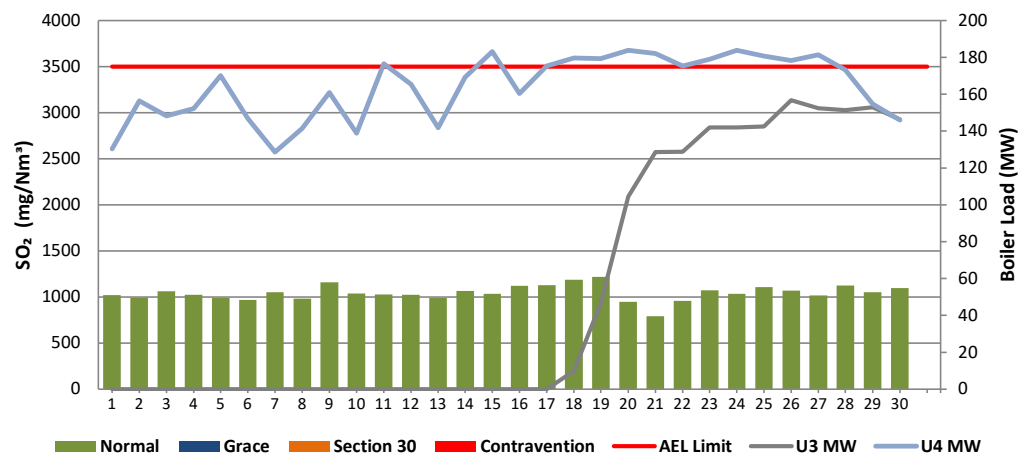


Figure 7: Camden Stack 3 SO₂ Emissions - September 2024

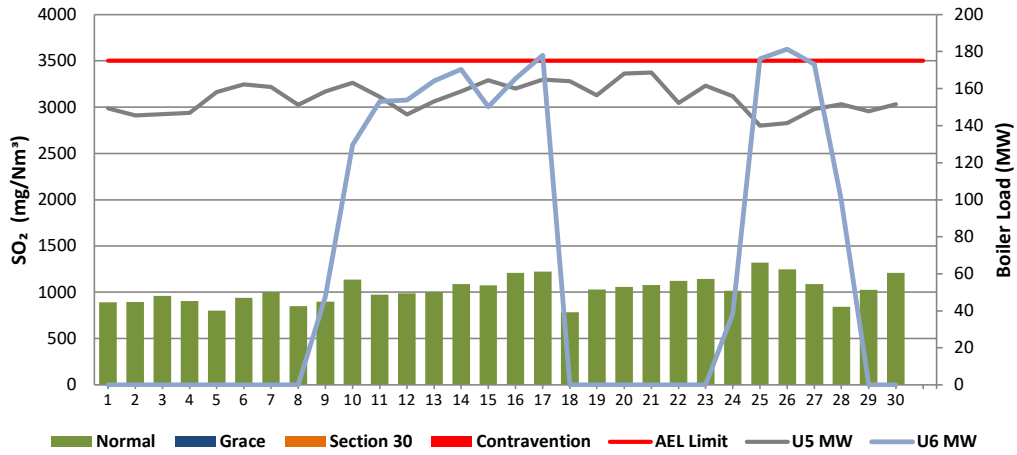


Figure 8: Camden Stack 4 SO₂ Emissions - September 2024

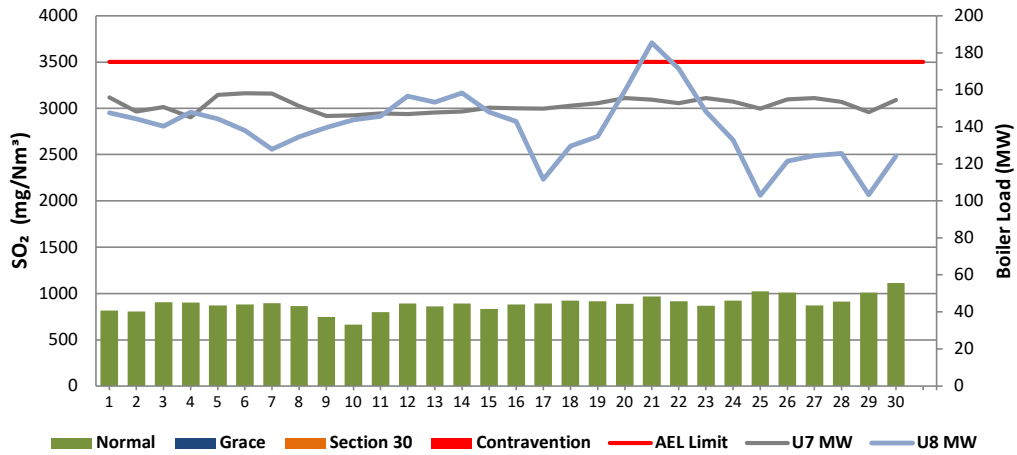


Figure 9: Camden Stack 1 NOx Emissions - September 2024

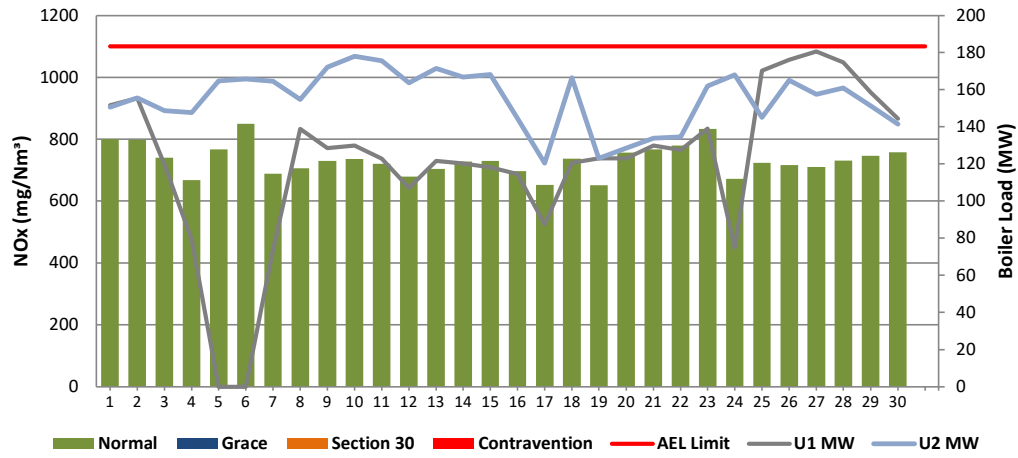


Figure 10: Camden Stack 2 NOx Emissions - September 2024

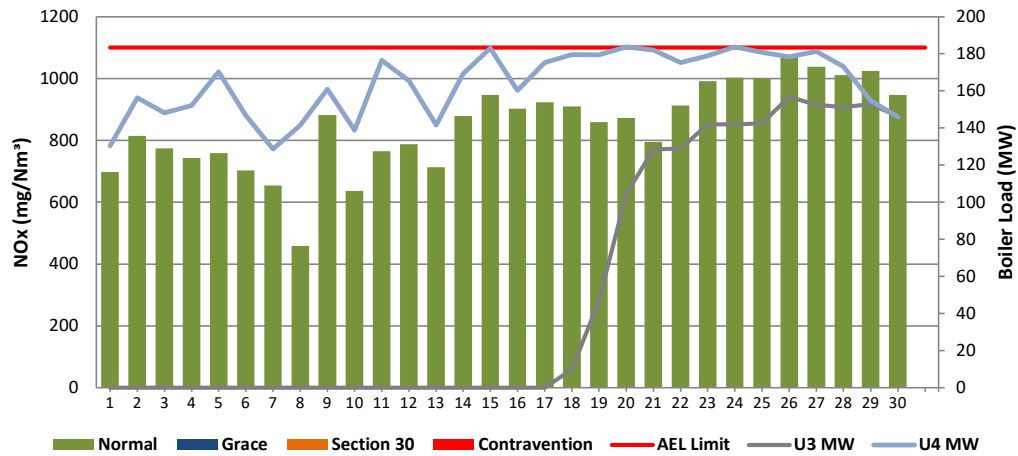


Figure 11: Camden Stack 3 NOx Emissions - September 2024

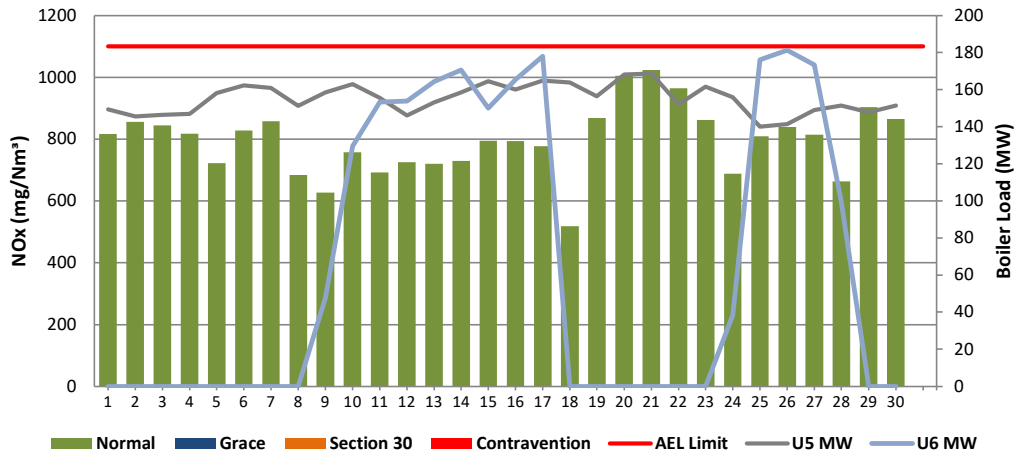
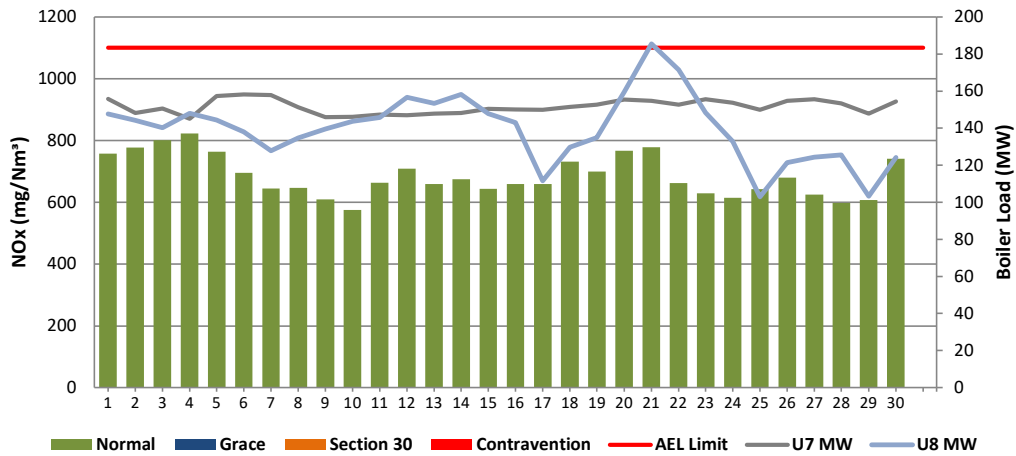


Figure 12: Camden Stack 4 NOx Emissions - September 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

None

Unit 6:

None

Unit 7:

None

Unit 8:

None

Comments on use of averages for Stack 2 O2 from QAL2 tests as per previous months

PP

Engineering Manager

18-10-2024

Date

Environmental Manager

18/10/2024

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
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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