

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 Oct-2024
	Coal	Tons	550 000	401 570.13
	Fuel Oil	Tons	6 500	1 173.68
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Oct-2024
	Energy	GWh	1190	724.15
	Ash	Tons	not specified	84 972
	RE PM	kg/MWh	not specified	0.145

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.95
Sulphur Content	%	< 2	0.90
Ash Content	%	<34	21.16

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 Oct-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)	99.998%
Unit 5	Fabric Filter Plant (FFP)	99.999%
Unit 6	Fabric Filter Plant (FFP)	99.999%
Unit 7	Fabric Filter Plant (FFP)	99.999%
Unit 8	Fabric Filter Plant (FFP)	99.999%

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	94.7	97.7	99.7	99.7
Stack 2	100.0	94.5	96.6	100.0	100.0
Stack 3	98.9	95.8	97.7	100.0	100.0
Stack 4	100.0	95.0	97.4	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 October-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	9.03	797	495
2	7.72	608	397
3	23.28	619	668
4	17.94	490	508
5	13.12	837	719
6	9.75	701	603
7	9.69	791	676
8	14.48	959	782
SUM	105.01	5 802	4 847

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	29	0	0	0	0	12.9
Stack 2	31	0	0	0	0	31.2
Stack 3	31	0	0	0	0	15.9
Stack 4	31	0	0	0	0	15.6
SUM	122	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	30	0	0	0	0	1 103.0
Stack 2	31	0	0	0	0	794.1
Stack 3	31	0	0	0	0	979.6
Stack 4	31	0	0	0	0	921.6
SUM	123	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	30	0	0	0	0	681.7
Stack 2	31	0	0	0	0	857.8
Stack 3	31	0	0	0	0	827.4
Stack 4	31	0	0	0	0	749.2
SUM	123	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 - October 2024

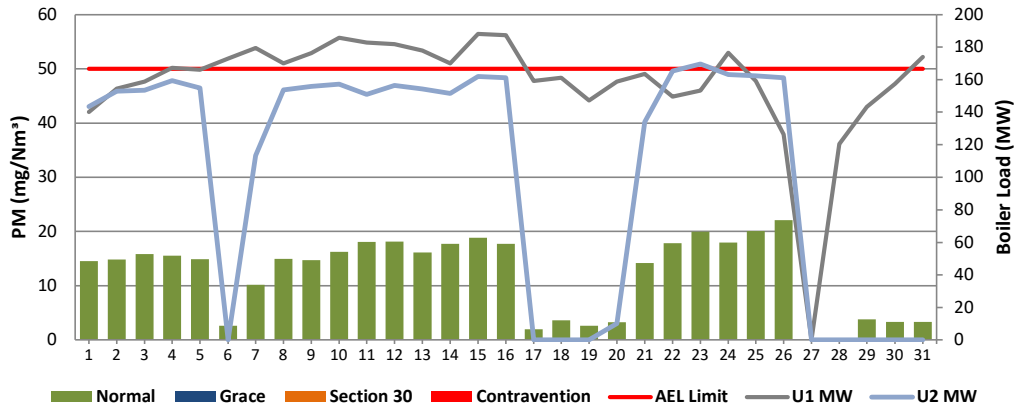


Figure 2: Camden Stack 2 PM Emissions - October 2024

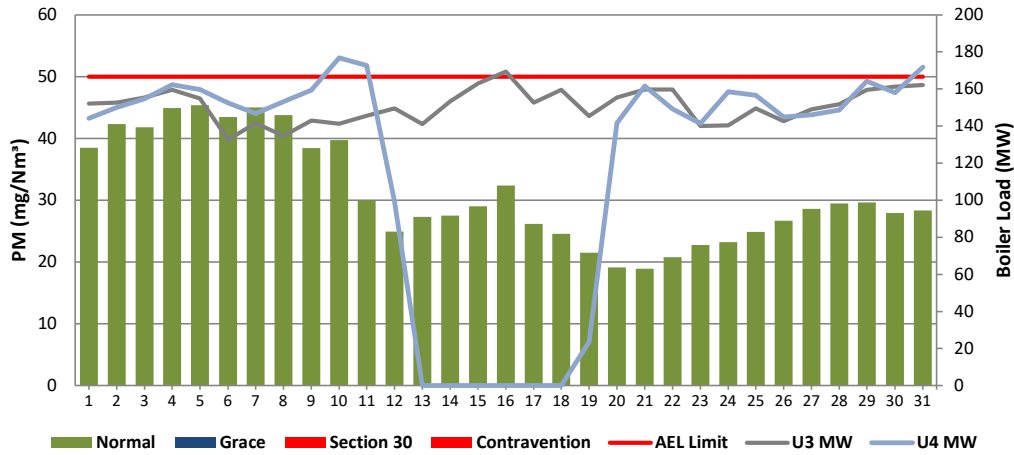


Figure 3: Camden Stack 3 PM Emissions - October 2024

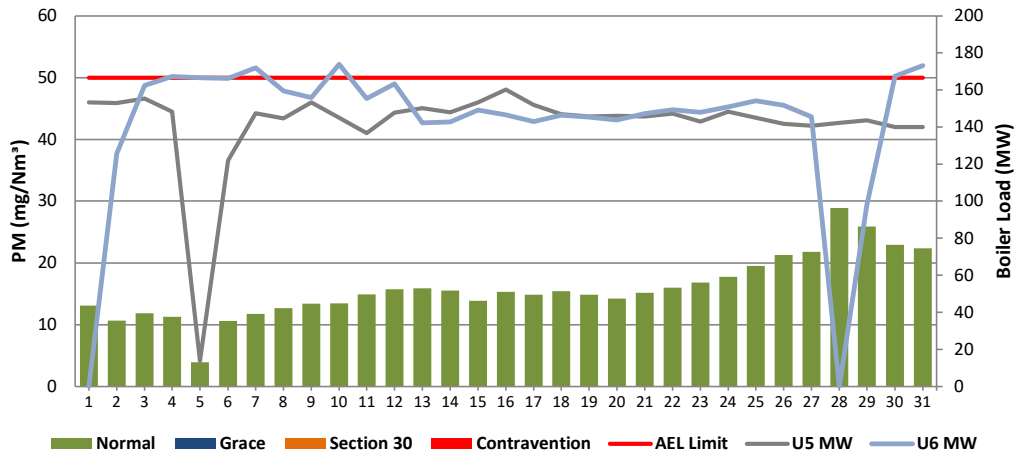


Figure 4: Camden Stack 4 PM Emissions - October 2024

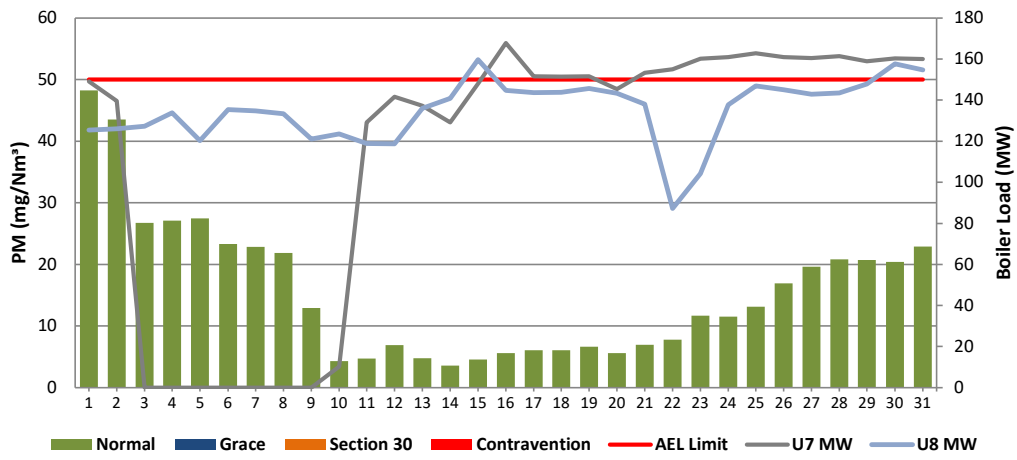


Figure 5: Camden Stack 1 SO₂ Emissions - October 2024

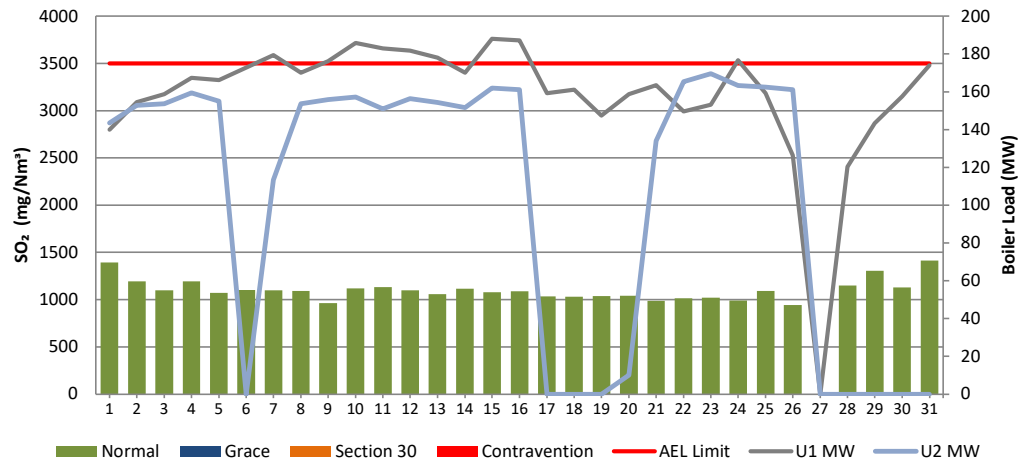


Figure 6: Camden Stack 2 SO₂ Emissions - October 2024

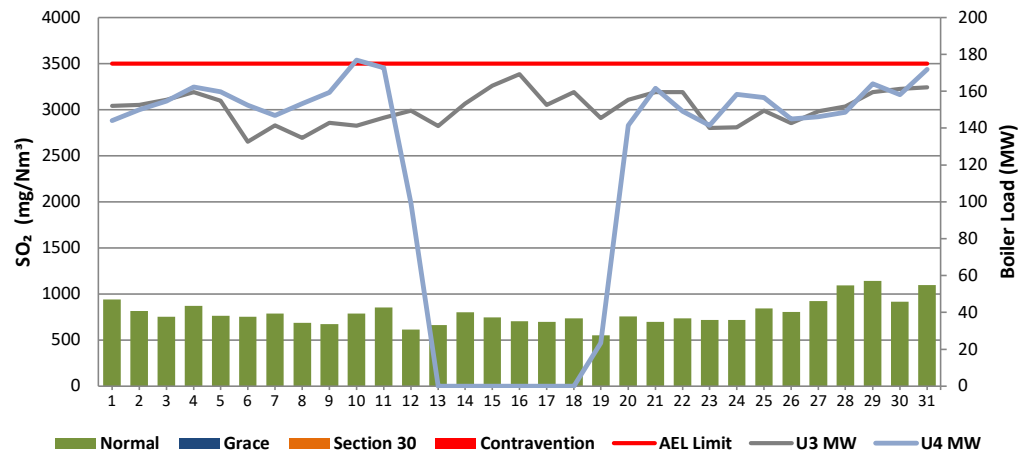


Figure 7: Camden Stack 3 SO₂ Emissions - October 2024

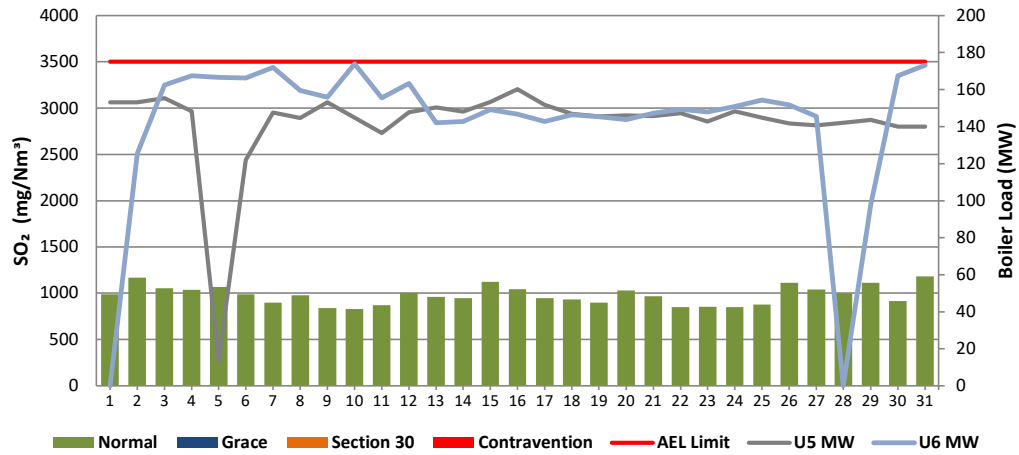


Figure 8: Camden Stack 4 SO₂ Emissions - October 2024

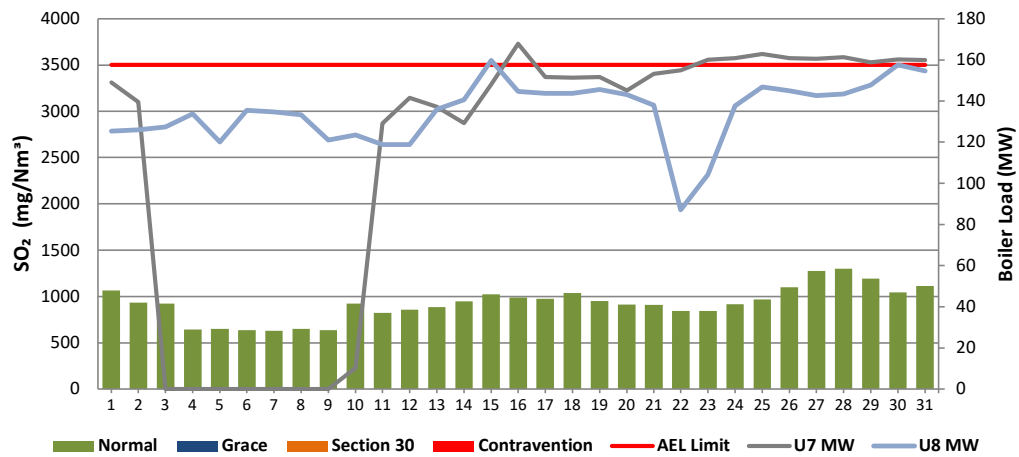


Figure 9: Camden Stack 1 NOx Emissions - October 2024

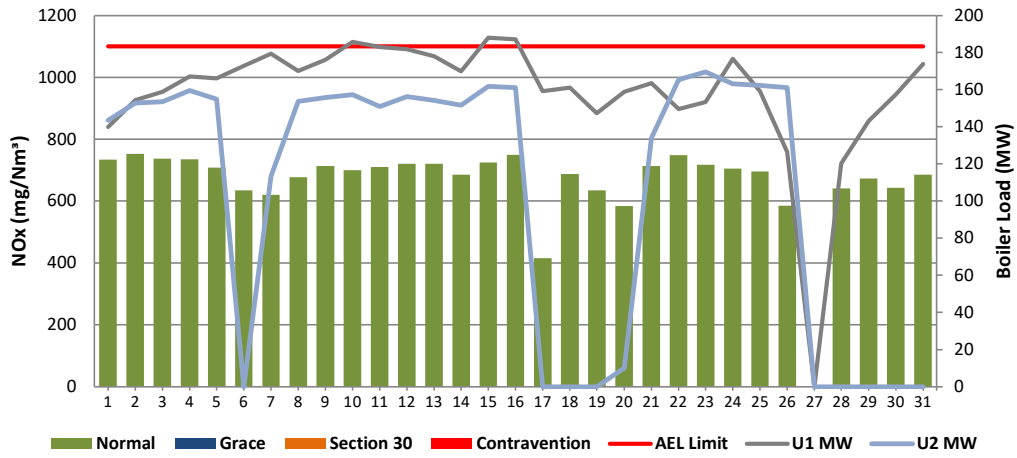


Figure 10: Camden Stack 2 NOx Emissions - October 2024

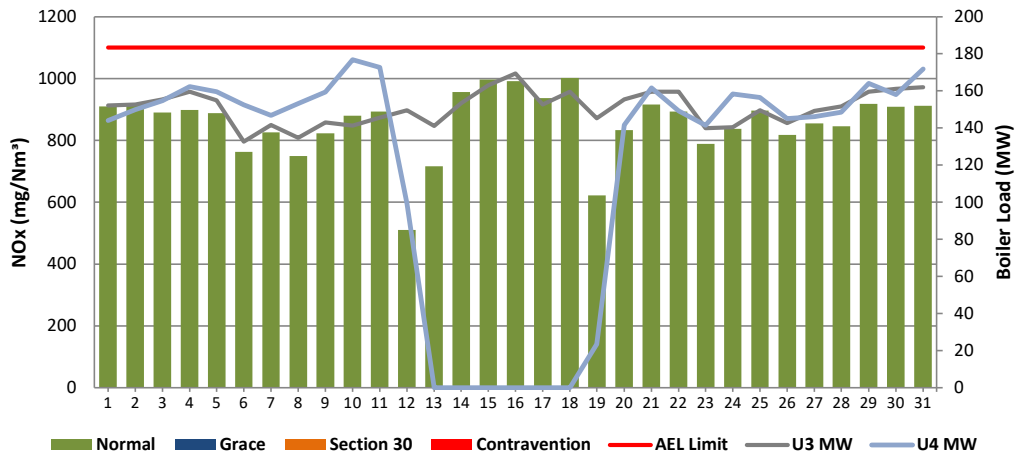


Figure 11: Camden Stack 3 NOx Emissions - October 2024

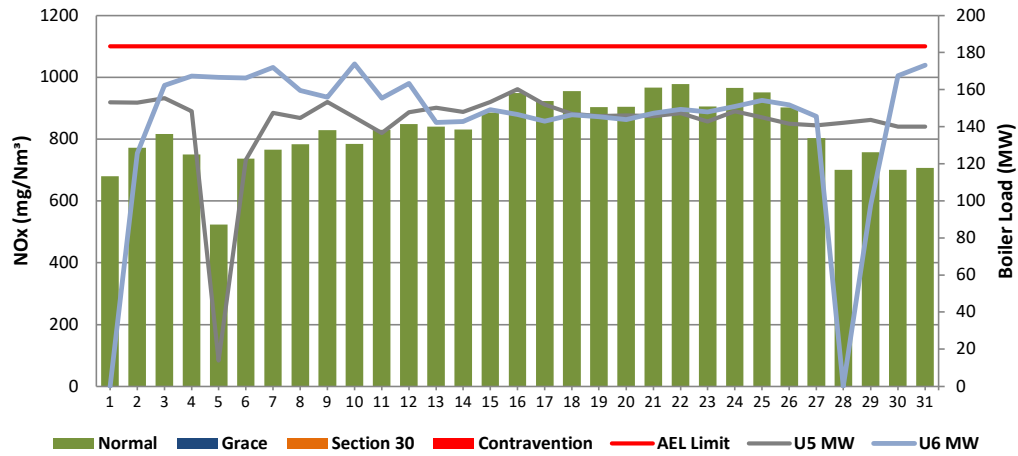
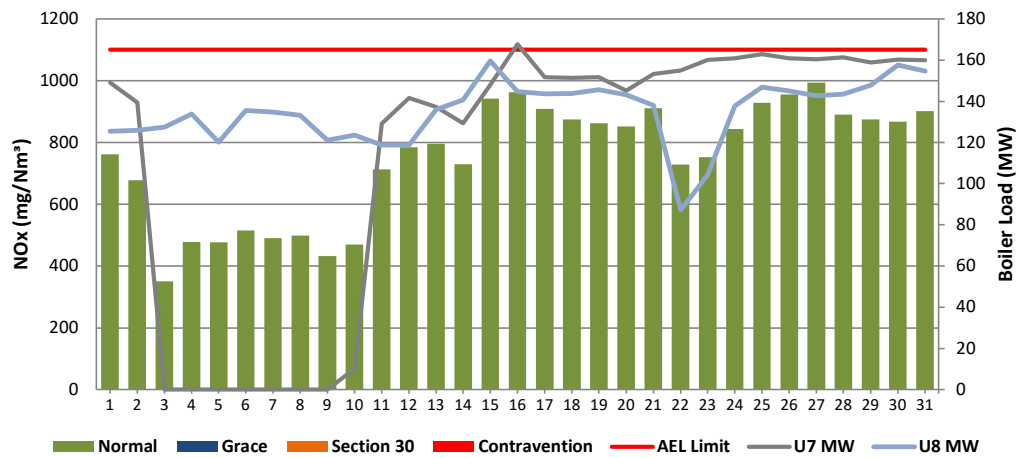


Figure 12: Camden Stack 4 NOx Emissions - October 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

None

Unit 6:

None

Unit 7:

None

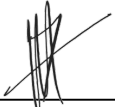
Unit 8:

None

Comments on Use of averages for O2 and CO2 from QAL2 tests as per previous months


Engineering Manager

20/11/2024
Date


Environmental Manager

20/11/2024
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