

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 Jul-2024
	Coal	Tons	550 000	379 776.98
	Fuel Oil	Tons	6 500	3 022.54
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Jul 2024
	Energy	GWh	1 190	625.50
	Ash	Tons	200 000	83 741
	RE PM	kg/MWh	not specified	0.175

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.63
Sulphur Content	%	< 2	0.90
Ash Content	%	< 34	22.05

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

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	93.8	96.4	93.8	99.9
Stack 2	100.0	94.8	98.0	94.6	100.0
Stack 3	68.0	99.6	99.9	90.6	100.0
Stack 4	99.9	95.0	97.4	94.5	99.5

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 July-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	10.41	988	541
2	8.69	1 006	562
3	24.00	673	657
4	Off	Off	Off
5	18.29	773	599
6	11.78	428	341
7	15.04	839	705
8	21.33	872	710
SUM	109.53	5 578	4 115

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	31	0	0	0	0	13.7
Stack 2	28	2	0	0	2	35.7
Stack 3	31	0	0	0	0	24.7
Stack 4	28	3	0	0	3	24.8
SUM	118	5	0	0	5	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	31	0	0	0	0	1 294.4
Stack 2	31	0	0	0	0	936.4
Stack 3	31	0	0	0	0	1 012.1
Stack 4	31	0	0	0	0	932.6
SUM	124	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	31	0	0	0	0	719.2
Stack 2	31	0	0	0	0	900.4
Stack 3	31	0	0	0	0	780.9
Stack 4	31	0	0	0	0	776.6
SUM	124	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 - July 2024

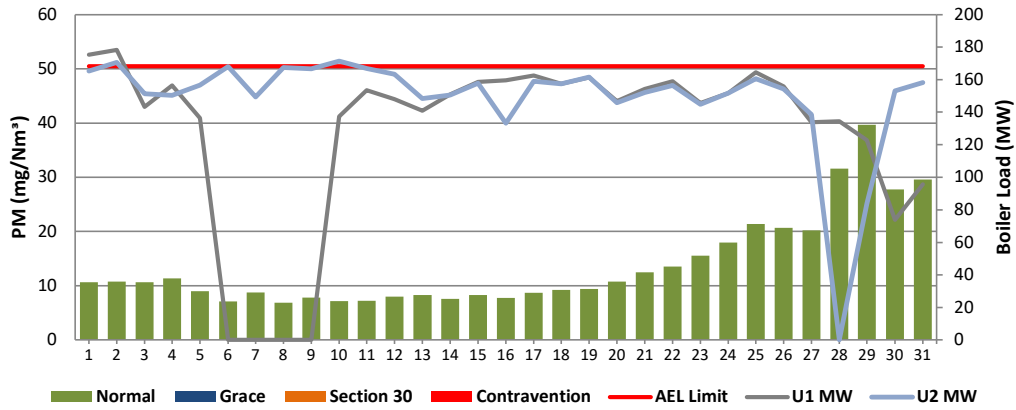


Figure 2: Camden Stack 2 PM Emissions - July 2024

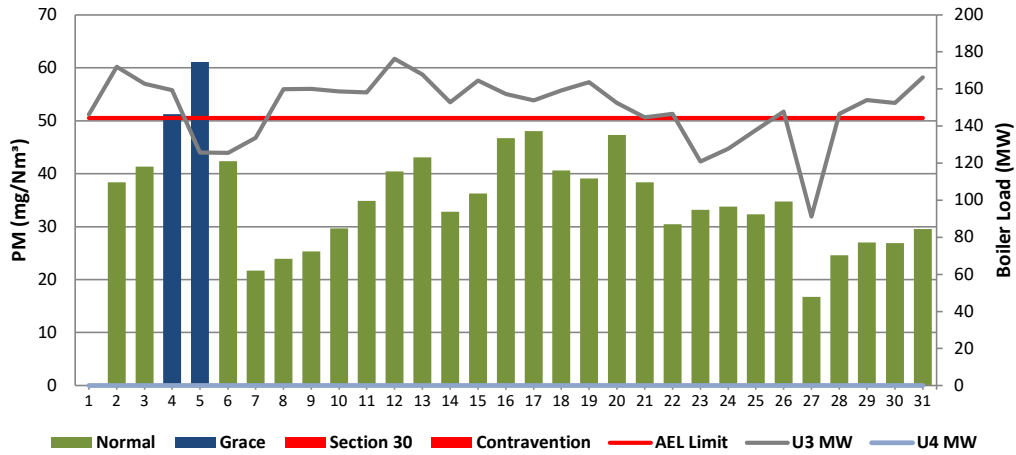


Figure 3: Camden Stack 3 PM Emissions - July 2024

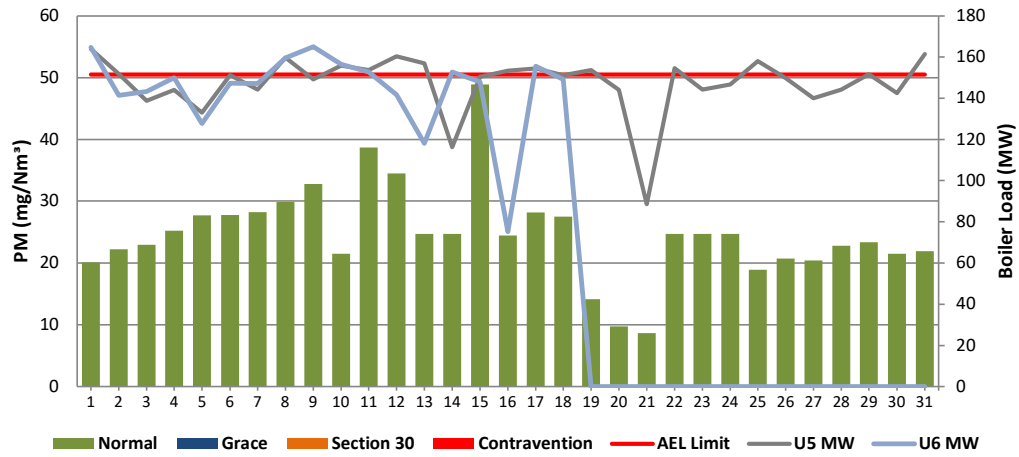


Figure 4: Camden Stack 4 PM Emissions - July 2024

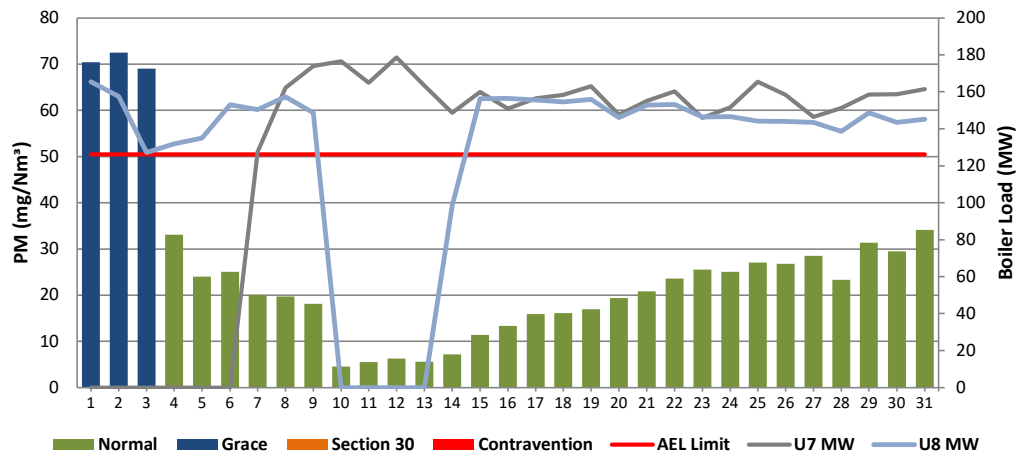


Figure 5: Camden Stack 1 SO₂ Emissions - July 2024

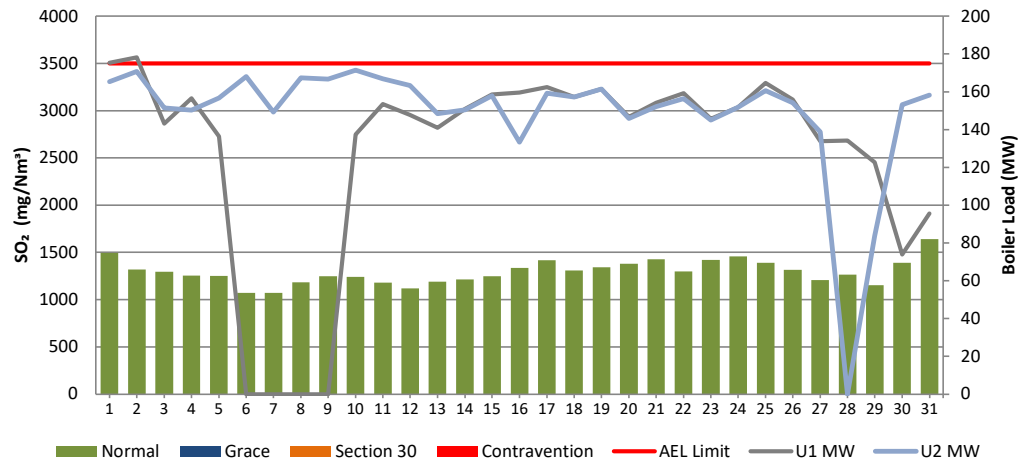


Figure 6: Camden Stack 2 SO₂ Emissions - July 2024

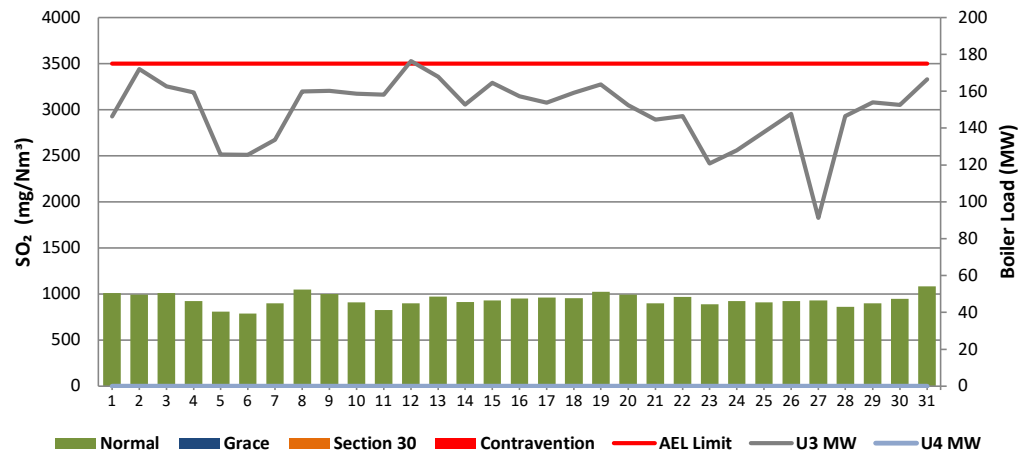


Figure 7: Camden Stack 3 SO₂ Emissions - July 2024

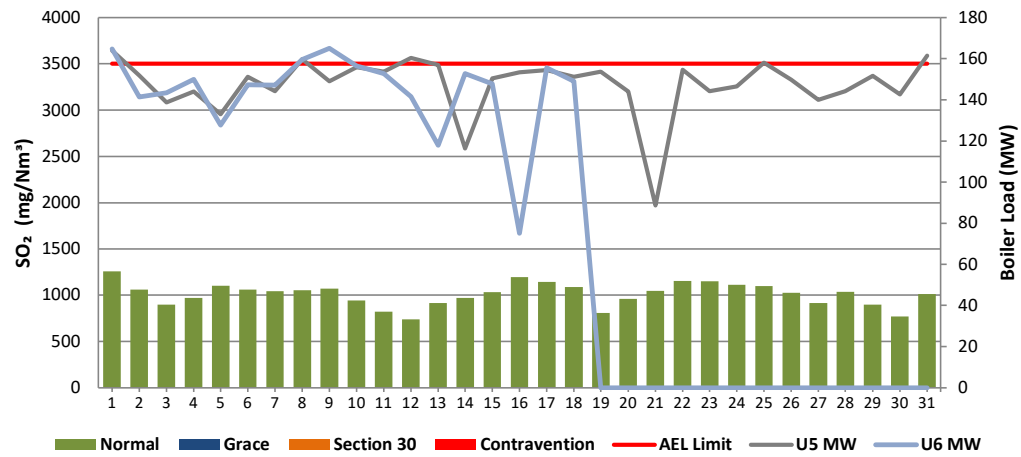


Figure 8: Camden Stack 4 SO₂ Emissions - July 2024

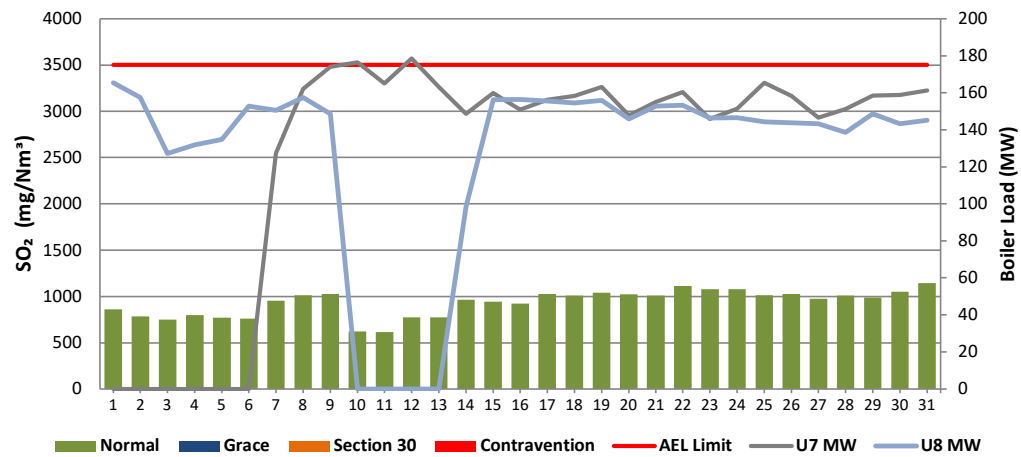


Figure 9: Camden Stack 1 NOx Emissions - July 2024

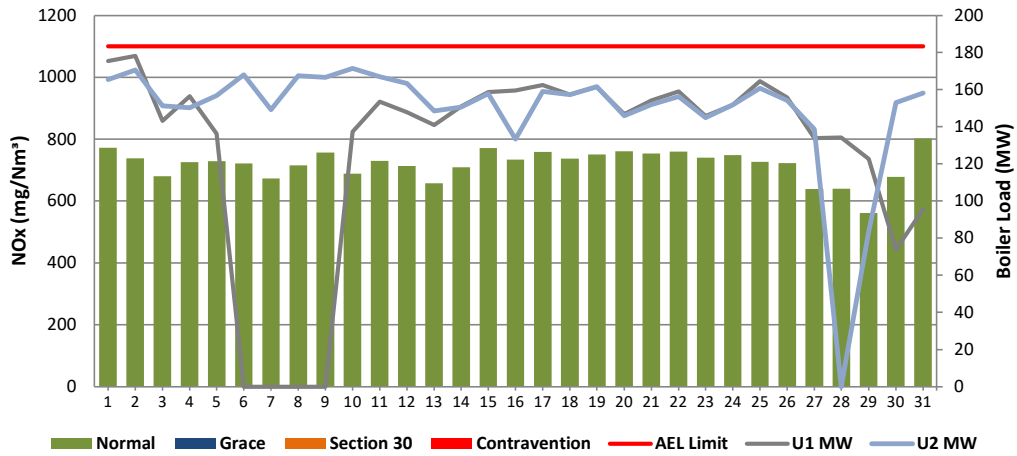


Figure 10: Camden Stack 2 NOx Emissions - July 2024

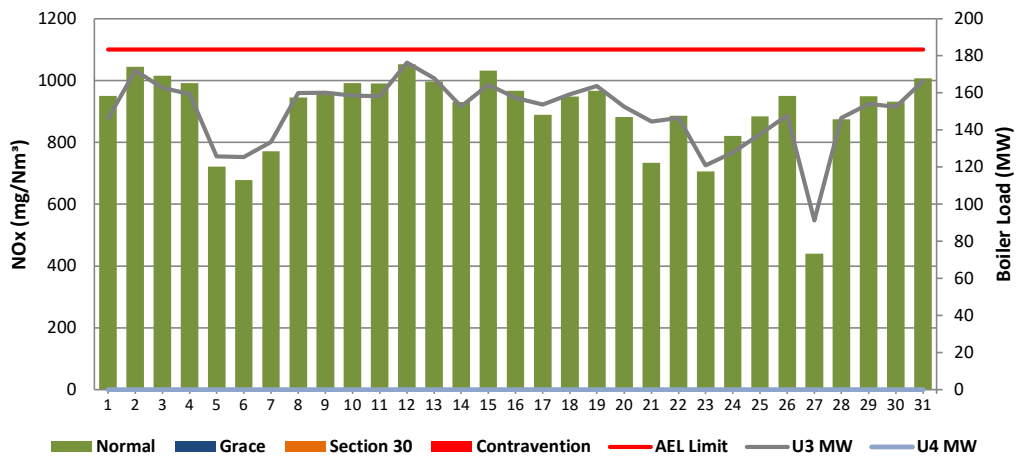


Figure 11: Camden Stack 3 NOx Emissions - July 2024

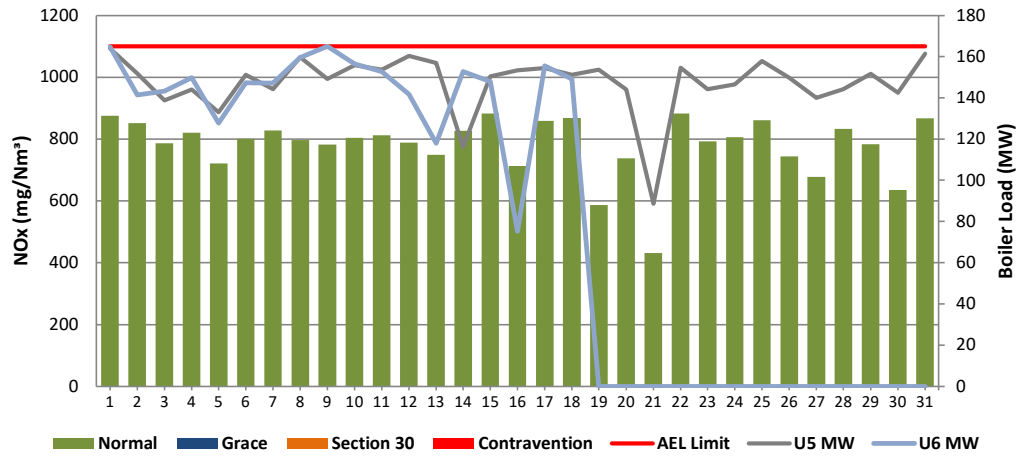
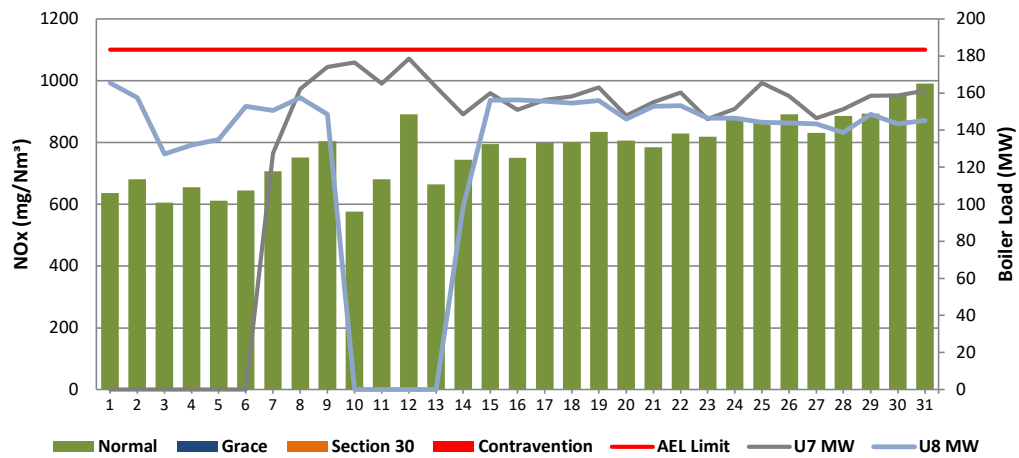


Figure 12: Camden Stack 4 NOx Emissions - July 2024



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

Stack 4 PM violated due to late communication of the new AEL

Stack 4 PM Legal Contravention confirmation is awaiting feedback from GSDM to grant us permission to continue with 100mg/Nm3 limit until our rebagging project is completed in February 2025



Engineering Manager

20/08/2024
Date



Environmental Manager

20/08/2024
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