

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 Apr-2024
	Coal	Tons	550 000	262 810.59
	Fuel Oil	Tons	5 000	3 673.37
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Apr-2024
	Energy	GWh	1600	427.11
	Ash	Tons	not specified	54 717
	RE PM	kg/MWh	not specified	0.384

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	23.18
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	20.82

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 Apr-2024
Unit 1	Fabric Filter Plant (FFP)	99.999%
Unit 2	Fabric Filter Plant (FFP)	Off
Unit 3	Fabric Filter Plant (FFP)	99.998%
Unit 4	Fabric Filter Plant (FFP)	Off
Unit 5	Fabric Filter Plant (FFP)	99.995%
Unit 6	Fabric Filter Plant (FFP)	99.996%
Unit 7	Fabric Filter Plant (FFP)	100.000%
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		
Stack 1	100.0	100.0	100.0		
Stack 2	100.0	100.0	100.0		
Stack 3	100.0	5.0	5.0		
Stack 4	100.0	99.7	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 April-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	10.54	1 045	384
2	Off	Off	Off
3	23.74	709	494
4	Off	Off	Off
5	48.58	0	0
6	31.66	0	0
7	0.00	41	28
8	49.31	863	500
SUM	163.83	2 659	1 405

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	27	0	0	0	0	18.2
Stack 2	30	0	0	0	0	43.0
Stack 3	28	2	0	0	2	67.3
Stack 4	30	0	0	0	0	48.3
SUM	115	2	0	0	2	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	29	0	0	0	0	1 476.1
Stack 2	30	0	0	0	0	1 208.5
Stack 3	0	0	0	0	0	
Stack 4	30	0	0	0	0	826.9
SUM	89	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	29	0	0	0	0	538.5
Stack 2	29	1	0	0	1	822.3
Stack 3	0	0	0	0	0	
Stack 4	30	0	0	0	0	478.3
SUM	88	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 - April 2024

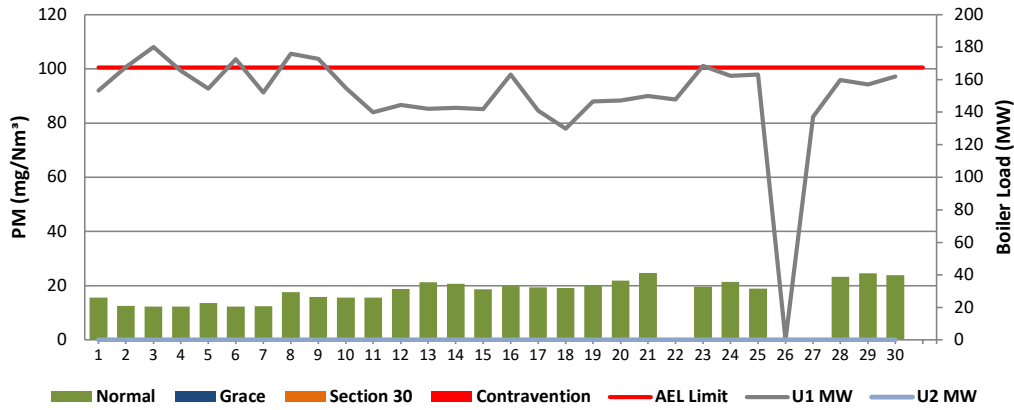


Figure 2: Camden Stack 2 PM Emissions - April 2024

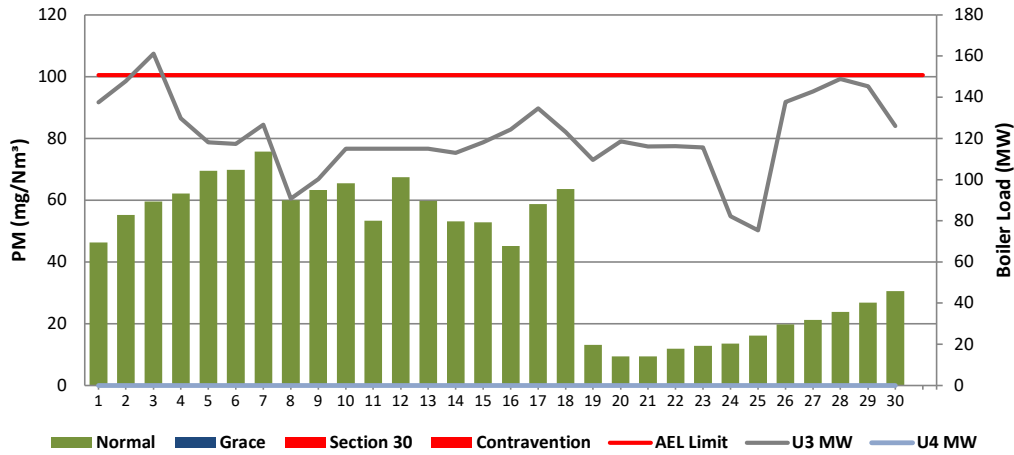


Figure 3: Camden Stack 3 PM Emissions - April 2024

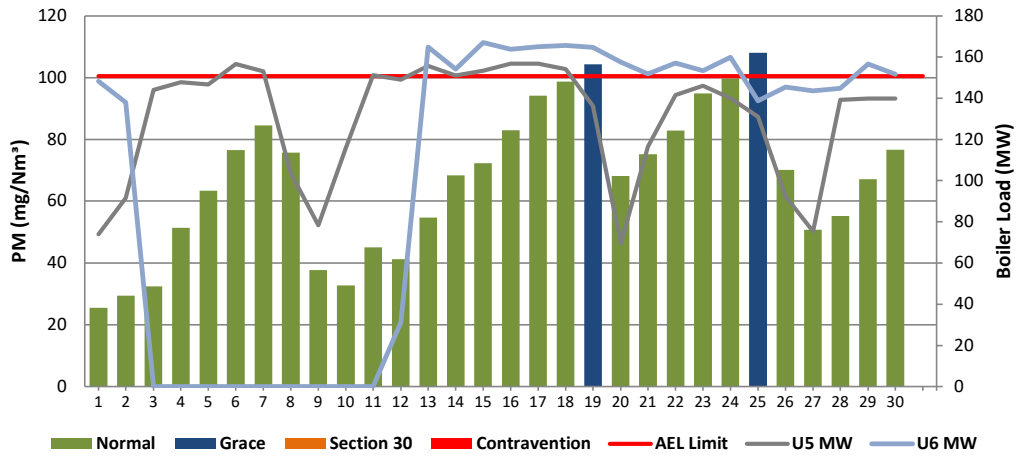


Figure 4: Camden Stack 4 PM Emissions - April 2024

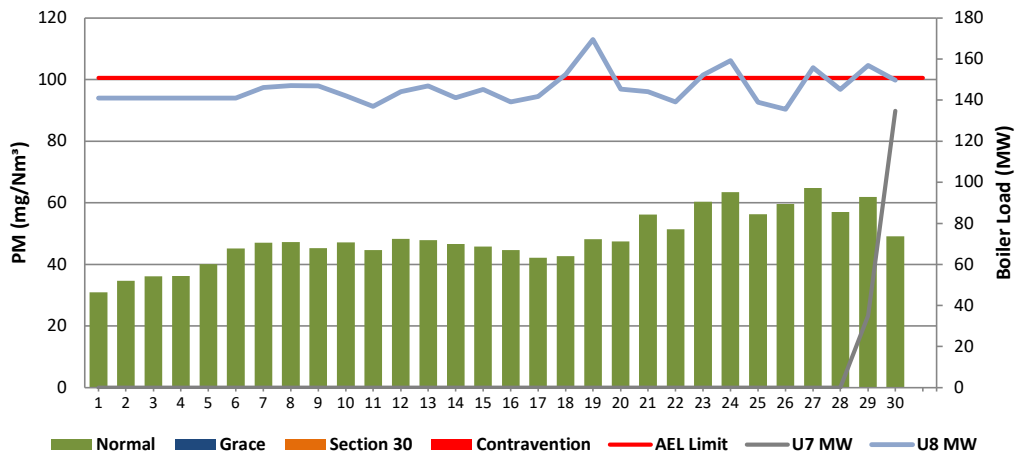


Figure 5: Camden Stack 1 SO₂ Emissions - April 2024

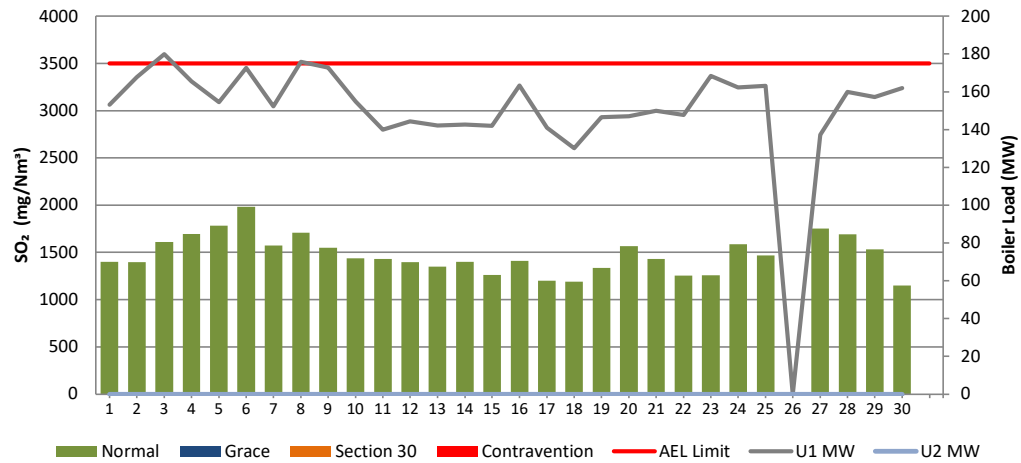


Figure 6: Camden Stack 2 SO₂ Emissions - April 2024

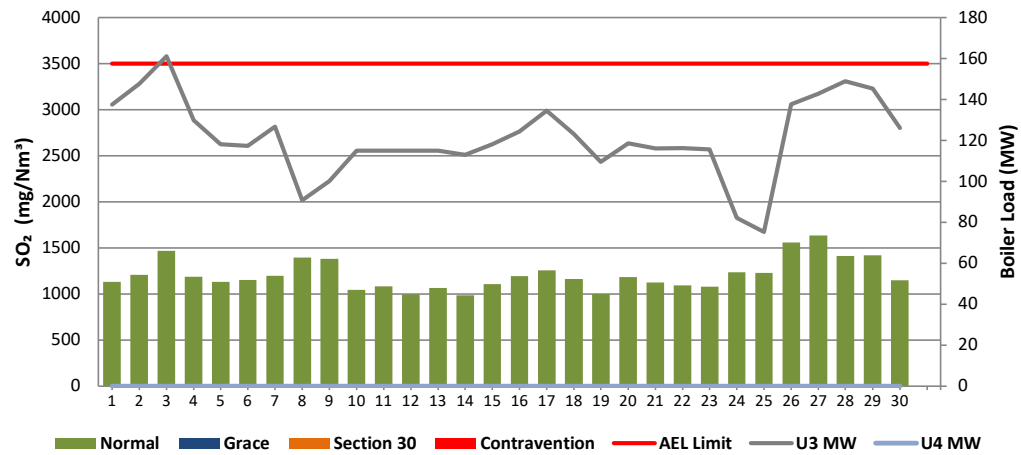


Figure 7: Camden Stack 3 SO₂ Emissions - April 2024

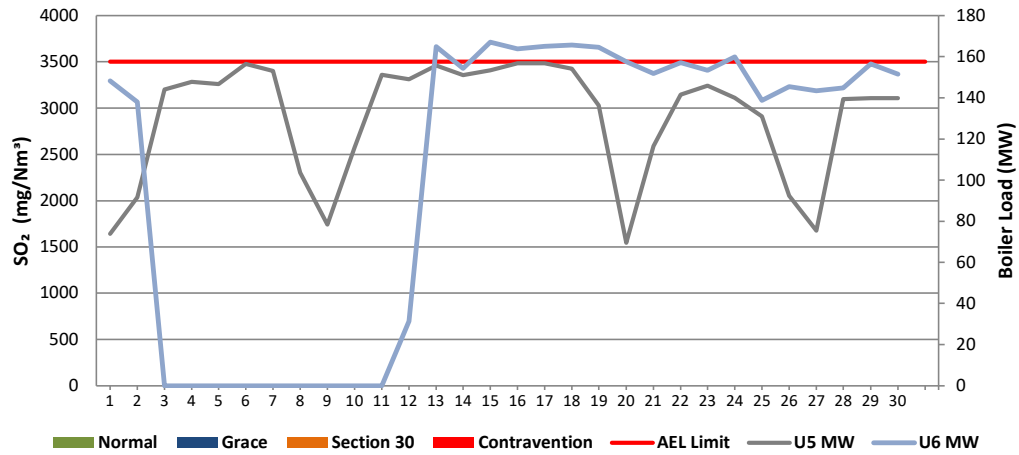


Figure 8: Camden Stack 4 SO₂ Emissions - April 2024

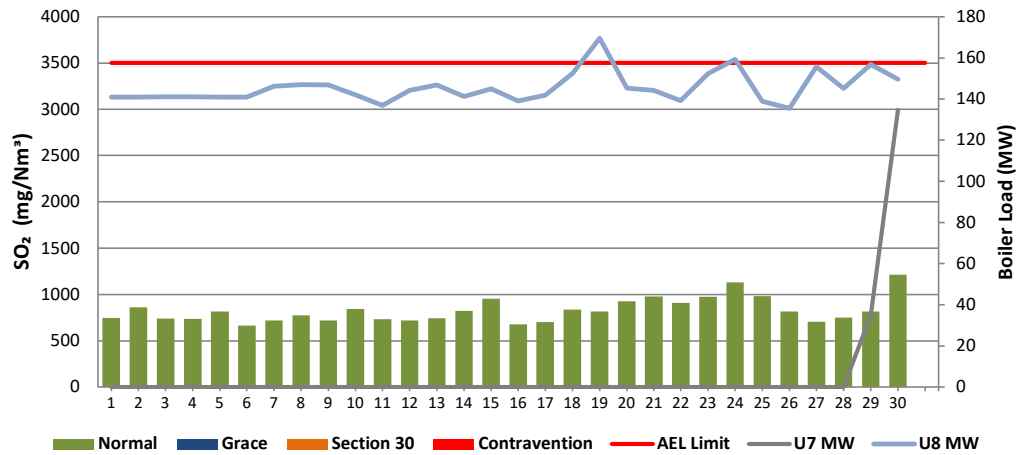


Figure 9: Camden Stack 1 NOx Emissions - April 2024

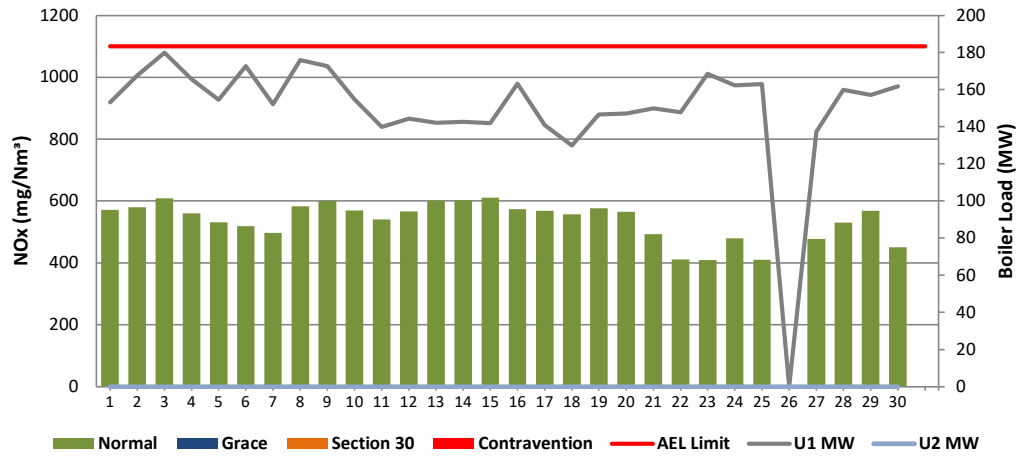


Figure 10: Camden Stack 2 NOx Emissions - April 2024

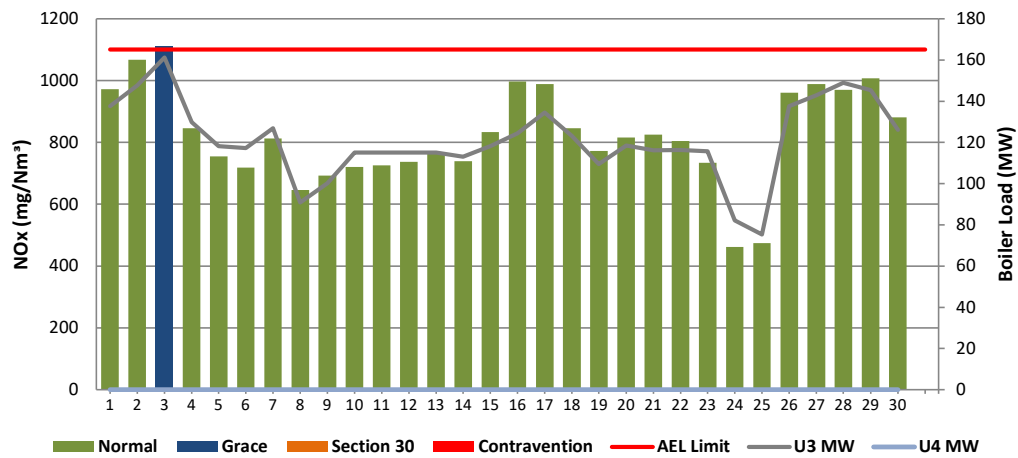


Figure 11: Camden Stack 3 NOx Emissions - April 2024

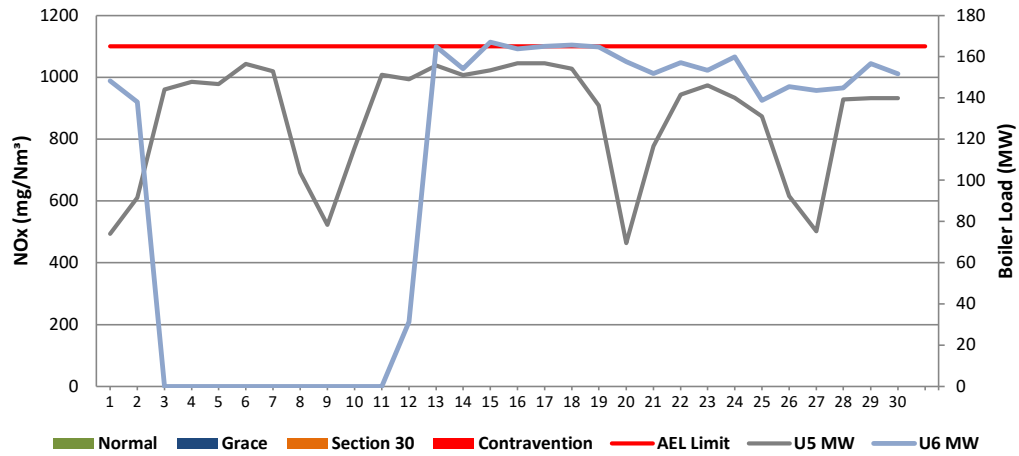
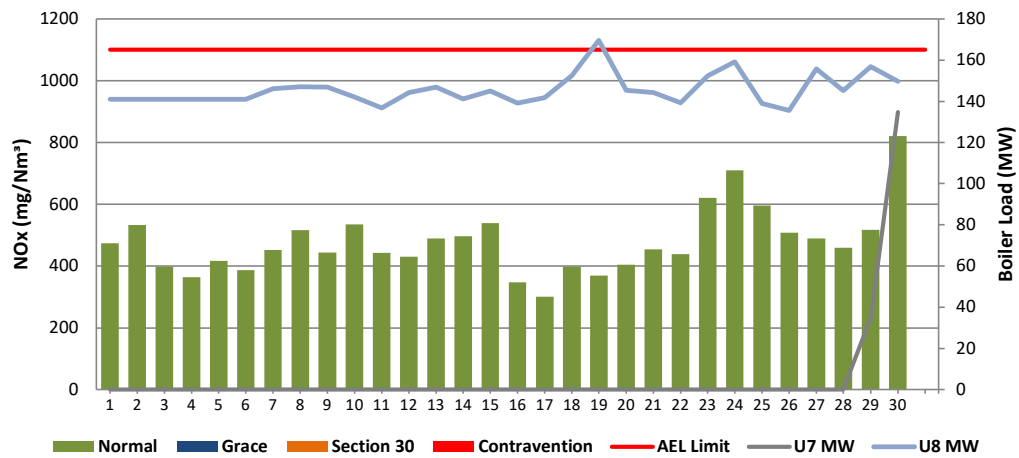


Figure 12: Camden Stack 4 NOx Emissions - April 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

None

Unit 6:

None

Unit 7:

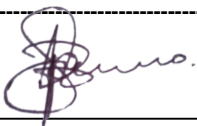
None

Unit 8:

None

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

Stack 3 CODEL Gas Analyzer Faulty April 2024 - letter send to GSDM

p.p. 

Engineering Manager

28/05/2024

Date



Environmental Manager

30/05/2024

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