

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 Feb-2024
	Coal	Tons	550 000	396 200.90
	Fuel Oil	Tons	5 000	2 636.00

Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Feb-2024
	Energy	GWh	1600	414.41
	Ash	Tons	not specified	87 402
	RE PM	kg/MWh	not specified	0.338

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.87
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	22.06

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 Feb-2024
Unit 1	Fabric Filter Plant (FFP)	99.998%
Unit 2	Fabric Filter Plant (FFP)	Off
Unit 3	Fabric Filter Plant (FFP)	99.998%
Unit 4	Fabric Filter Plant (FFP)	99.998%
Unit 5	Fabric Filter Plant (FFP)	Off
Unit 6	Fabric Filter Plant (FFP)	99.999%
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
Stack 1	100.0	99.8	100.0
Stack 2	100.0	90.1	90.1
Stack 3	100.0	99.8	99.8
Stack 4	100.0	81.0	80.9

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 February-2024

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	30.92	1 166	479
2	Off	Off	Off
3	27.22	672	492
4	12.08	330	237
5	Off	Off	Off
6	24.51	717	332
7	17.91	652	420
8	27.34	511	345
SUM	139.97	4 049	2 306

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
Stack 1	28	0	0	0	0	46.6
Stack 2	24	1	0	0	1	60.7
Stack 3	19	0	0	0	0	46.9
Stack 4	11	0	0	0	0	42.5
SUM	82	1	0	0	1	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm ³)
Stack 1	29	0	0	0	0	1 638.8
Stack 2	26	0	0	0	0	1 271.6
Stack 3	24	0	0	0	0	1 299.9
Stack 4	29	0	0	0	0	1 009.5
SUM	108	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm ³)
Stack 1	29	0	0	0	0	670.5
Stack 2	24	2	0	0	2	893.4
Stack 3	24	0	0	0	0	600.8
Stack 4	29	0	0	0	0	659.5
SUM	106	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 - February 2024

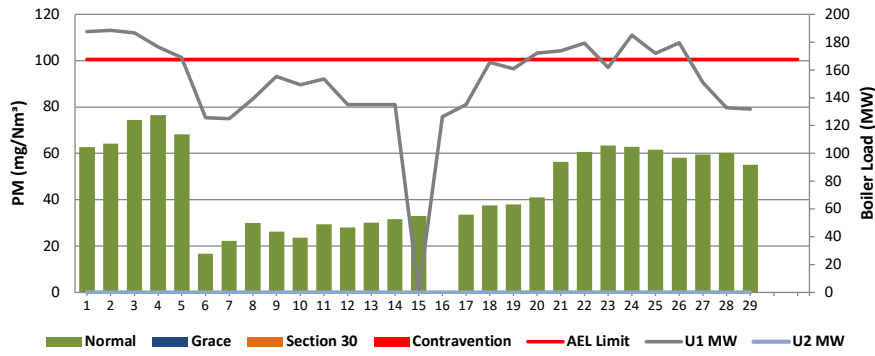


Figure 2: Camden Stack 2 PM Emissions - February 2024

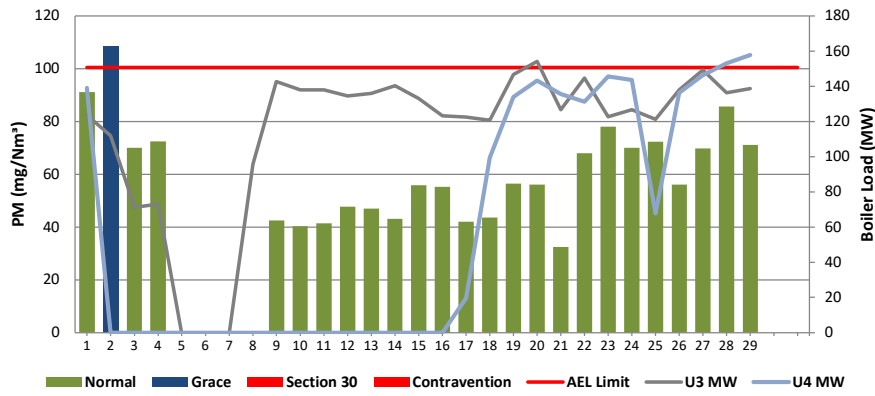


Figure 3: Camden Stack 3 PM Emissions - February 2024

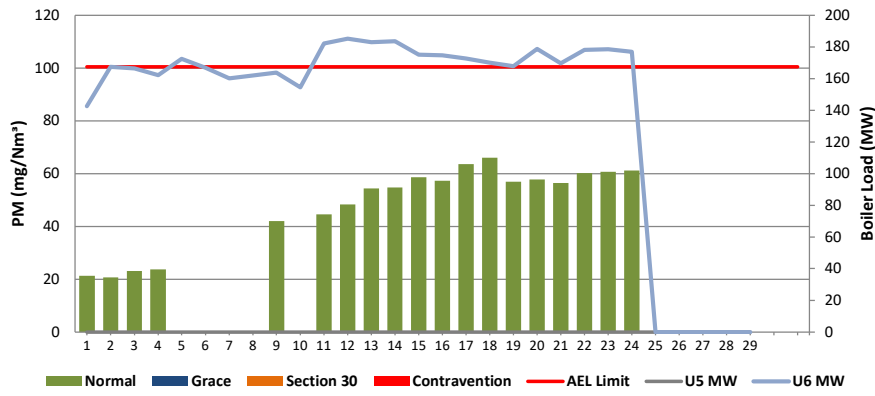


Figure 4: Camden Stack 4 PM Emissions - February 2024

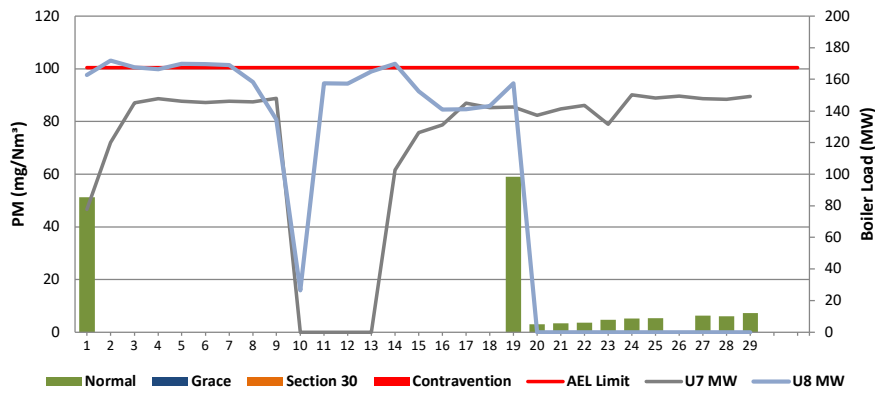


Figure 5: Camden Stack 1 SO₂ Emissions - February 2024

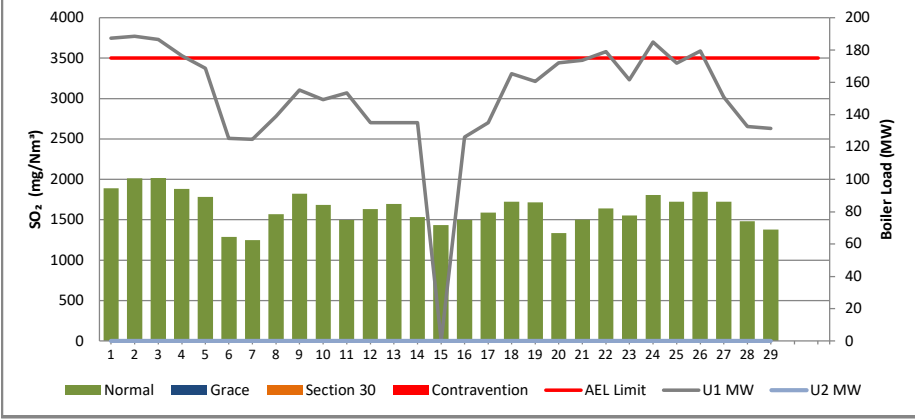


Figure 6: Camden Stack 2 SO₂ Emissions - February 2024

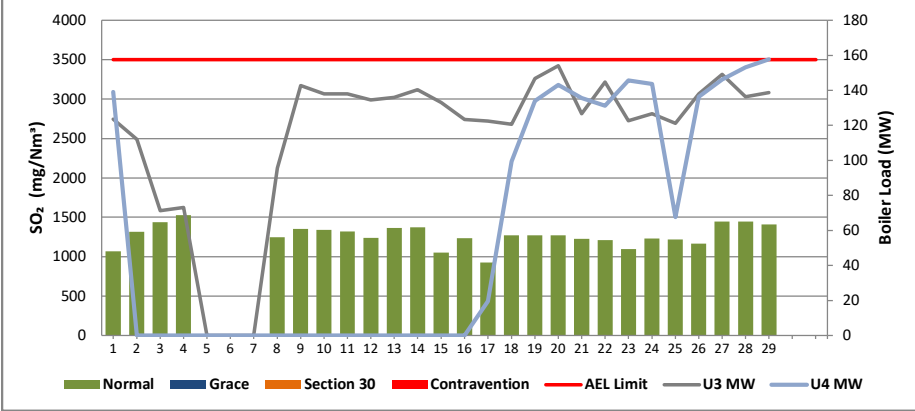


Figure 7: Camden Stack 3 SO₂ Emissions - February 2024

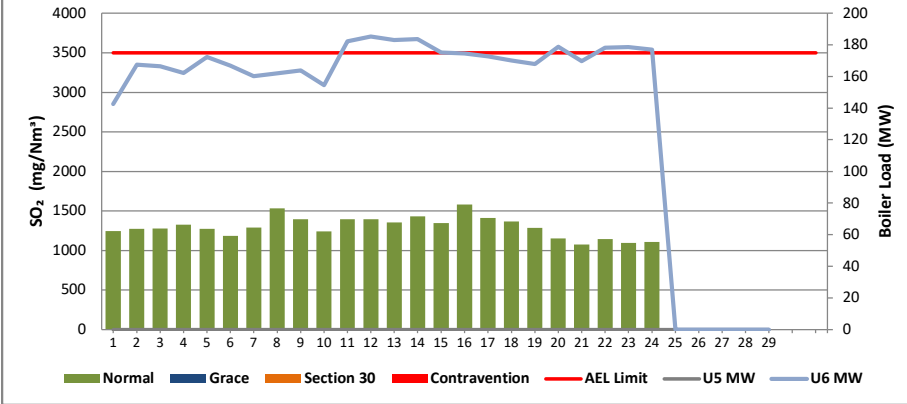


Figure 8: Camden Stack 4 SO₂ Emissions - February 2024

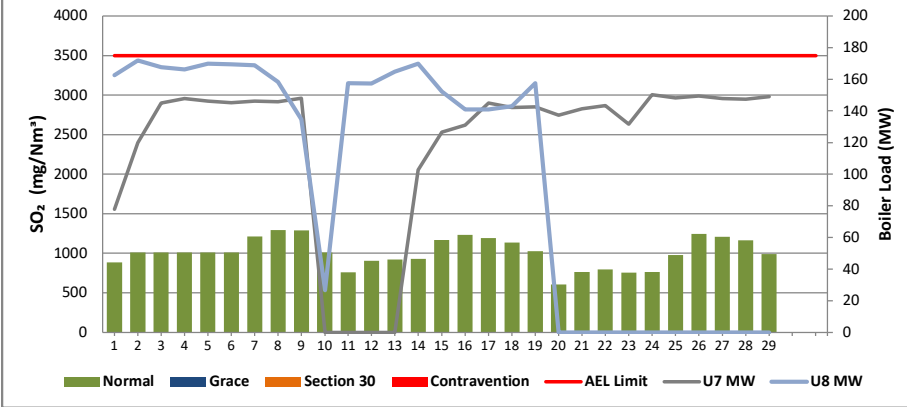


Figure 9: Camden Stack 1 NOx Emissions - February 2024

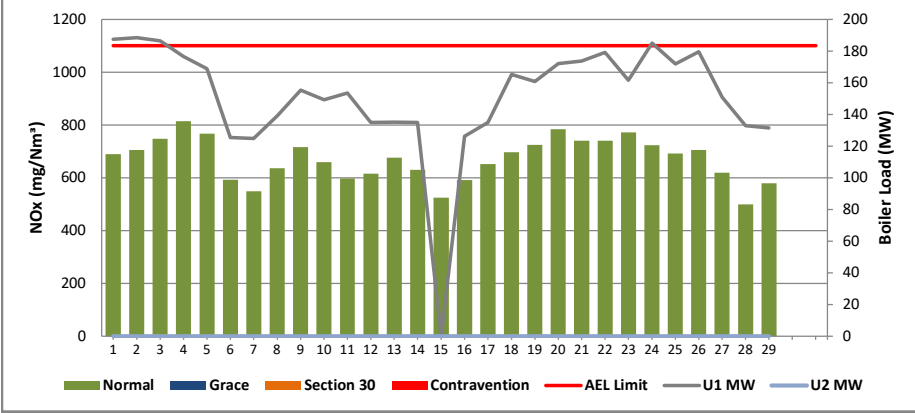


Figure 10: Camden Stack 2 NOx Emissions - February 2024

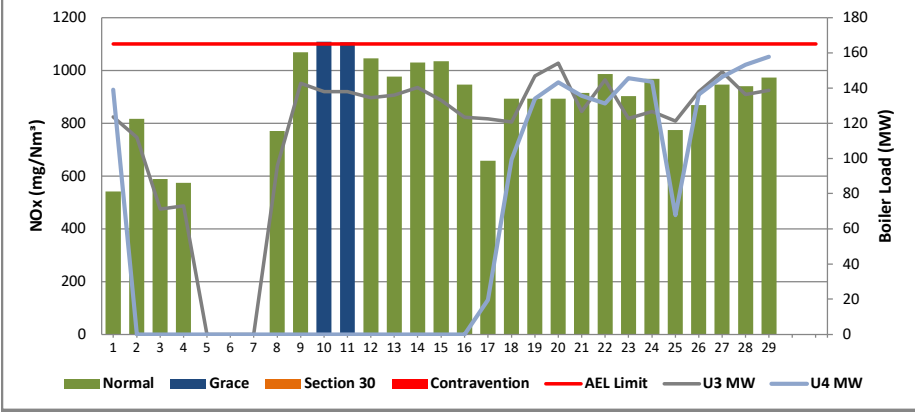


Figure 11: Camden Stack 3 NOx Emissions - February 2024

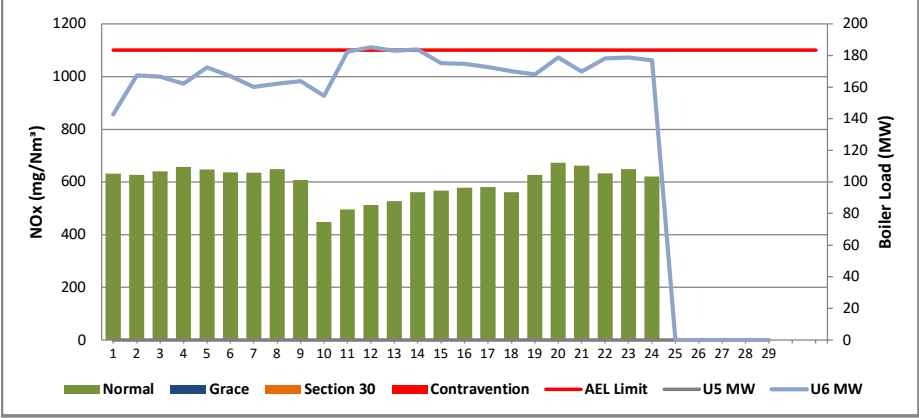
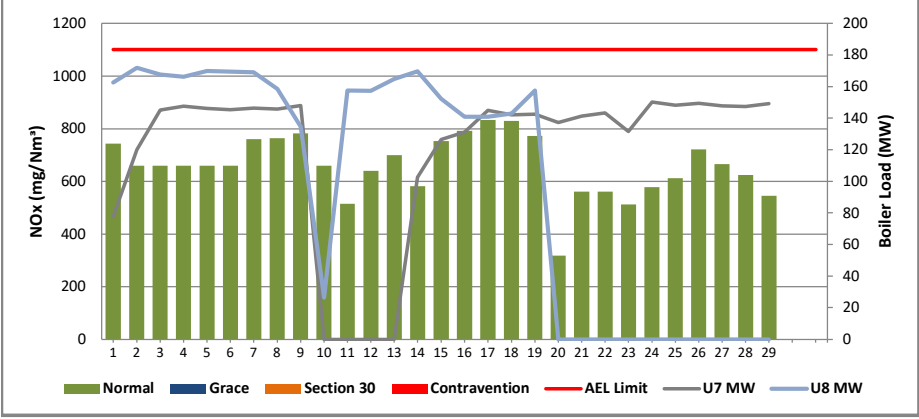


Figure 12: Camden Stack 4 NOx Emissions - February 2024



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

None

Unit 6:

None

Unit 7:

None

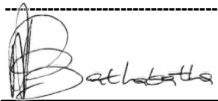
Unit 8:

None

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

Stack 4 gas monitor defect impacted on the CEMS reliability, see attached letter

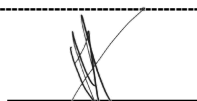
Stack 2 monitor defect due to lightning, impacted on the CEMS reliability.



Engineering Manager

22/03/2024

Date



Environmental Manager

12/04/2024

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