

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 Mar-2022
	Coal	Tons	550 000	321 990,60
	Fuel Oil	Tons	5 000	6 578,75
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Mar-2022
	Energy	GWh	1600	648,09
	Ash	Tons	not specified	73 575
	RE PM	kg/MWh	not specified	0,256

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19,56	22,62
Sulphur Content	%	< 2	0,90
Ash Content	%	25 to 35	22,85

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO _x	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 Mar-2022
Unit 1	Fabric Filter Plant (FFP)	99,5%
Unit 2	Fabric Filter Plant (FFP)	99,58%
Unit 3	Fabric Filter Plant (FFP)	99,65%
Unit 4	Fabric Filter Plant (FFP)	99,58%
Unit 5	Fabric Filter Plant (FFP)	99,89%
Unit 6	Fabric Filter Plant (FFP)	99,93%
Unit 7	Fabric Filter Plant (FFP)	99,97%
Unit 8	Fabric Filter Plant (FFP)	99,95%

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	96,8	99,5	0,0	0,0
Stack 2	100,0	98,8	99,5	0,0	0,0
Stack 3	100,0	98,0	99,9	0,0	0,0
Stack 4	99,6	96,6	96,8	0,0	0,0

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 March-2022

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	38,3	1 140	577	147 323
2	31,9	939	482	122 329
3	29,9	904	608	111 252
4	45,5	1 175	787	150 378
5	8,6	877	531	103 563
6	4,9	871	419	99 403
7	2,2	776	440	104 064
8	4,7	1 082	607	157 191
SUM	165,9	7 765	4 450	995 503

Table 6.2: Operating days in compliance to PM AEL Limit - March 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	30	1	0	0	1	50,0
Stack 2	31	0	0	0	0	63,0
Stack 3	31	0	0	0	0	12,2
Stack 4	31	0	0	0	0	5,6
SUM	123	1	0	0	1	

Table 6.3: Operating days in compliance to SOx AEL Limit - March 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	1 447,6
Stack 2	31	0	0	0	0	1 626,6
Stack 3	31	0	0	0	0	1 640,2
Stack 4	31	0	0	0	0	1 338,0
SUM	124	0	0	0	0	

Table 6.4: Operating days in compliance to NOx AEL Limit - March 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	733,5
Stack 2	14	0	0	17	17	1 090,8
Stack 3	27	0	0	4	4	883,2
Stack 4	31	0	0	0	0	740,0
SUM	103	0	0	21	21	

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 - March 2022

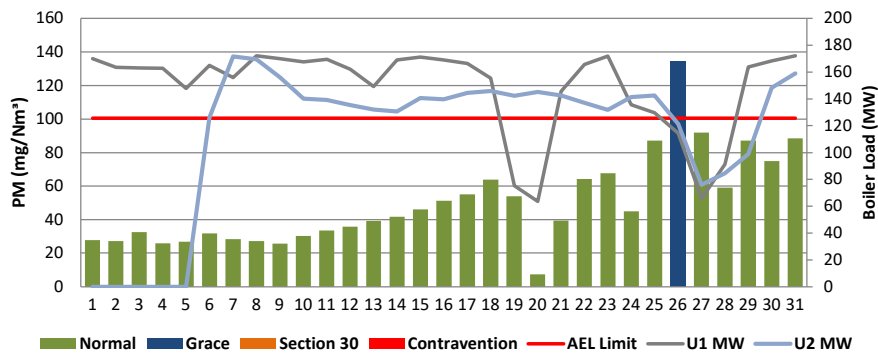


Figure 2: Camden Stack 2 PM Emissions - March 2022

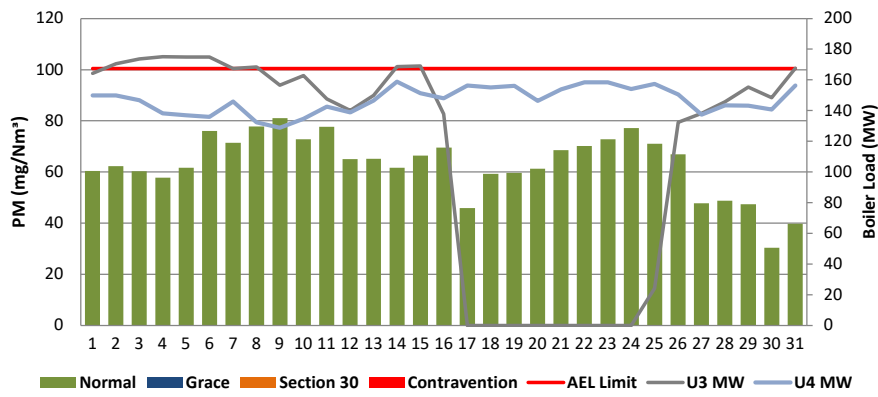


Figure 3: Camden Stack 3 PM Emissions - March 2022

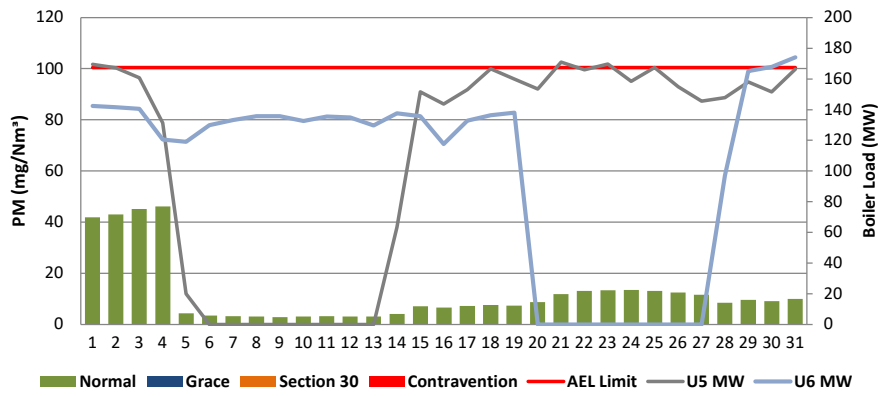


Figure 4: Camden Stack 4 PM Emissions - March 2022

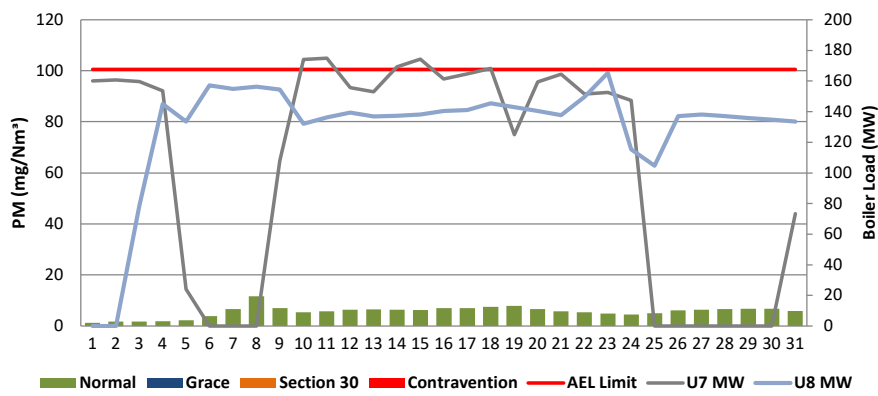


Figure 5: Camden Stack 1 SOx Emissions - March 2022

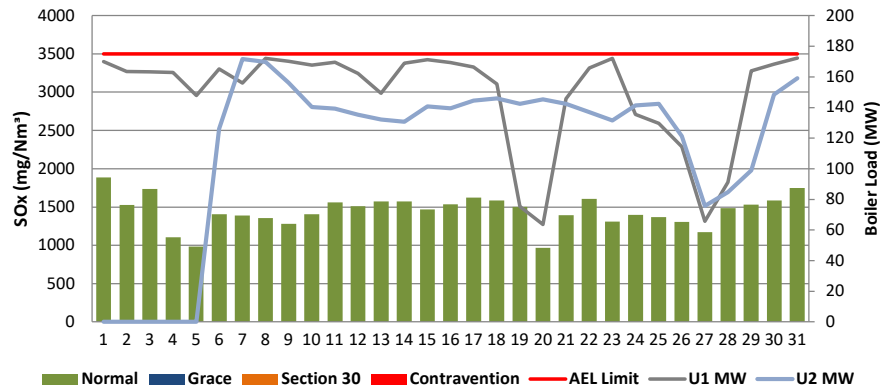


Figure 6: Camden Stack 2 SOx Emissions - March 2022

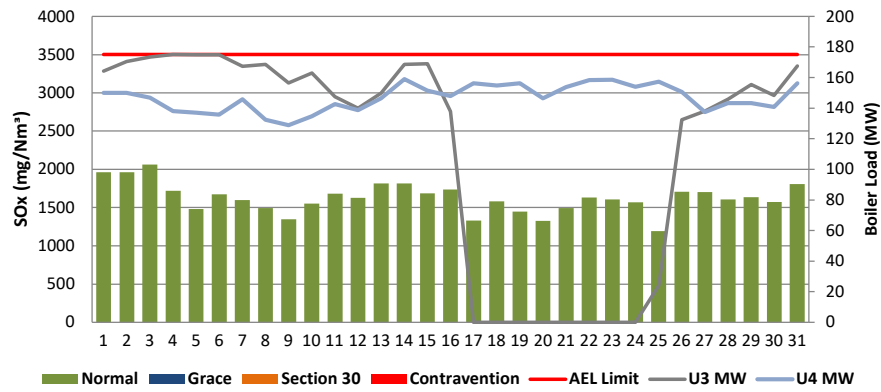


Figure 7: Camden Stack 3 SOx Emissions - March 2022

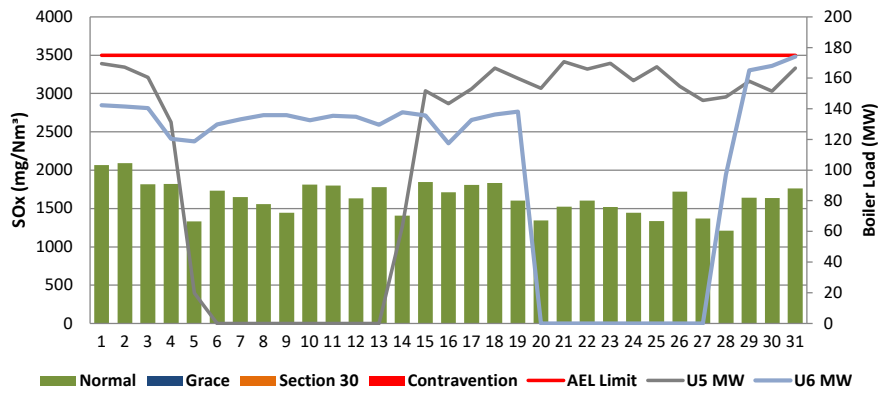


Figure 8: Camden Stack 4 SOx Emissions - March 2022

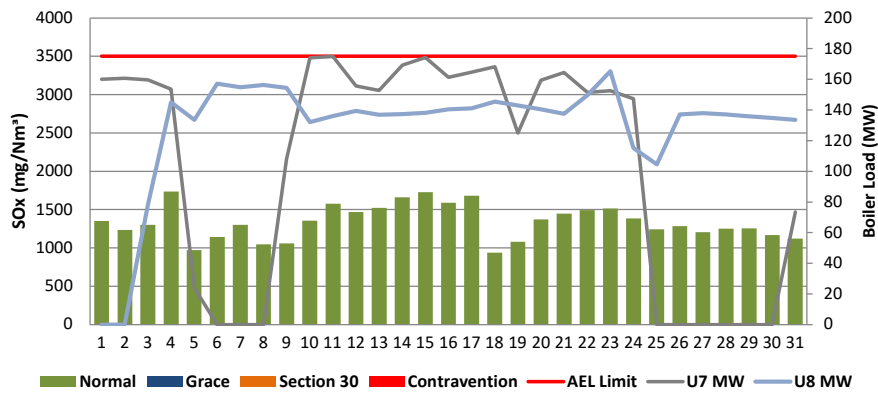


Figure 9: Camden Stack 1 NOx Emissions - March 2022

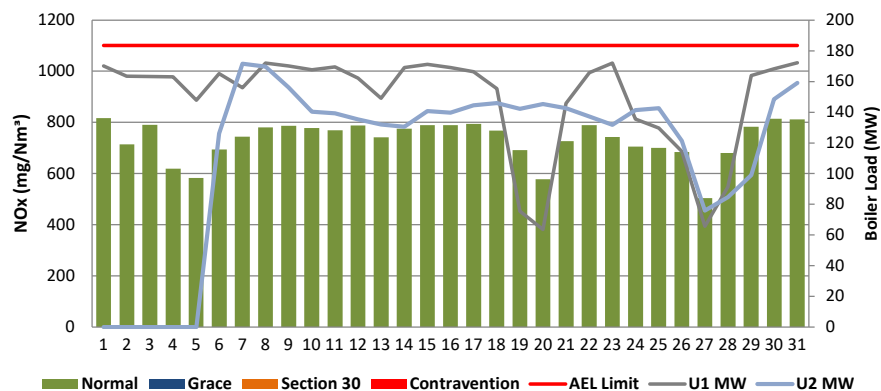


Figure 10: Camden Stack 2 NOx Emissions - March 2022

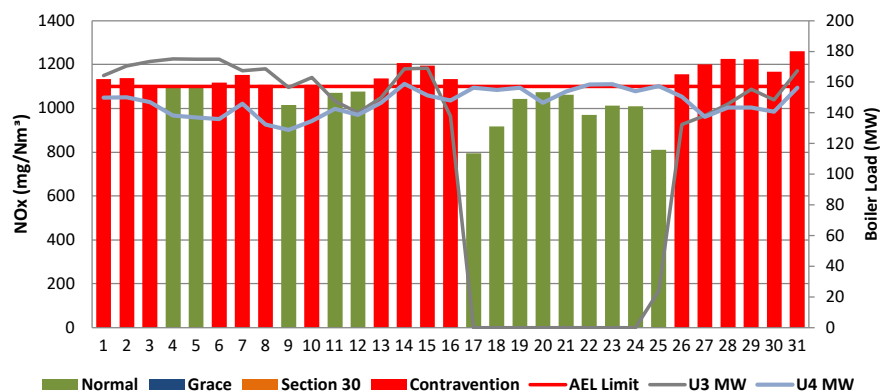


Figure 11: Camden Stack 3 NOx Emissions - March 2022

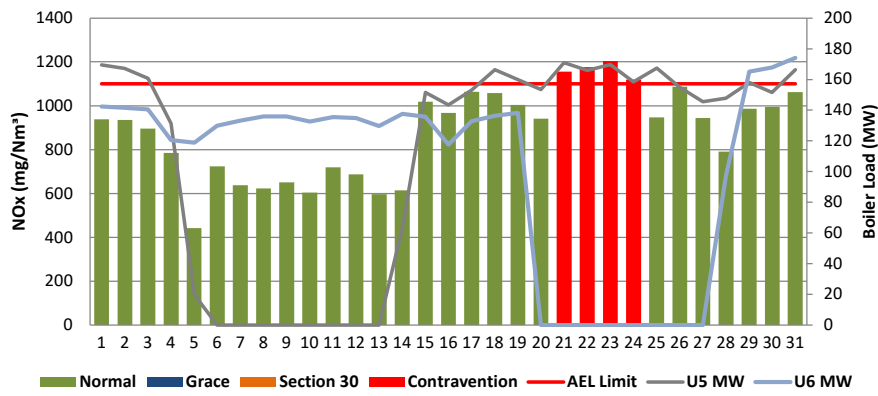
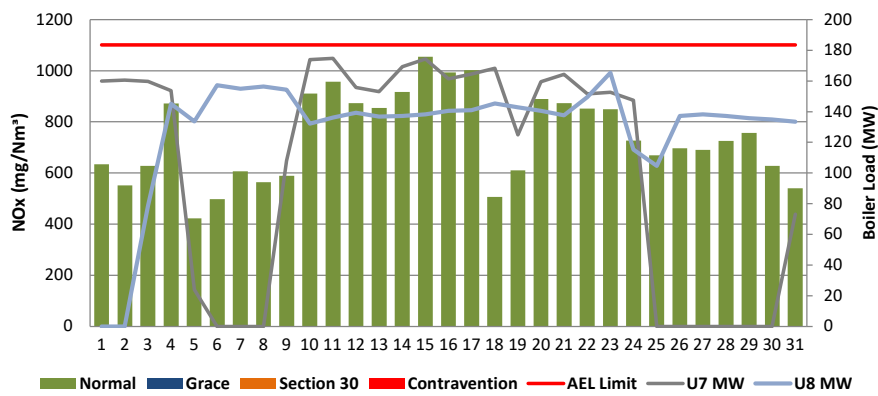


Figure 12: Camden Stack 4 NOx Emissions - March 2022



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
No complaints have been received for the month of March 2022**


p.p

Engineering Manager

20/04/2022

Date



Environmental Manager

20/04/2022

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