

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-2022
	Coal	Tons	550 000	331 780,28
	Fuel Oil	Tons	5 000	4 460,31
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Feb-2022
	Energy	GWh	1600	531,94
	Ash	Tons	not specified	70 205
	RE PM	kg/MWh	not specified	0,238

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19,56	23,17
Sulphur Content	%	< 2	0,90
Ash Content	%	25 to 35	21,16

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 Feb-2022
Unit 1	Fabric Filter Plant (FFP)	99,6%
Unit 2	Fabric Filter Plant (FFP)	99,85%
Unit 3	Fabric Filter Plant (FFP)	99,77%
Unit 4	Fabric Filter Plant (FFP)	99,81%
Unit 5	Fabric Filter Plant (FFP)	99,77%
Unit 6	Fabric Filter Plant (FFP)	99,80%
Unit 7	Fabric Filter Plant (FFP)	99,99%
Unit 8	Fabric Filter Plant (FFP)	100,00%

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	98,5	99,0	0,0	0,0
Stack 2	100,0	95,5	99,3	0,0	0,0
Stack 3	100,0	99,4	100,0	0,0	0,0
Stack 4	100,0	100,0	100,0	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 February-2022

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	38,6	1 062	546	138 248
2	1,1	112	53	14 384
3	23,0	848	614	114 346
4	19,0	841	601	115 739
5	28,3	1 028	592	138 954
6	15,5	686	386	88 093
7	0,8	937	560	159 187
8	0,0	0	0	0
SUM	126,4	5 513	3 351	768 952

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	31	0	0	0	0	52,7
Stack 2	31	0	0	0	0	40,1
Stack 3	31	0	0	0	0	39,8
Stack 4	31	0	0	0	0	0,9
SUM	124	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	1 457,3
Stack 2	31	0	0	0	0	1 503,6
Stack 3	31	0	0	0	0	1 441,3
Stack 4	31	0	0	0	0	1 142,7
SUM	124	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	748,6
Stack 2	15	0	0	16	16	1 074,0
Stack 3	31	0	0	0	0	830,1
Stack 4	31	0	0	0	0	682,0
SUM	108	0	0	16	16	

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 2022

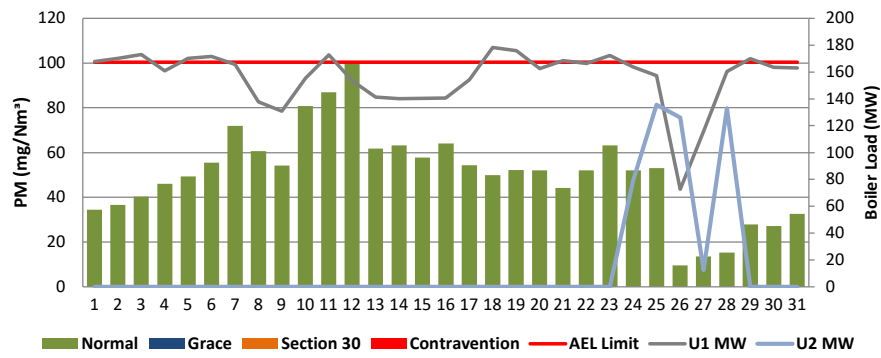


Figure 2: Camden Stack 2 PM Emissions - February 2022

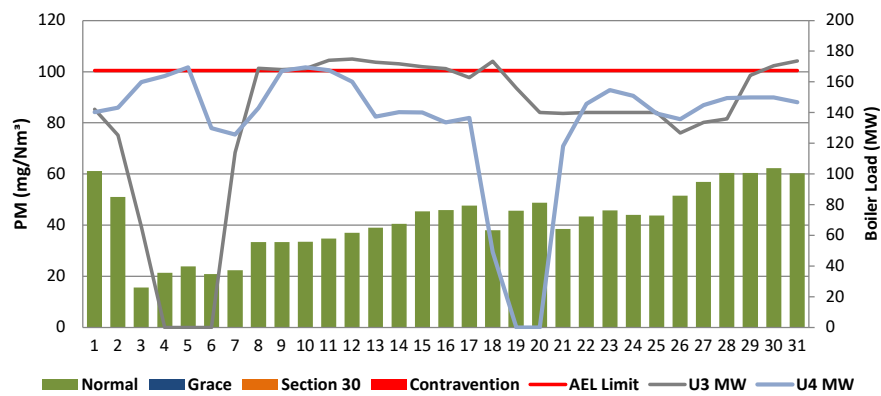


Figure 3: Camden Stack 3 PM Emissions - February 2022

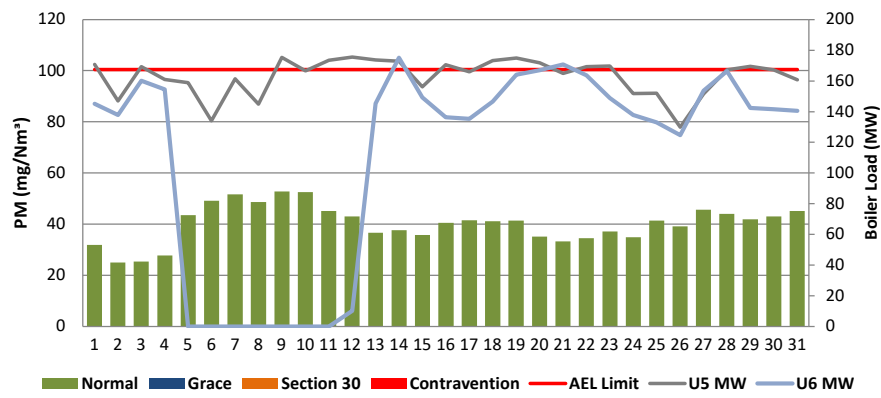


Figure 4: Camden Stack 4 PM Emissions - February 2022

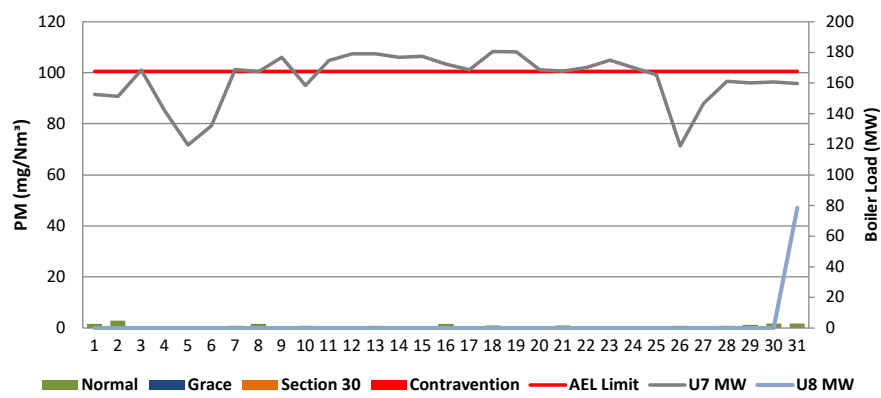


Figure 5: Camden Stack 1 SOx Emissions - February 2022

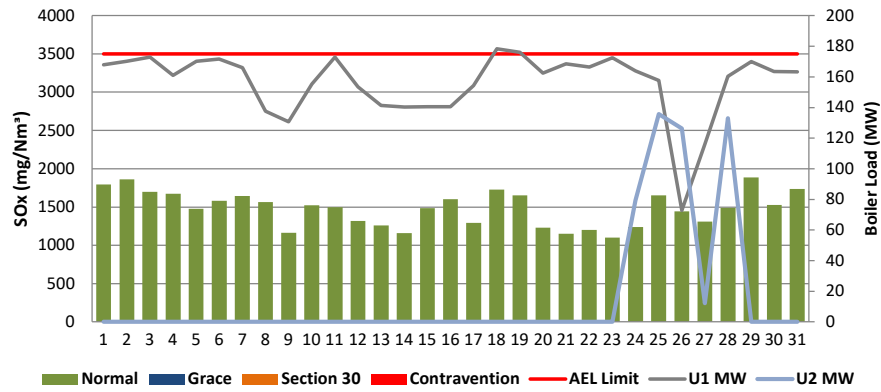


Figure 6: Camden Stack 2 SOx Emissions - February 2022

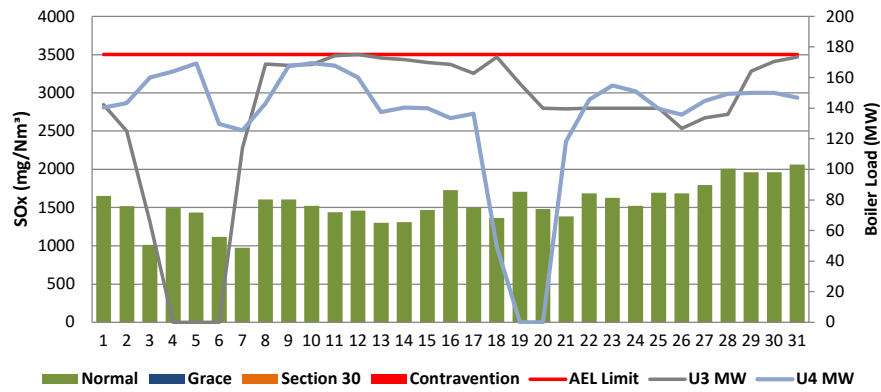


Figure 7: Camden Stack 3 SOx Emissions - February 2022

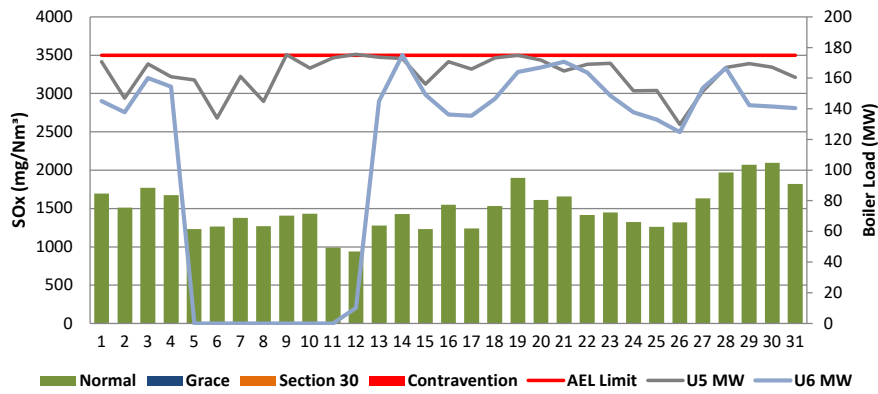


Figure 8: Camden Stack 4 SOx Emissions - February 2022

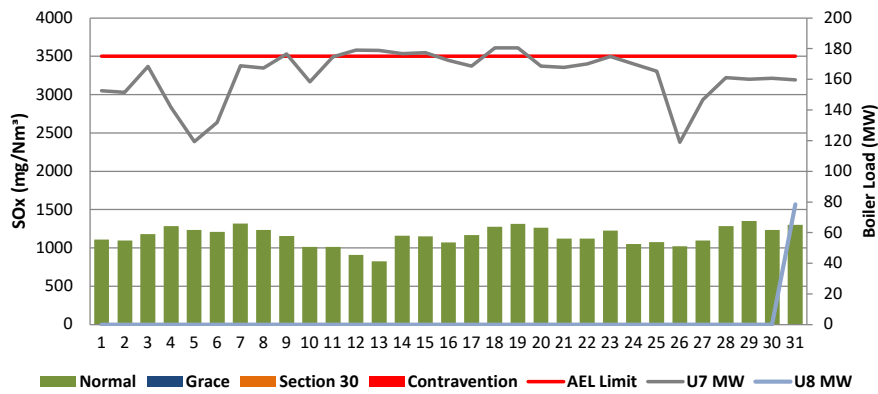


Figure 9: Camden Stack 1 NOx Emissions - February 2022

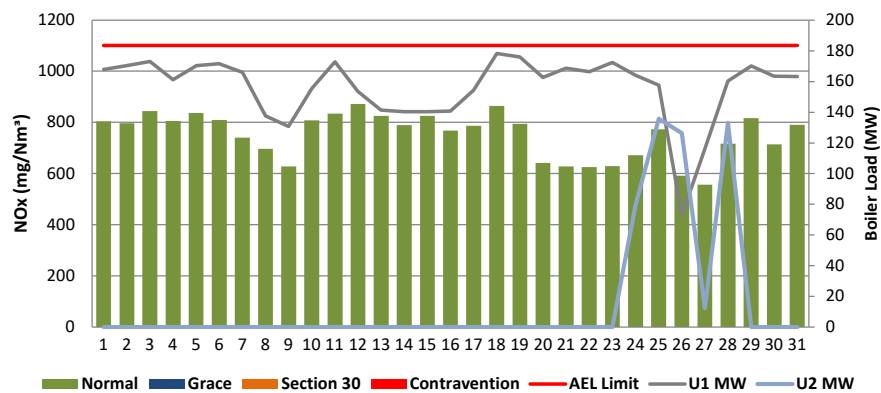


Figure 10: Camden Stack 2 NOx Emissions - February 2022

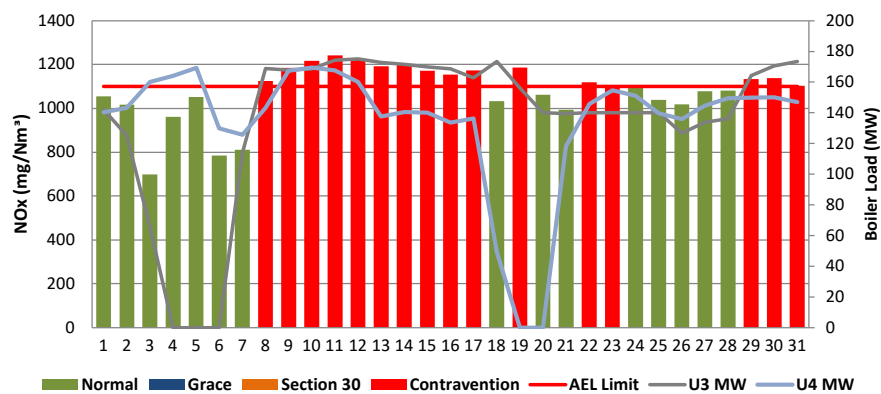


Figure 11: Camden Stack 3 NOx Emissions - February 2022

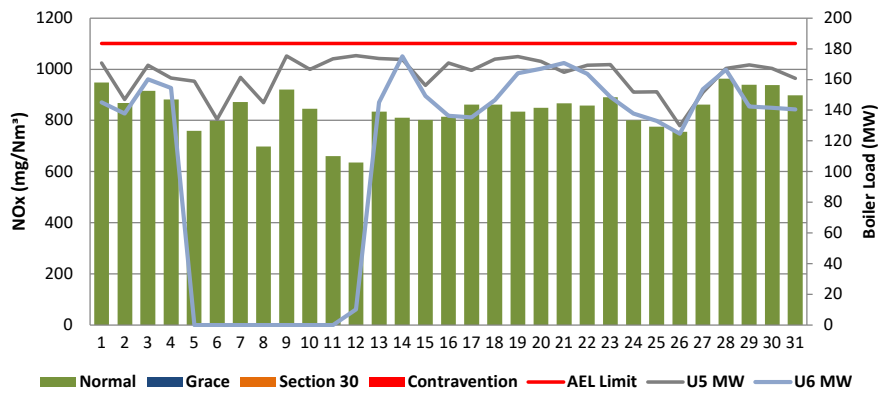
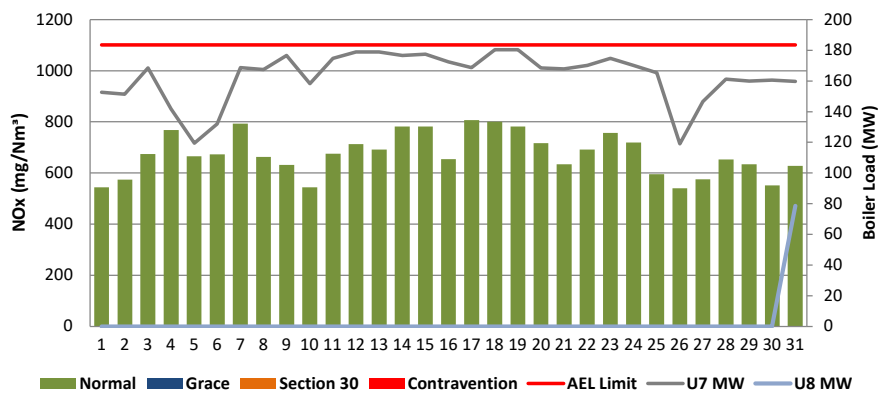


Figure 12: Camden Stack 4 NOx Emissions - February 2022



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

None

Unit 6:

None

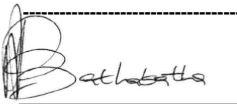
Unit 7:

None

Unit 8:

None

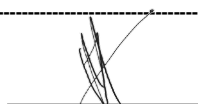
Comments on Use of averages for O2 and CO2 from QAL2 tests as per previous months



Engineering Manager

22/03/2022

Date



Environmental Manager

22/03/2022

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