

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 Jan-2022
	Coal	Tons	550 000	300 688,00
	Fuel Oil	Tons	5 000	5 602,51
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Jan-2022
	Energy	GWh	1600	558,65
	Ash	Tons	not specified	64 738
	RE PM	kg/MWh	not specified	0,213

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19,56	22,99
Sulphur Content	%	< 2	0,90
Ash Content	%	25 to 35	21,53

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 Jan-2022
Unit 1	Fabric Filter Plant (FFP)	99,7%
Unit 2	Fabric Filter Plant (FFP)	Unit Off-line
Unit 3	Fabric Filter Plant (FFP)	99,68%
Unit 4	Fabric Filter Plant (FFP)	99,67%
Unit 5	Fabric Filter Plant (FFP)	99,85%
Unit 6	Fabric Filter Plant (FFP)	99,86%
Unit 7	Fabric Filter Plant (FFP)	99,99%
Unit 8	Fabric Filter Plant (FFP)	Unit Off-line

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	100,0	100,0	0,0	0,0
Stack 2	100,0	99,5	99,5	0,0	0,0
Stack 3	100,0	100,0	100,0	0,0	0,0
Stack 4	100,0	99,0	98,8	0,0	0,0

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of January-2022

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	20,8	1 405	604	152 981
2	0,0	0	0	0
3	32,4	1 132	635	132 690
4	35,5	1 206	677	142 893
5	17,8	1 336	684	147 719
6	11,5	1 041	515	113 388
7	0,8	898	354	132 922
8	0,0	0	0	0
SUM	118,8	7 018	3 469	822 593

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	31	0	0	0	0	25,8
Stack 2	31	0	0	0	0	52,2
Stack 3	31	0	0	0	0	23,0
Stack 4	23	0	0	0	0	1,2
SUM	116	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	1 748,0
Stack 2	31	0	0	0	0	1 747,4
Stack 3	31	0	0	0	0	1 737,4
Stack 4	24	0	0	0	0	1 312,8
SUM	117	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	751,1
Stack 2	31	0	0	0	0	985,9
Stack 3	30	0	1	0	1	887,3
Stack 4	24	0	0	0	0	517,6
SUM	116	0	1	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 - January 2022

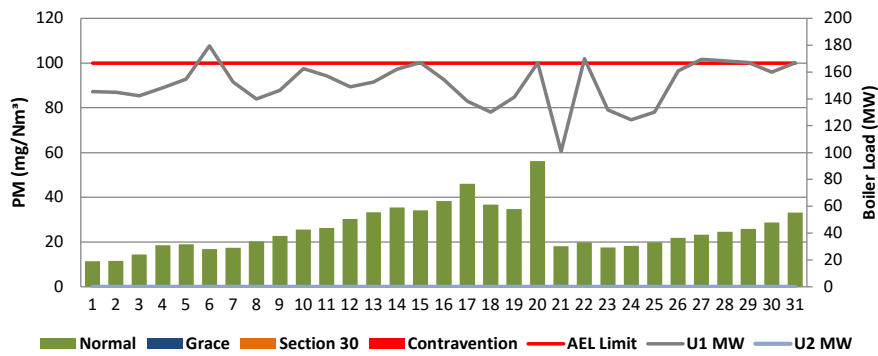


Figure 2: Camden Stack 2 PM Emissions - January 2022

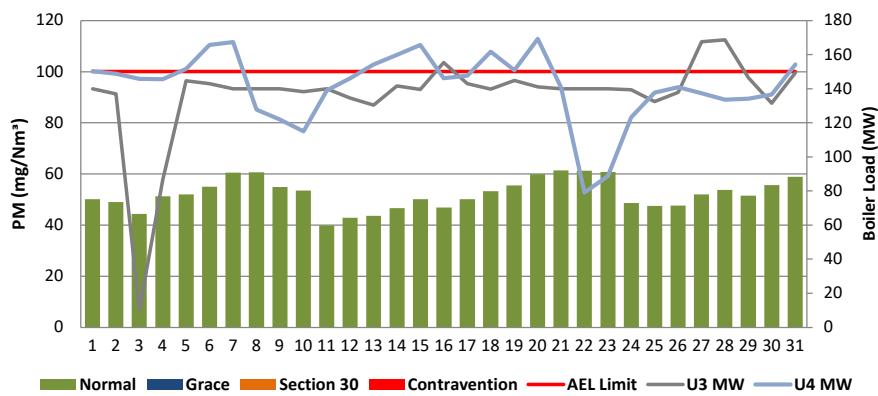


Figure 3: Camden Stack 3 PM Emissions - January 2022

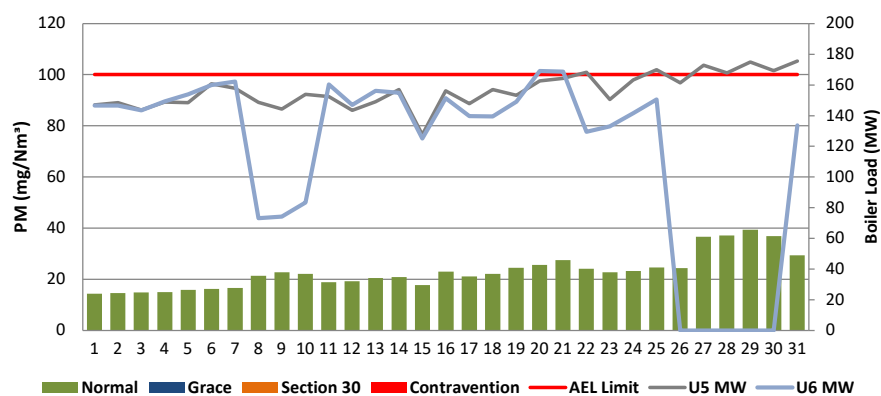


Figure 4: Camden Stack 4 PM Emissions - January 2022

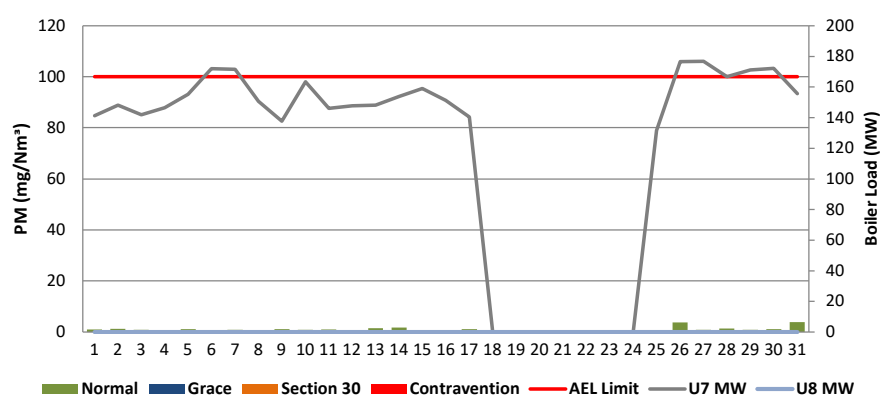


Figure 5: Camden Stack 1 SOx Emissions - January 2022

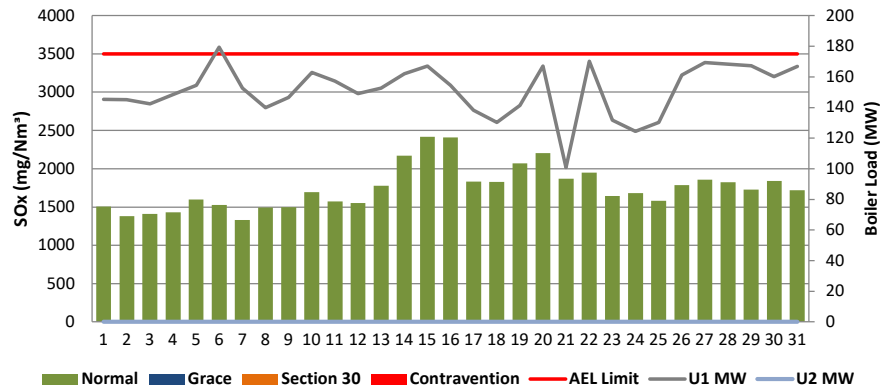


Figure 6: Camden Stack 2 SOx Emissions - January 2022

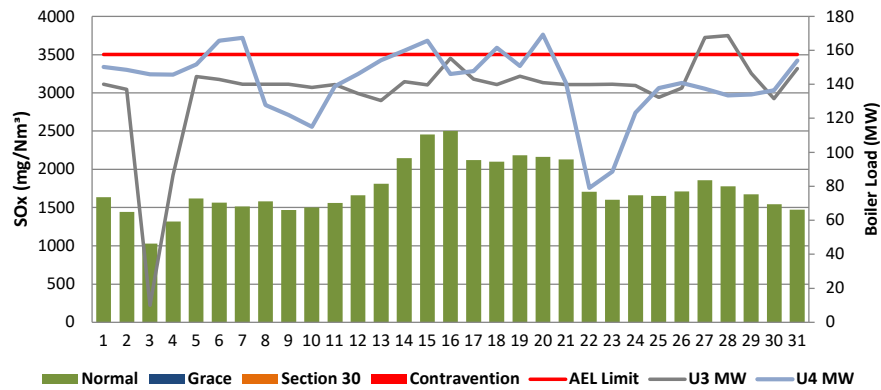


Figure 7: Camden Stack 3 SOx Emissions - January 2022

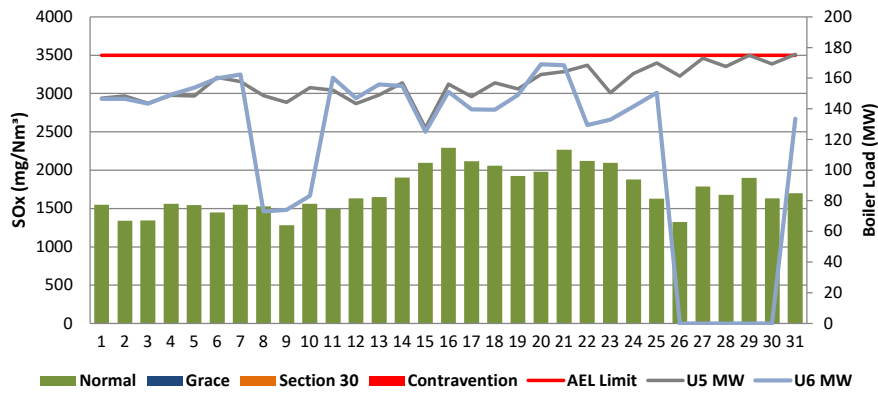


Figure 8: Camden Stack 4 SOx Emissions - January 2022

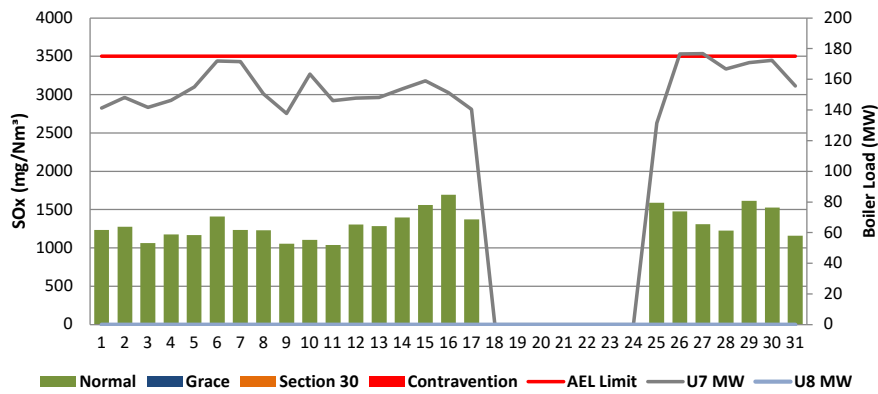


Figure 9: Camden Stack 1 NOx Emissions - January 2022

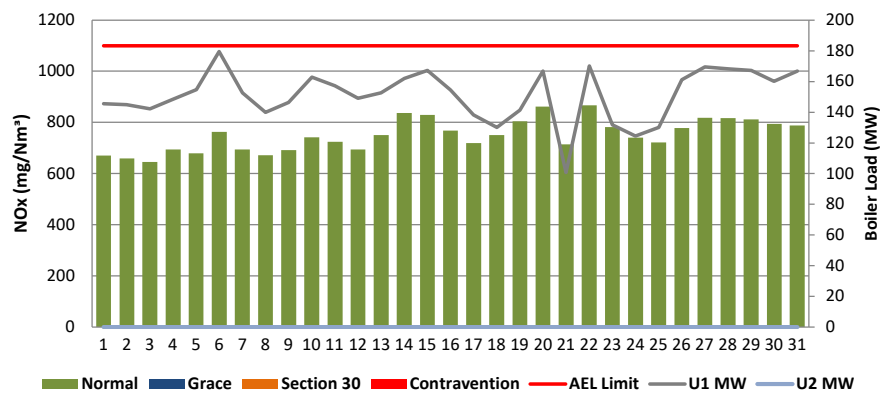


Figure 10: Camden Stack 2 NOx Emissions - January 2022

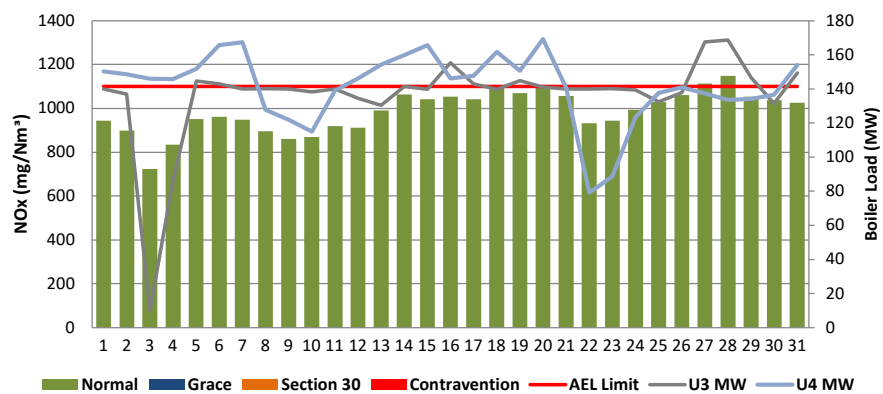


Figure 11: Camden Stack 3 NOx Emissions - January 2022

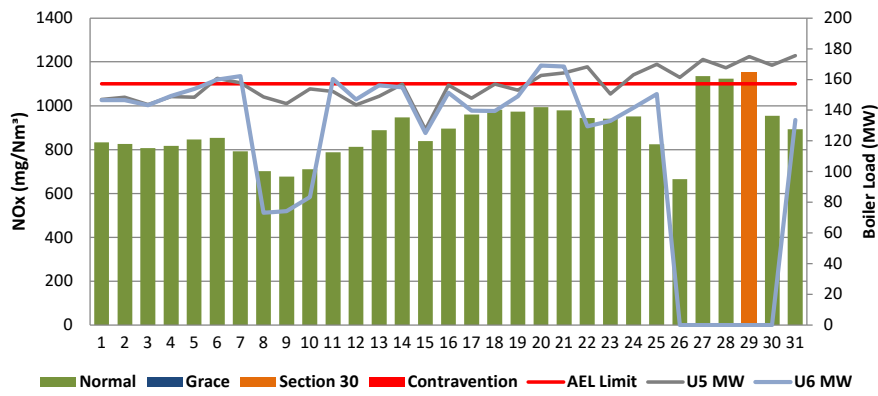
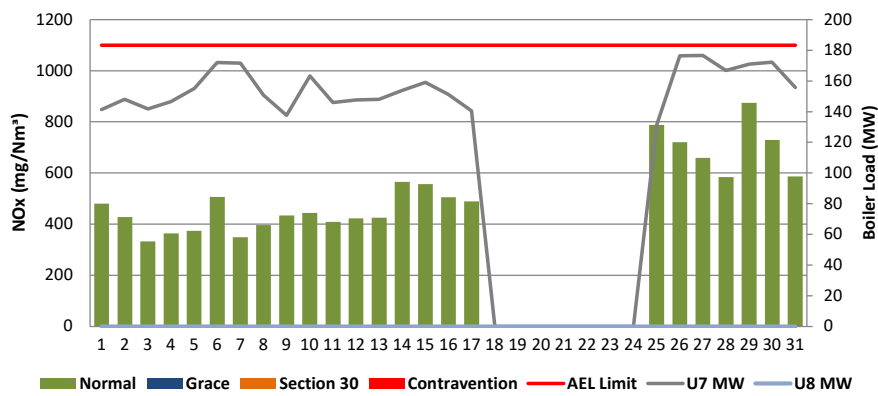


Figure 12: Camden Stack 4 NOx Emissions - January 2022



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
Fuel oil was exceeded for the Month of January 2022

	17/03/2022		17/03/2022
Engineering Manager	Date	Environmental Manager	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