

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 Rate	Consumption Rate Feb-2020
	Coal	Tons	550 000	188 945.00
	Fuel Oil	Tons	5 000	2 609.22
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Feb-2020
	Energy	GWh	1600	364.13
	Ash	Tons	not specified	42 645
	RE PM	kg/MWh	not specified	0.278

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	22.57

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SOx	NOx
Stack 1	100	3500	1300
Stack 2	100	3500	1300
Stack 3	100	3500	1300
Stack 4	100	3500	1300

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Feb-2020
Unit 1	Fabric Filter Plant (FFP)	100.0%
Unit 2	Fabric Filter Plant (FFP)	99.98%
Unit 3	Fabric Filter Plant (FFP)	99.69%
Unit 4	Fabric Filter Plant (FFP)	99.67%
Unit 5	Fabric Filter Plant (FFP)	Unit Off-line
Unit 6	Fabric Filter Plant (FFP)	99.54%
Unit 7	Fabric Filter Plant (FFP)	99.42%
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
Stack 1	100.0	97.9	98.8	
Stack 2	100.0	89.5	83.9	
Stack 3	100.0	80.4	77.6	
Stack 4	100.0	98.6	98.2	

6 EMISSION PERFORMANCE

Table 6.1 Monthly tonnages for the month of February-2020

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	2.2	1.448	664	
2	1.6	1.141	530	
3	24.1	1.474	660	
4	28.5	1.818	839	
5	0.0	3	1	
6	11.4	370	130	
7	33.4	698	302	
8	0.0	0	0	
SUM	101.2	6.951	3.126	

Table 6.2: Operating days in compliance to PM AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	28	0	0	0	0	2.9
Stack 2	31	0	0	0	0	36.0
Stack 3	7	0	0	0	0	59.8
Stack 4	18	0	0	0	0	56.1
SUM	84	0	0	0	0	

Table 6.3: Operating days in compliance to SOx AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	29	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	9	0	0	0	0	0.0
Stack 4	19	0	0	0	0	0.0
SUM	88	0	0	0	0	

Table 6.4: Operating days in compliance to NOx AEL Limit - February 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	29	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	9	0	0	0	0	0.0
Stack 4	19	0	0	0	0	0.0
SUM	88	0	0	0	0	

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

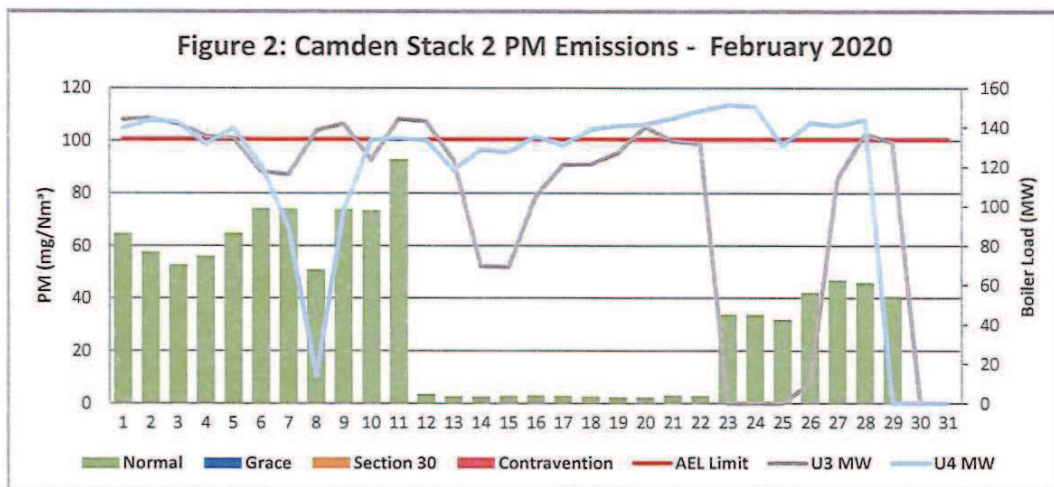
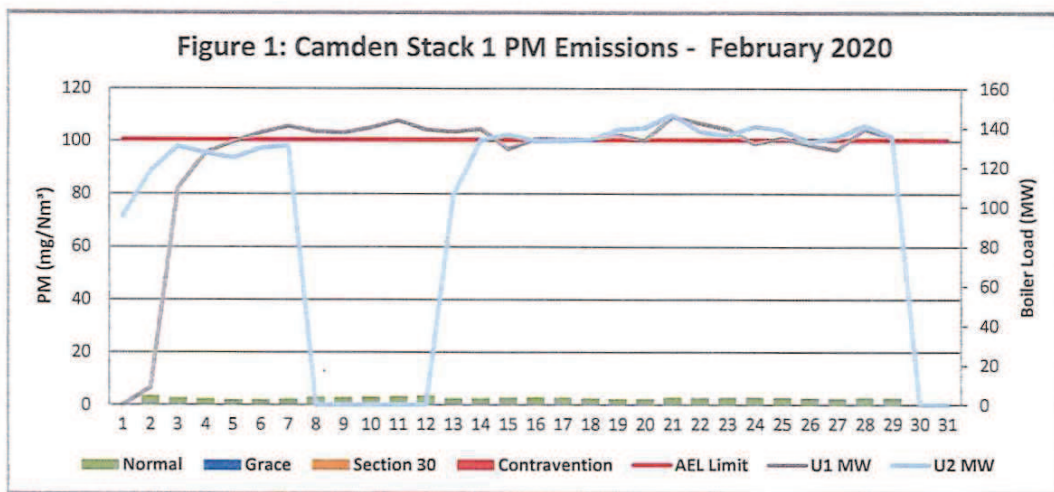


Figure 3: Camden Stack 3 PM Emissions - February 2020

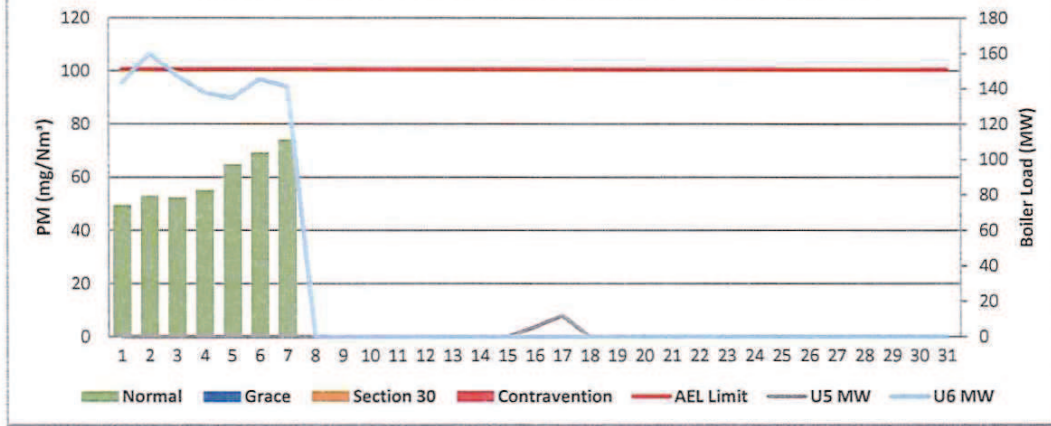


Figure 4: Camden Stack 4 PM Emissions - February 2020

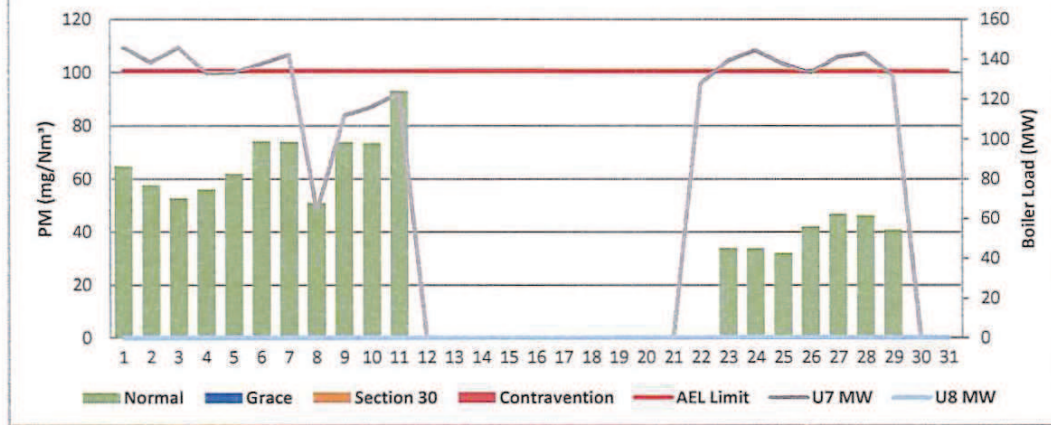


Figure 5: Camden Stack 1 SOx Emissions - February 2020

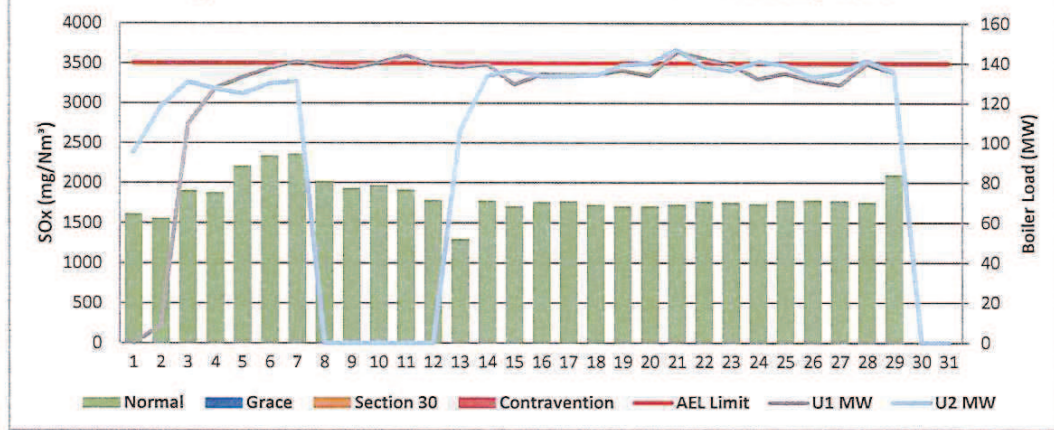


Figure 6: Camden Stack 2 SOx Emissions - February 2020

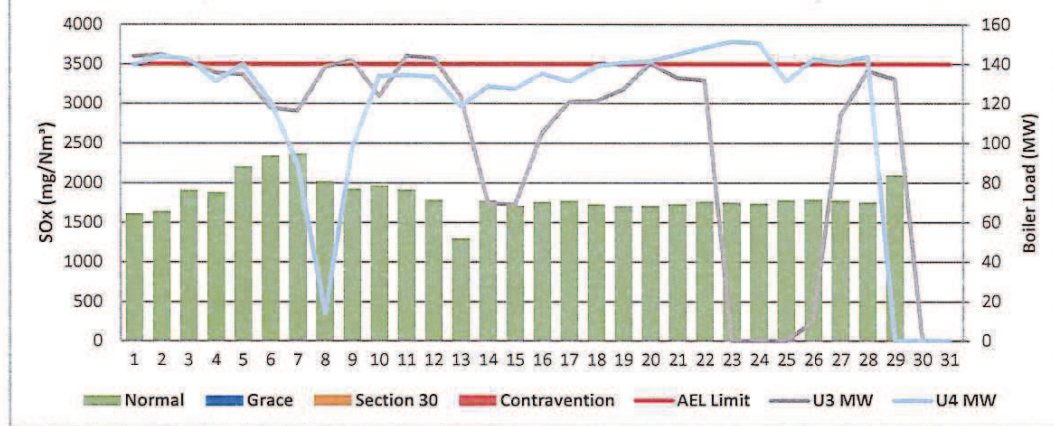


Figure 7: Camden Stack 3 SOx Emissions - February 2020

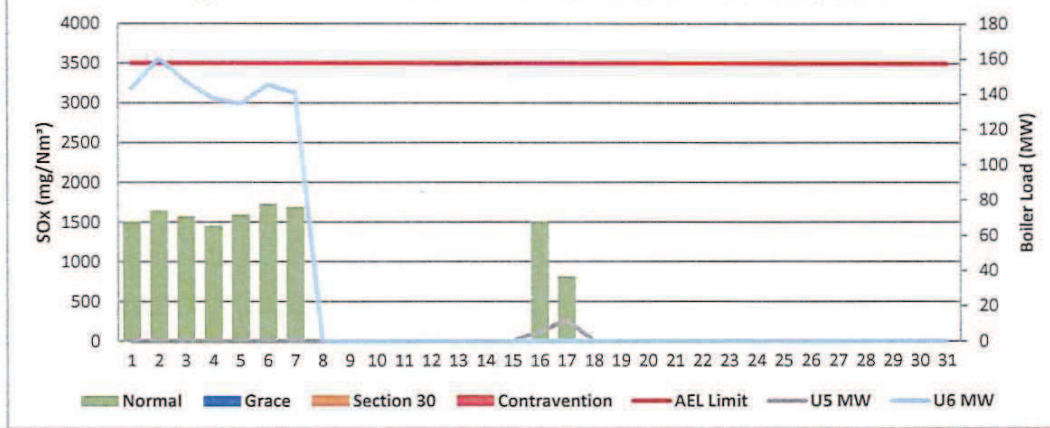


Figure 8: Camden Stack 4 SOx Emissions - February 2020

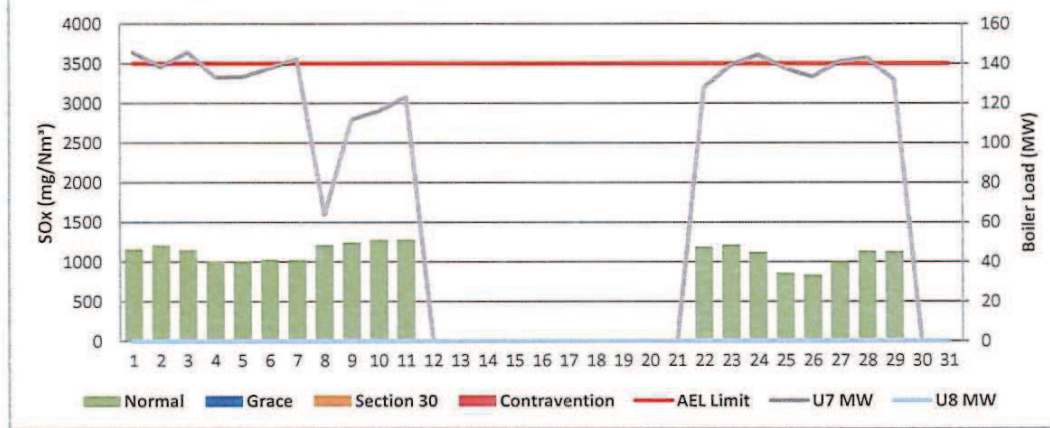


Figure 9: Camden Stack 1 NOx Emissions - February 2020

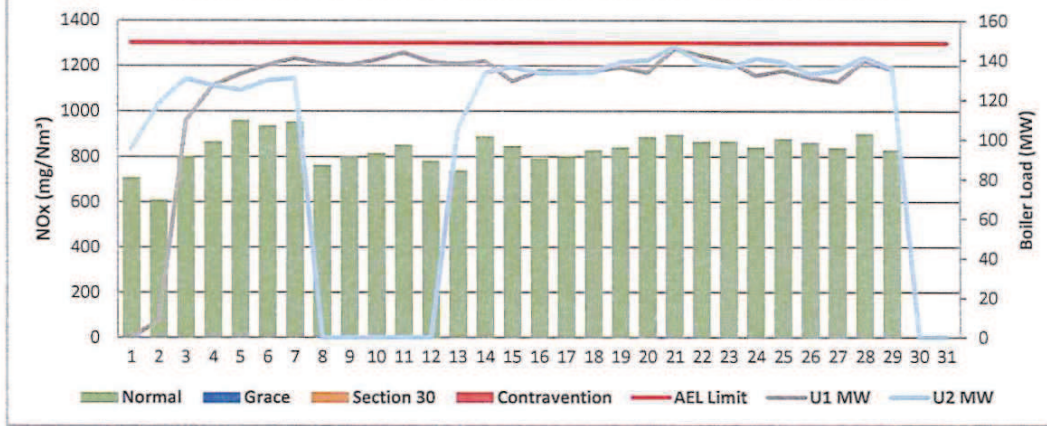
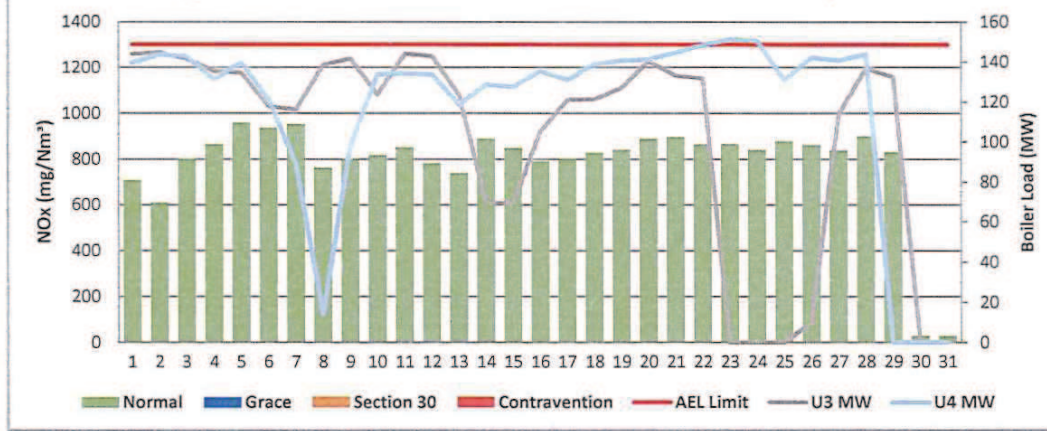
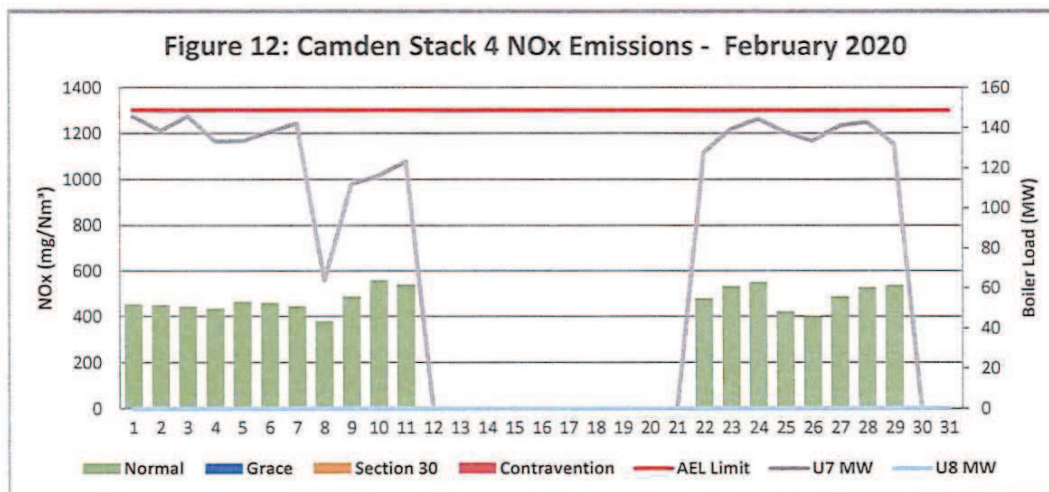
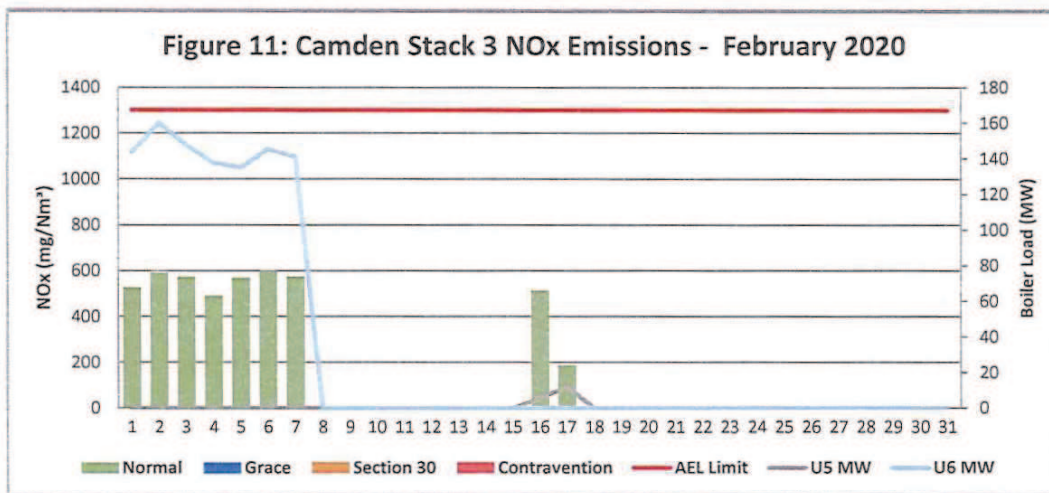


Figure 10: Camden Stack 2 NOx Emissions - February 2020





10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

None

Unit 5:

Offload

Unit 6:

None

Unit 7:

None

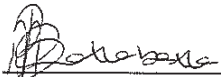
Unit 8:

Offload

Please note that the issues on Stack 2 still exists

No exceedances

Fuel consumption was within the limit


Engineering Manager

19/03/2020
Date


Environmental Manager

19/03/2020 .
Date

Compiled by Environmental Department&verified by Boiler Eng

For Department of Environmental Affairs and Tourism

Copies Eskom Environmental Management

Group Technology Engineering

Camden Power Station

Env Practitioner & System Eng

Chief Air Pollution Control Officer

D Herbst
B Mccourt

R Ramplar
E Patel

Engineering Manager
Operating Manager
Maintenance Manager
Unit Production Manager
Boiler Engineering Manager
System Engineer
Environmental Officer
Performance and Test
Production Manager