

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 Mar-2020
	Coal	Tons	550 000	222 715.00
	Fuel Oil	Tons	5 000	1 718.87
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Production Rate Mar-2020
	Energy	GWh	1600	367.22
	Ash	Tons	not specified	51 247
	RE PM	kg/MWh	not specified	0.293

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	22.38
Sulphur Content	%	< 2	0.90
Ash Content	%	25 to 35	23.01

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO _x	NO _x
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 Mar-2020
Unit 1	Fabric Filter Plant (FFP)	100.0%
Unit 2	Fabric Filter Plant (FFP)	99.98%
Unit 3	Fabric Filter Plant (FFP)	99.67%
Unit 4	Fabric Filter Plant (FFP)	Unit Off-line
Unit 5	Fabric Filter Plant (FFP)	Unit Off-line
Unit 6	Fabric Filter Plant (FFP)	Unit Off-line
Unit 7	Fabric Filter Plant (FFP)	99.54%
Unit 8	Fabric Filter Plant (FFP)	99.68%

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	98.4	100.0	96.1
Stack 2	99.8	80.2	0.0	0.0
Stack 3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Stack 4	100.0	96.7	98.6	86.0

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of March-2020

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	2.8	1 316	600	178 476
2	1.7	948	443	130 737
3	29.8	1 164	516	156 832
4	0.0	0	0	0
5	0.0	0	0	0
6	0.0	0	0	0
7	43.0	829	378	137 624
8	30.5	890	407	151 451
SUM	107.7	5 147	2 345	755 120

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	31	0	0	0	0	3.2
Stack 2	31	0	0	0	0	47.5
Stack 3	0	0	0	0	0	
Stack 4	31	0	0	0	0	47.5
SUM	93	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	0	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	93	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	0.0
Stack 2	31	0	0	0	0	0.0
Stack 3	0	0	0	0	0	0.0
Stack 4	31	0	0	0	0	0.0
SUM	93	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 1: Camden Stack 1 PM Emissions - March 2020

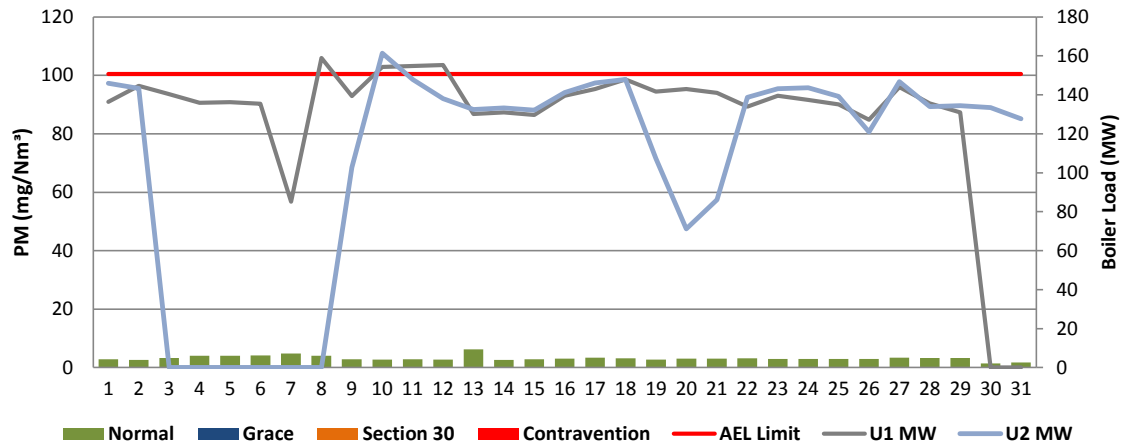


Figure 2: Camden Stack 2 PM Emissions - March 2020

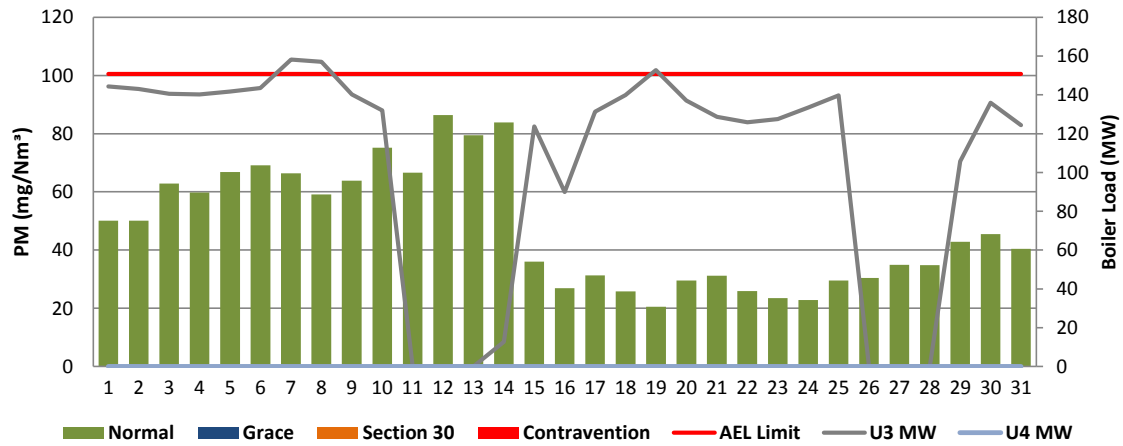


Figure 3: Camden Stack 3 PM Emissions - March 2020

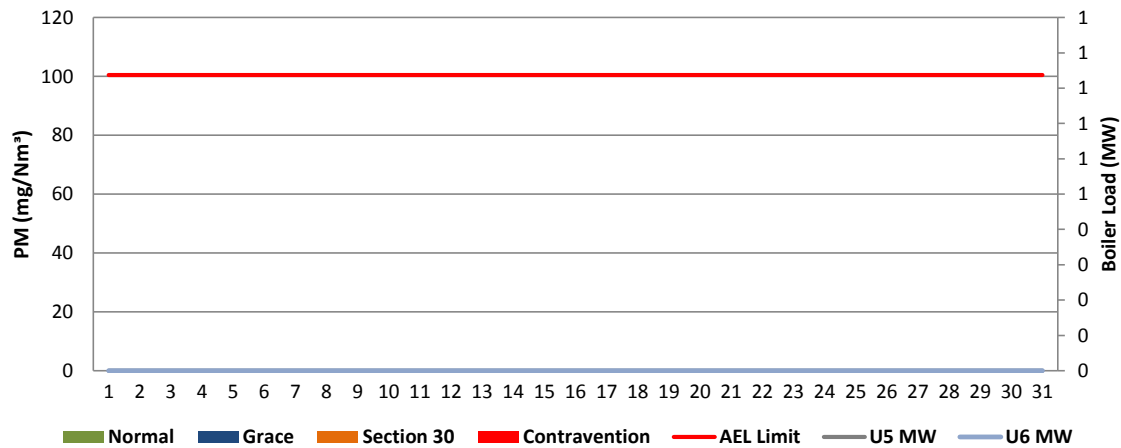


Figure 4: Camden Stack 4 PM Emissions - March 2020

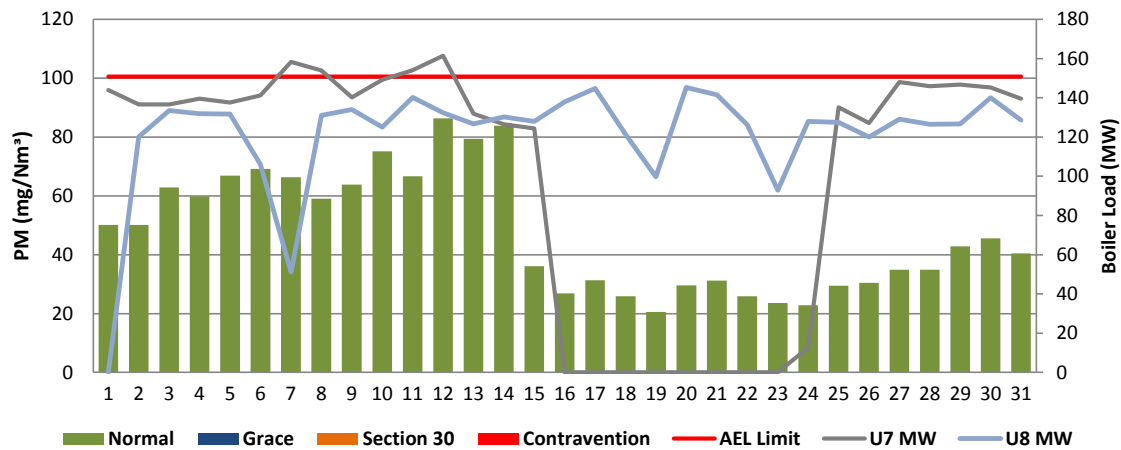


Figure 5: Camden Stack 1 SOx Emissions - March 2020

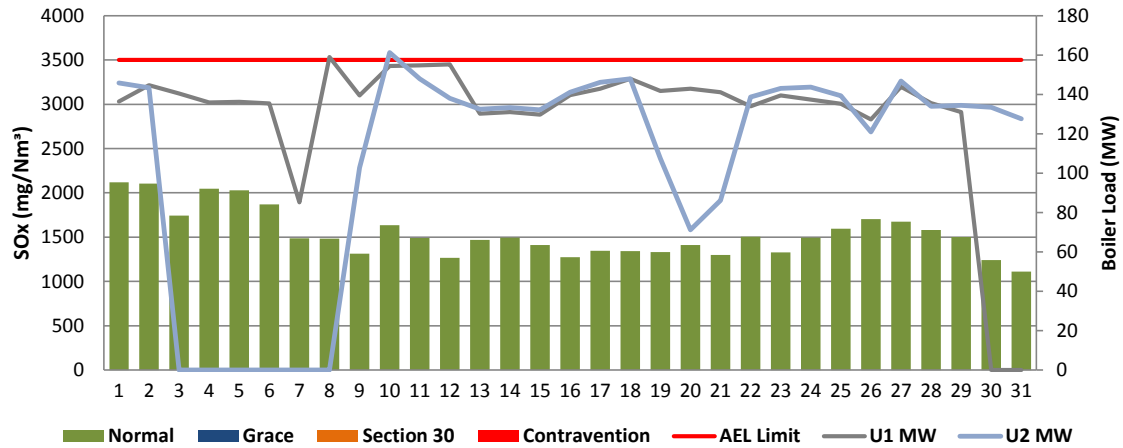


Figure 6: Camden Stack 2 SOx Emissions - March 2020

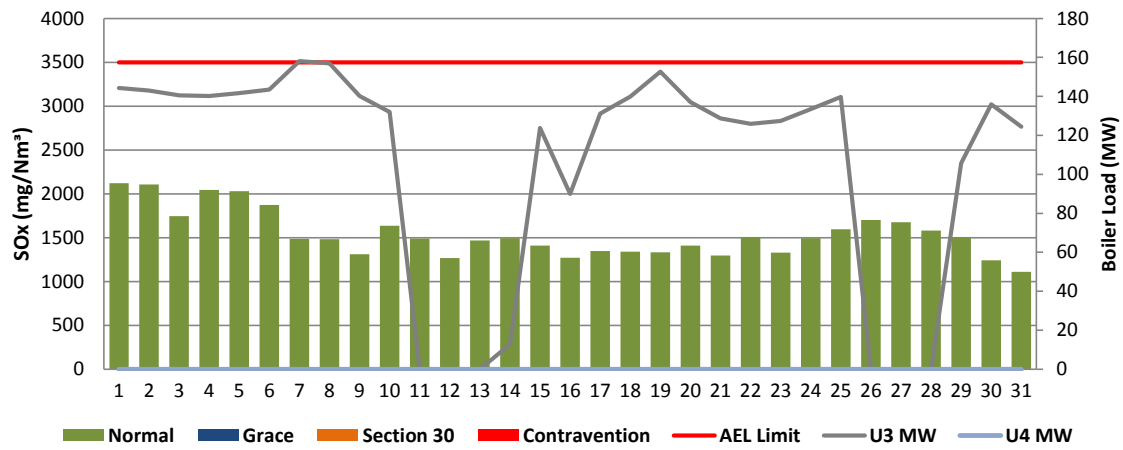


Figure 7: Camden Stack 3 SOx Emissions - March 2020

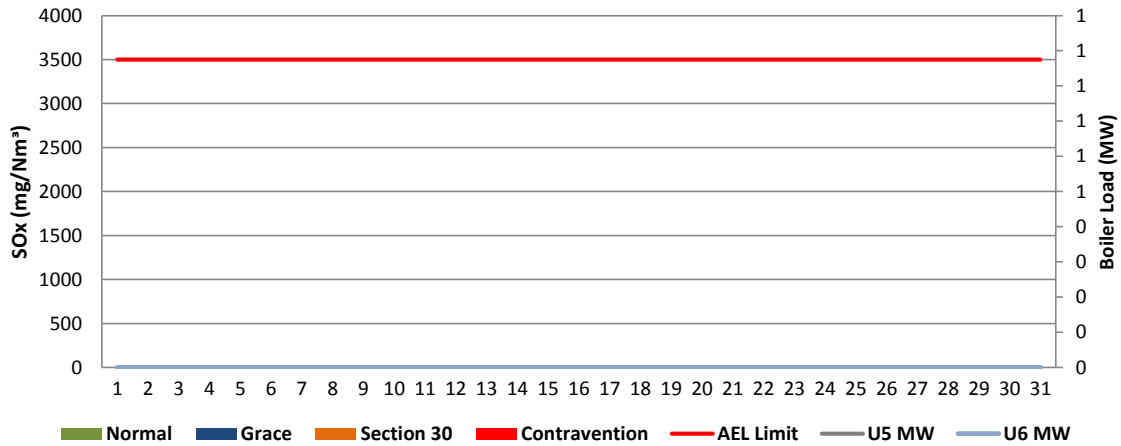


Figure 8: Camden Stack 4 SOx Emissions - March 2020

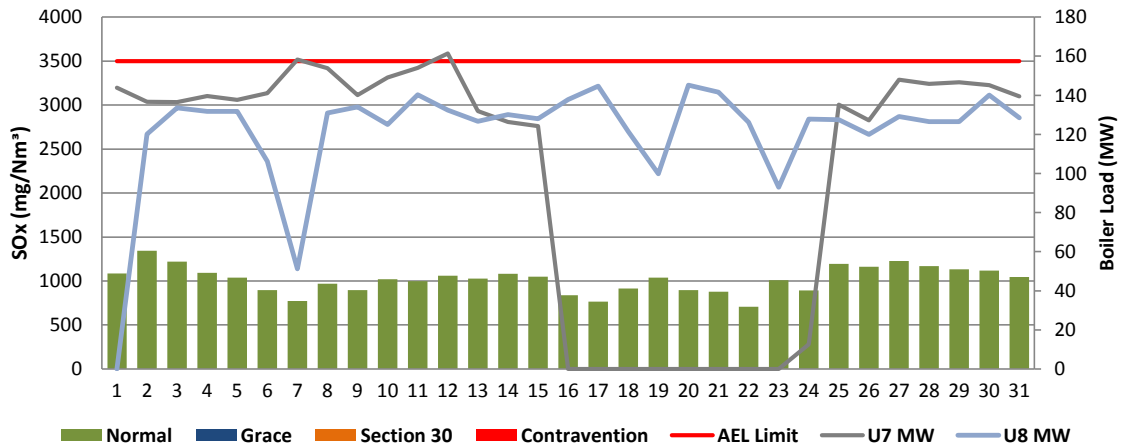


Figure 9: Camden Stack 1 NOx Emissions - March 2020

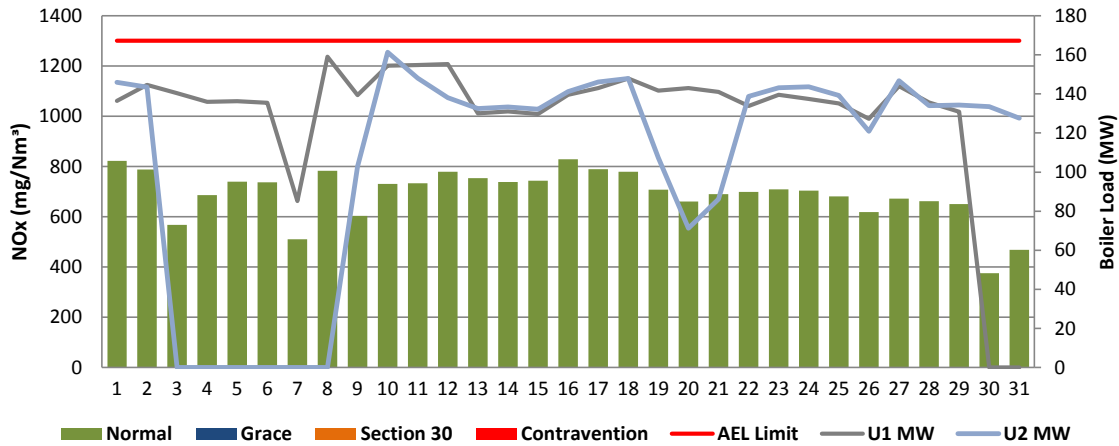


Figure 10: Camden Stack 2 NOx Emissions - March 2020

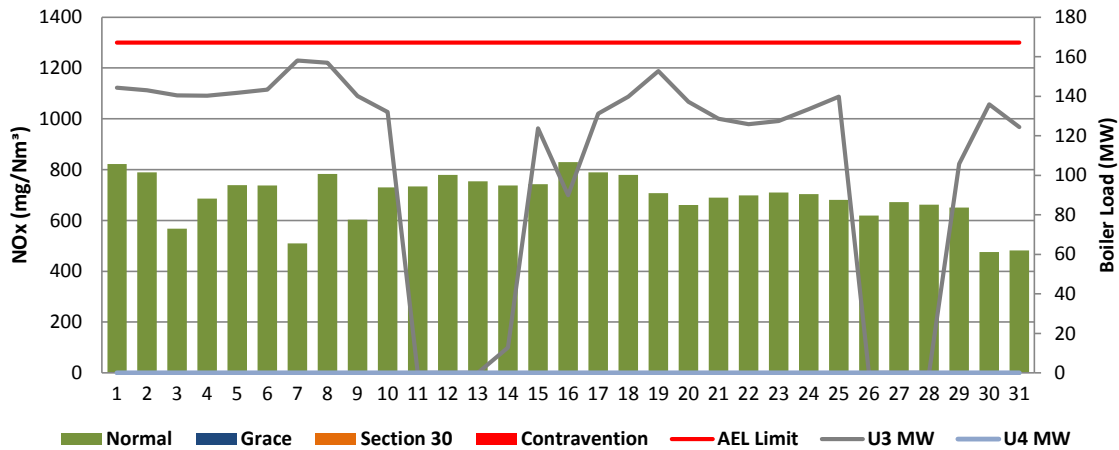


Figure 11: Camden Stack 3 NOx Emissions - March 2020

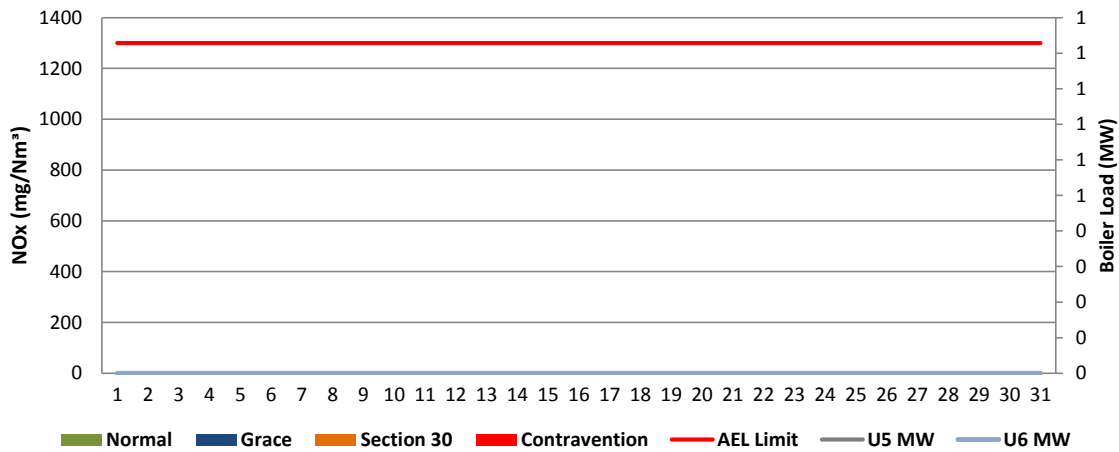
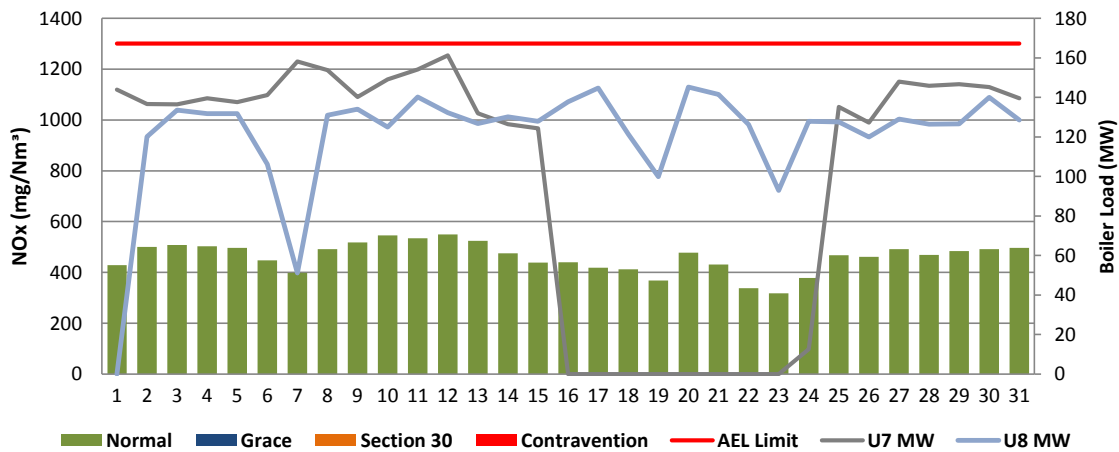


Figure 12: Camden Stack 4 NOx Emissions - March 2020



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

Unit off due to ash dam constraints

Unit 5:

The unit was expected to return from GO in late December but during RTS & commissioning further issues were discovered so the unit had to be shutdown again.

Unit 6:

Unit off due to ash dam constraints

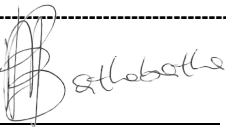
Unit 7:

None

Unit 8:

None

Please note stack 2 reporting is done in line with the letter sent to GSDM



Engineering Manager

08/05/2020

Date



Environmental Manager

08/05/2020

Date

Compiled by: Environmental Department&verified by Boiler Eng

For: Department of Environmental Affairs and Tourism

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Unit Production Manager
Boiler Engineering Manager
System Engineer
Environmental Officer
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Production Manager