

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 Apr-2021
	Coal	Tons	550 000	418 841,00
	Fuel Oil	Tons	5 000	3 285,94
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Apr-2021
	Energy	GWh	1600	539,66
	Ash	Tons	not specified	100 606
	RE PM	kg/MWh	not specified	0,077

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19,56	22,00
Sulphur Content	%	< 2	0,90
Ash Content	%	25 to 35	24,02

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SOx	NOx
Stack 1	50	3500	1100
Stack 2	50	3500	1100
Stack 3	50	3500	1100
Stack 4	50	3500	1100

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Apr-2021
Unit 1	Fabric Filter Plant (FFP)	99,9%
Unit 2	Fabric Filter Plant (FFP)	99,94%
Unit 3	Fabric Filter Plant (FFP)	99,96%
Unit 4	Fabric Filter Plant (FFP)	100,00%
Unit 5	Fabric Filter Plant (FFP)	99,98%
Unit 6	Fabric Filter Plant (FFP)	Unit Off-line
Unit 7	Fabric Filter Plant (FFP)	99,95%
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	50,3	73,8	100,0	100,0
Stack 2	100,0	99,0	99,2	100,0	100,0
Stack 3	100,0	98,5	100,0	100,0	100,0
Stack 4	99,9	97,9	97,9	99,9	99,9

6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of April-2021

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
1	8,9	1 436	491	148 676
2	8,1	1 339	451	135 936
3	6,0	888	503	114 416
4	0,0	42	22	4 600
5	3,1	1 038	541	132 276
6	0,0	0	0	0
7	8,1	1 298	666	166 163
8	7,2	1 230	633	157 655
SUM	41,5	7 271	3 307	859 721

Table 6.2: Operating days in compliance to PM AEL Limit - April 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	31	0	0	0	0	11,4
Stack 2	27	0	0	0	0	11,2
Stack 3	28	0	0	0	0	4,6
Stack 4	31	0	0	0	0	9,6
SUM	117	0	0	0	0	

Table 6.3: Operating days in compliance to SOx AEL Limit - April 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
Stack 1	31	0	0	0	0	1 832,2
Stack 2	28	0	0	0	0	1 577,4
Stack 3	29	0	0	0	0	1 488,4
Stack 4	31	0	0	0	0	1 518,9
SUM	119	0	0	0	0	

Table 6.4: Operating days in compliance to NOx AEL Limit - April 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
Stack 1	31	0	0	0	0	626,7
Stack 2	28	0	0	0	0	891,5
Stack 3	29	0	0	0	0	774,6
Stack 4	31	0	0	0	0	779,8
SUM	119	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 - April 2021

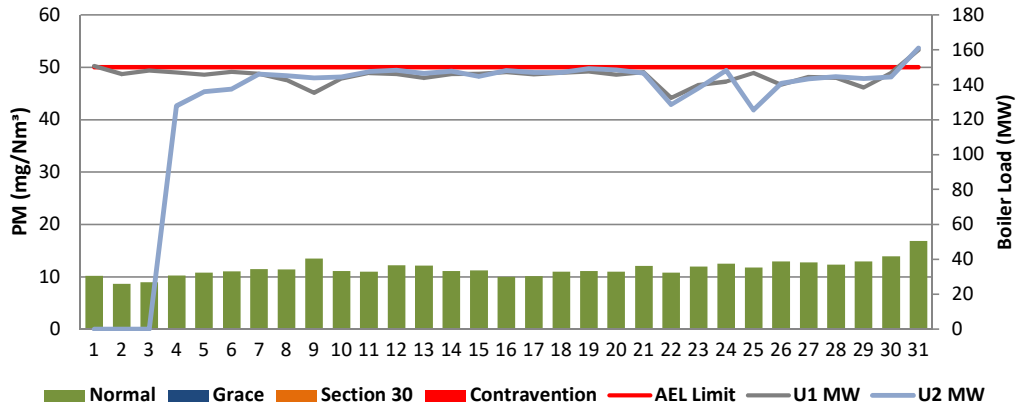


Figure 2: Camden Stack 2 PM Emissions - April 2021

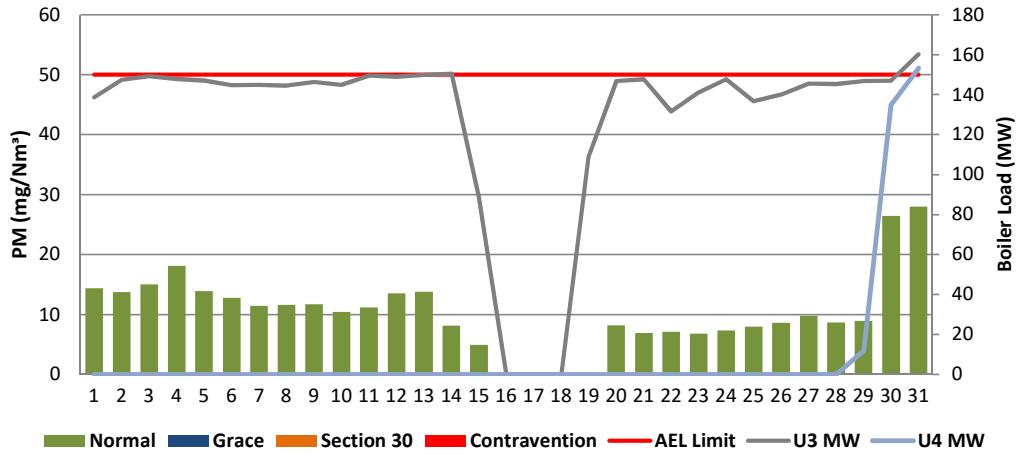


Figure 3: Camden Stack 3 PM Emissions - April 2021

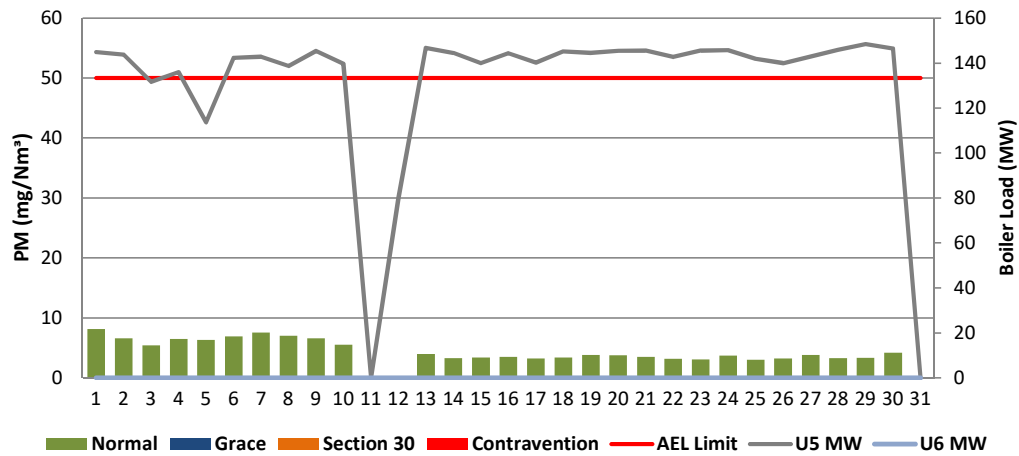


Figure 4: Camden Stack 4 PM Emissions - April 2021

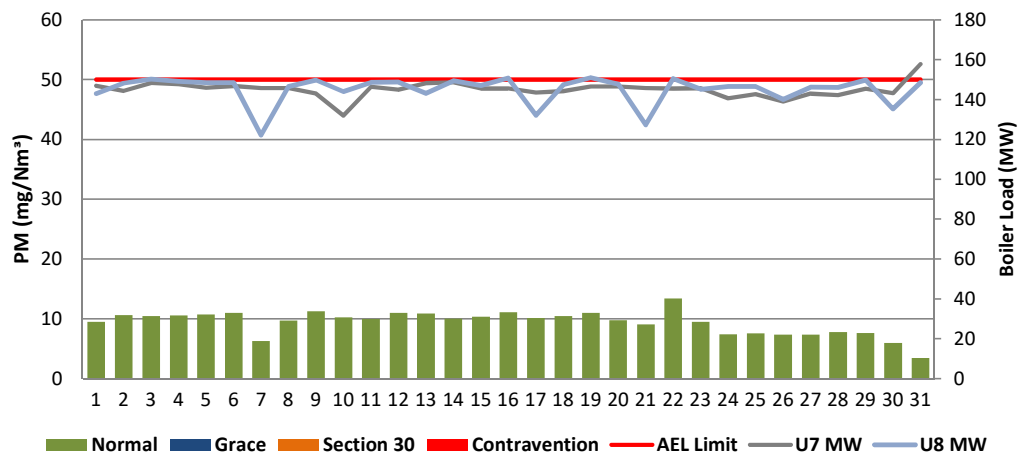


Figure 5: Camden Stack 1 SOx Emissions - April 2021

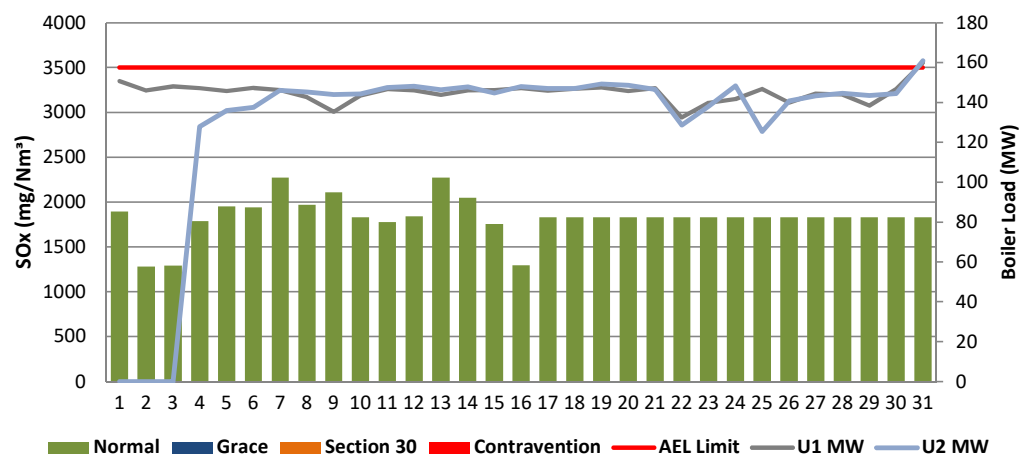


Figure 6: Camden Stack 2 SOx Emissions - April 2021

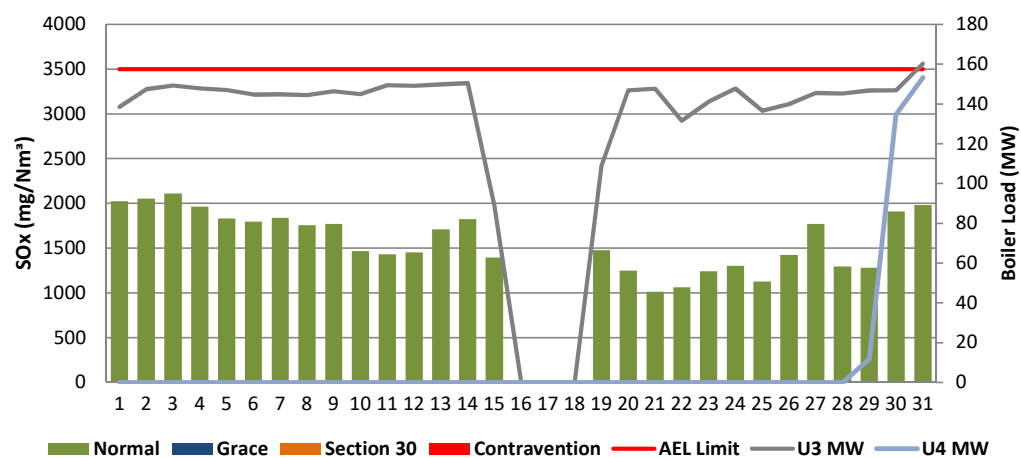


Figure 7: Camden Stack 3 SOx Emissions - April 2021

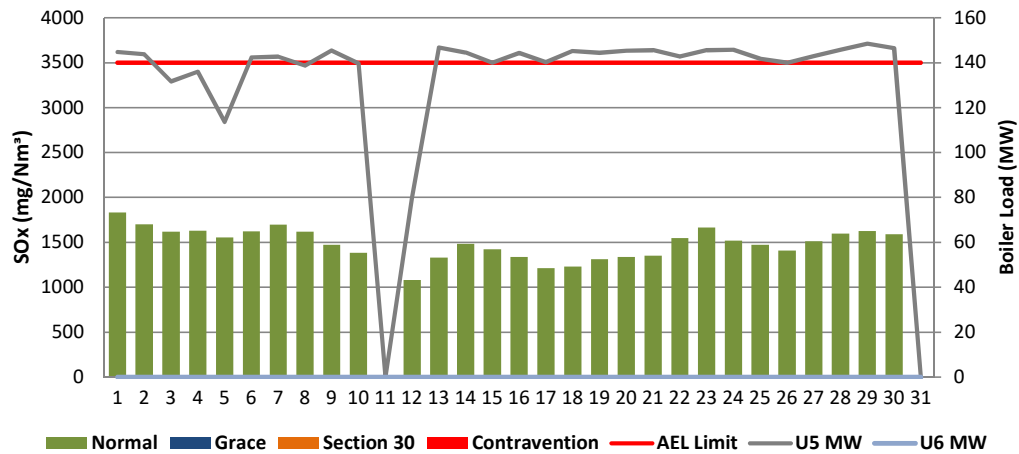


Figure 8: Camden Stack 4 SOx Emissions - April 2021

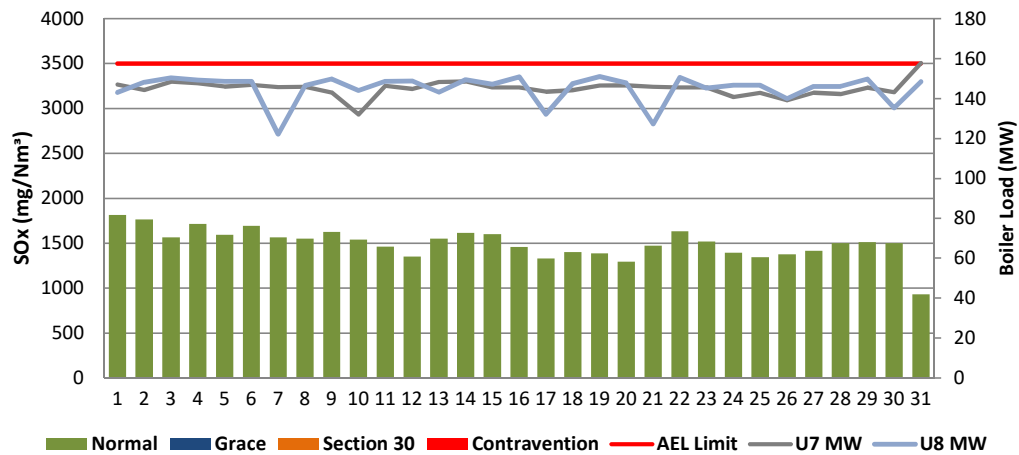


Figure 9: Camden Stack 1 NOx Emissions - April 2021

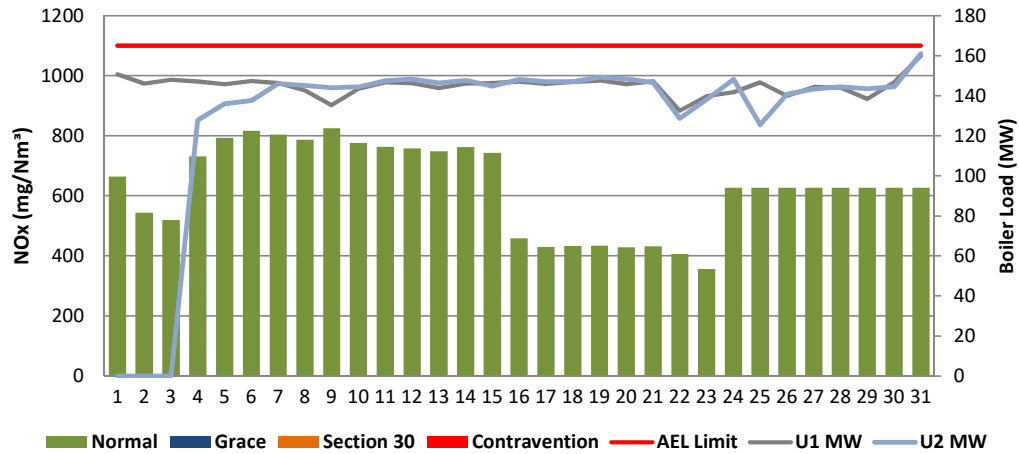


Figure 10: Camden Stack 2 NOx Emissions - April 2021

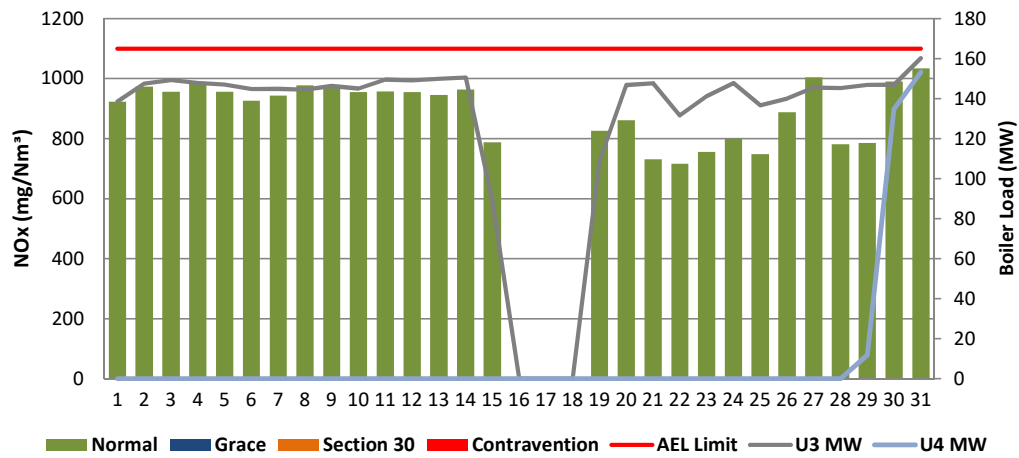


Figure 11: Camden Stack 3 NOx Emissions - April 2021

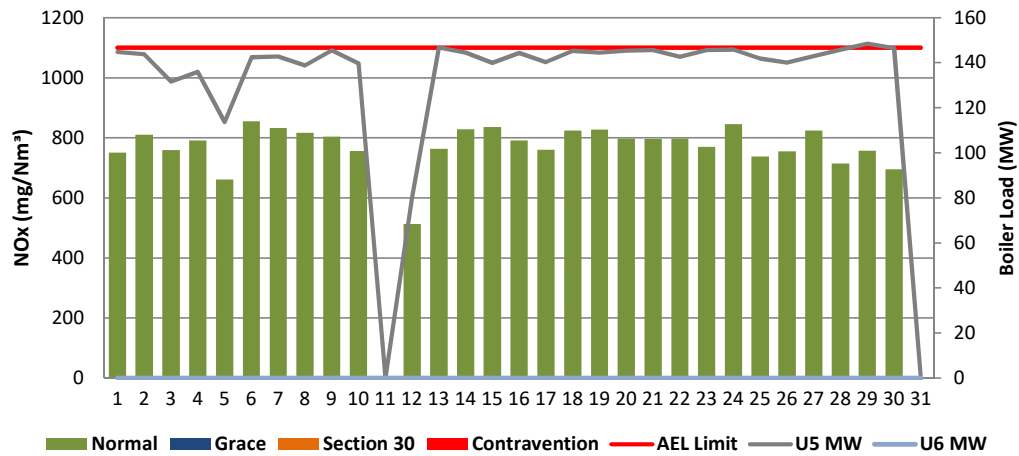
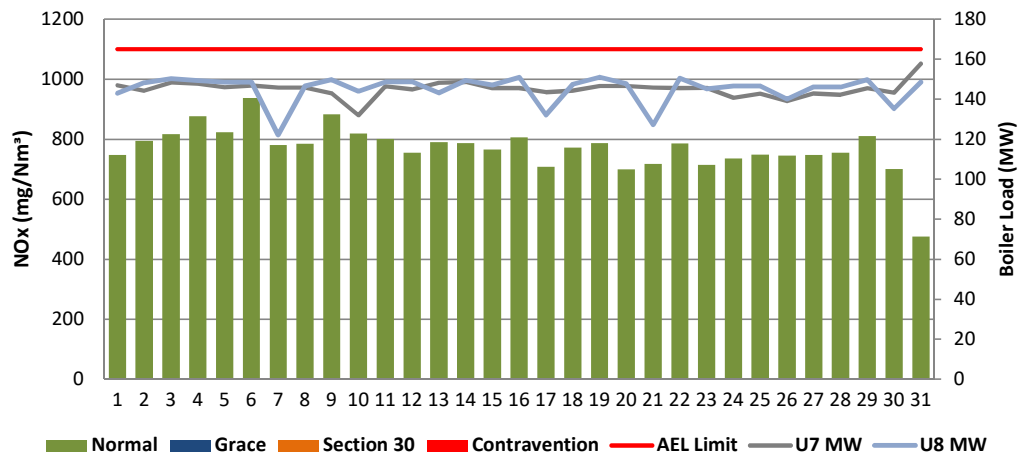


Figure 12: Camden Stack 4 NOx Emissions - April 2021



10 GENERAL / ABNORMALITIES

Unit 1:

None

Unit 2:

None

Unit 3:

None

Unit 4:

The unit was off-load for the month.

Unit 5:

None

Unit 6:

None

Unit 7:

None

Unit 8:

None

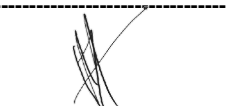
Please note the issues experienced on Stack 1, as per the attached letter from C&I which contributed to the low monitor reliability. Also, there were drift issues experienced on all stack gas monitors which resulted in the O2 and CO2 readings being inaccurate. In the interim, the average O2 and CO2 values from the monitors recorded during the Correlation and QAL2 tests will be used until such time that the monitors are properly serviced and calibrated and the QAL2 tests can be redone.



Engineering Manager

25/05/2021

Date



Environmental Manager

25/05/2021

Date

Compiled by: Environmental Department&verified by Boiler Eng

Env. Practitioner & System Eng

For: Department of Environment, Forestry & Fisheries

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D Herbst
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Gx Compliance Management
Gx Asset Management

R Rampiar
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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