

CAMDEN POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License CPS/0012/2024/F04


1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption	Actual Consumption Jun-2025
	Coal	Tons	550 000	370 171.80
	Fuel Oil	Tons	6 500	1 783.53
Production Rates	Product / By-Product Name	Units	Maximum Production Capacity Permitted	Actual Production Jun-2025
	Energy	GWh	1190	628.72
	Ash	Tons	200 000	77 625
	RE PM	kg/MWh	not specified	0.122

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	19.56	23.45
Sulphur Content	%	< 2	0.90
Ash Content	%	<34	20.97

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM	SO ₂	NO _x
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 Jun-2025
Unit 1	Fabric Filter Plant (FFP)	Exempt
Unit 2	Fabric Filter Plant (FFP)	99.998%
Unit 3	Fabric Filter Plant (FFP)	99.998%
Unit 4	Fabric Filter Plant (FFP)	99.998%
Unit 5	Fabric Filter Plant (FFP)	99.999%
Unit 6	Fabric Filter Plant (FFP)	100.000%
Unit 7	Fabric Filter Plant (FFP)	100.000%
Unit 8	Fabric Filter Plant (FFP)	100.000%

Note: Abatement plant does not have bypass mode operation, hence plant 100% Utilised.

5 MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO
Stack 1	100.0	95.9	96.9
Stack 2	100.0	97.1	97.1
Stack 3	100.0	91.8	93.7
Stack 4	100.0	90.4	95.0

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 June-2025

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
1	Exempt	48	20
2	14.54	999	461
3	20.18	1 016	613
4	25.95	1 263	739
5	1.38	356	161
6	4.07	1 176	505
7	5.15	1 466	1 084
8	5.25	1 494	1 104
SUM	76.51	7 819	4 688

Table 6.2: Operating days in compliance to PM AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
Stack 1	25	0	0	0	0	23.6
Stack 2	29	1	0	0	1	34.2
Stack 3	30	0	0	0	0	6.0
Stack 4	30	0	0	0	0	4.8
SUM	114	1	0	0	1	

Table 6.3: Operating days in compliance to SO₂ AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Stack 1	26	0	0	0	0	1 477.0
Stack 2	30	0	0	0	0	1 630.4
Stack 3	30	0	0	0	0	1 607.0
Stack 4	30	0	0	0	0	1 373.9
SUM	116	0	0	0	0	

Table 6.4: Operating days in compliance to NO_x AEL Limit - June 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm³)
Stack 1	26	0	0	0	0	684.4
Stack 2	29	1	0	0	1	954.5
Stack 3	30	0	0	0	0	685.6
Stack 4	28	2	0	0	2	1 015.3
SUM	113	3	0	0	3	

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 - June 2025

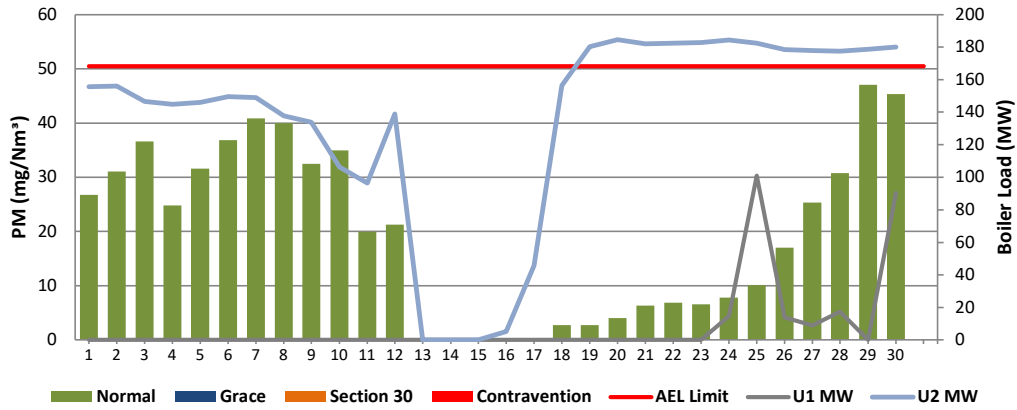


Figure 2: Camden Stack 2 PM Emissions - June 2025

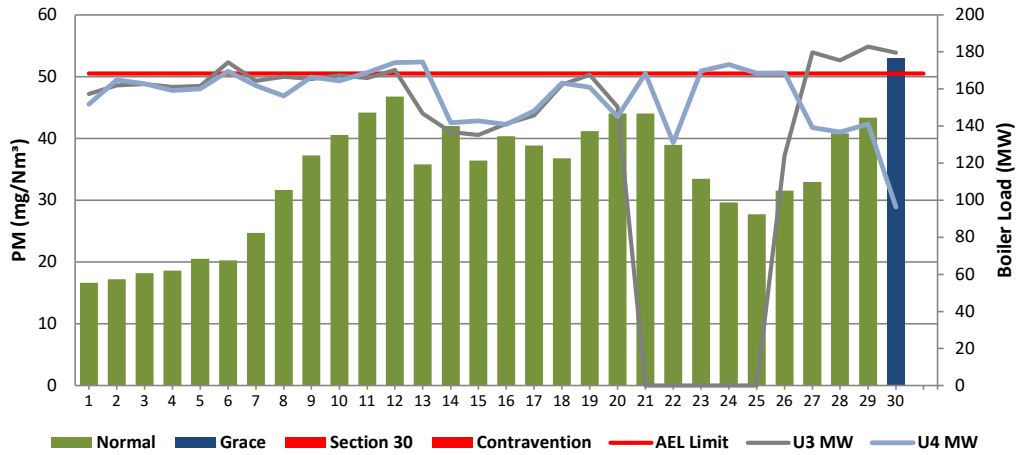


Figure 3: Camden Stack 3 PM Emissions - June 2025

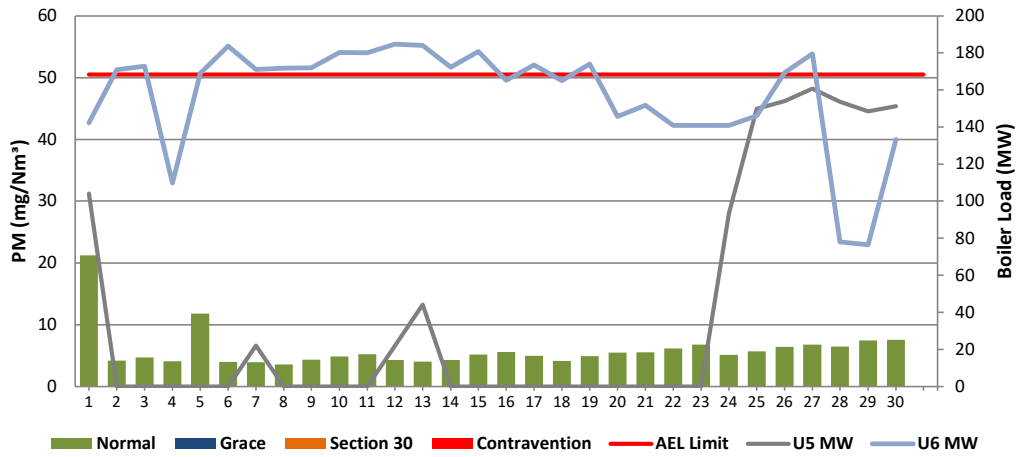


Figure 4: Camden Stack 4 PM Emissions - June 2025

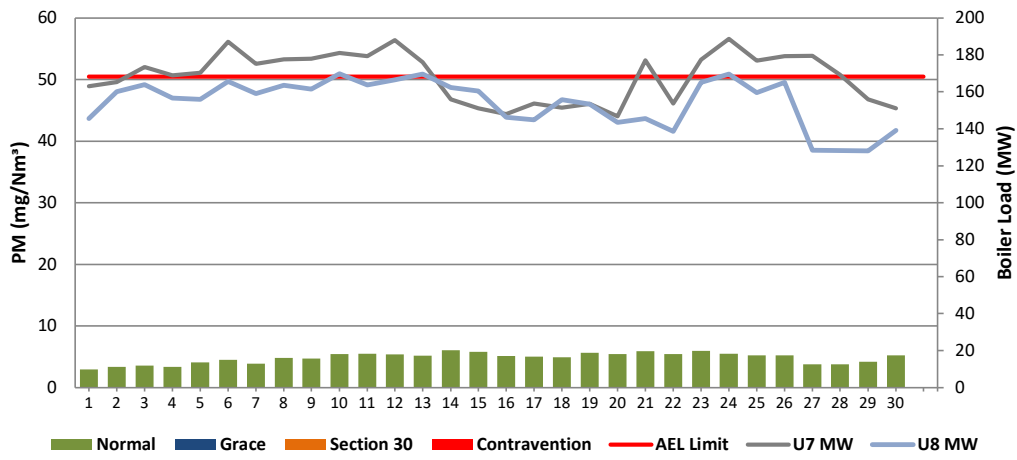


Figure 5: Camden Stack 1 SO₂ Emissions - June 2025

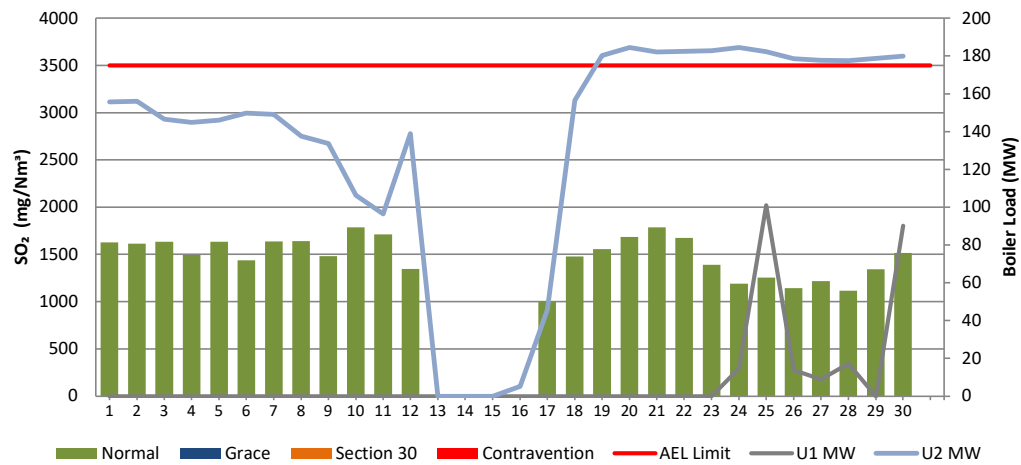


Figure 6: Camden Stack 2 SO₂ Emissions - June 2025

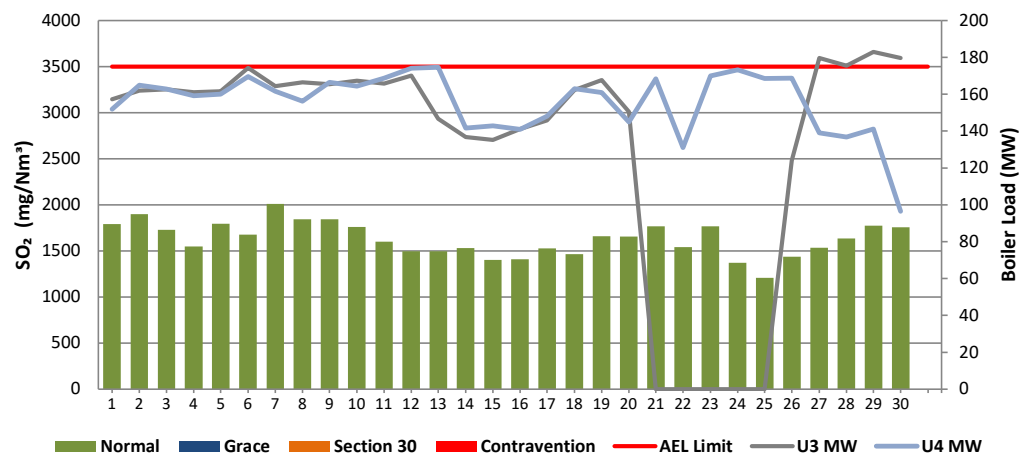


Figure 7: Camden Stack 3 SO₂ Emissions - June 2025

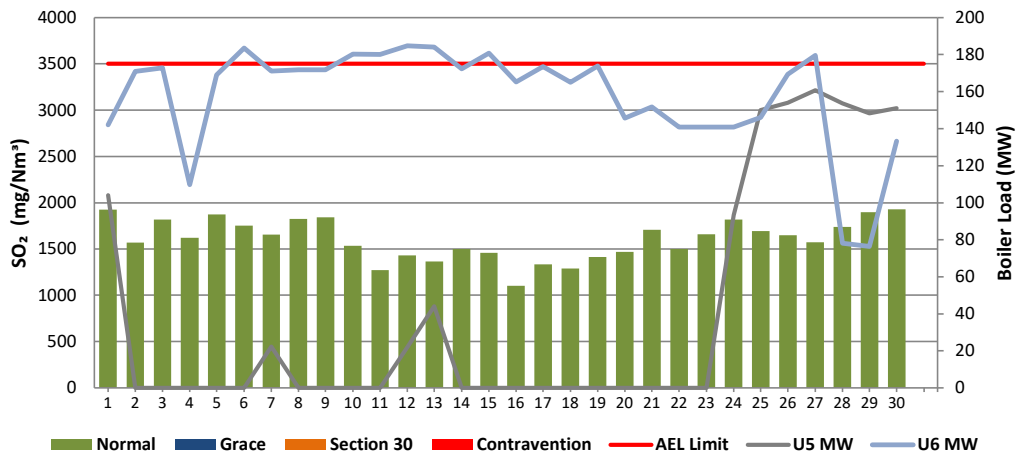


Figure 8: Camden Stack 4 SO₂ Emissions - June 2025

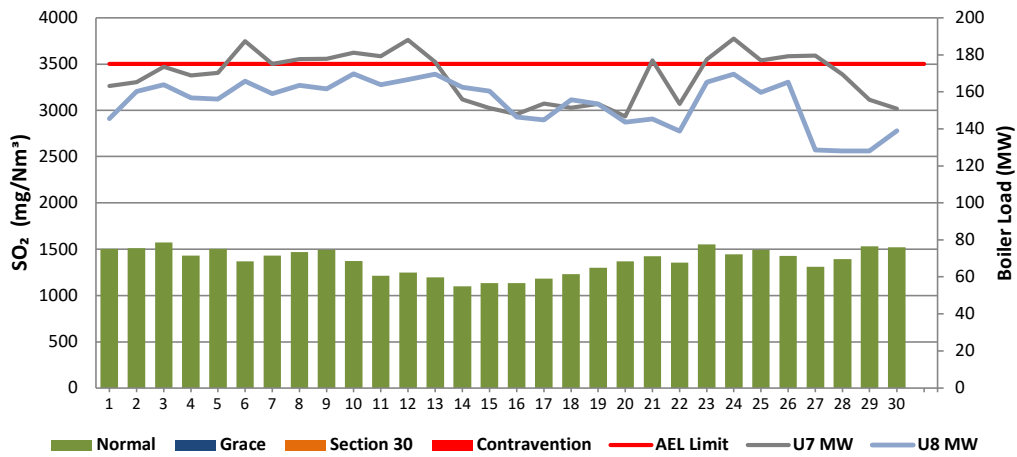


Figure 9: Camden Stack 1 NOx Emissions - June 2025

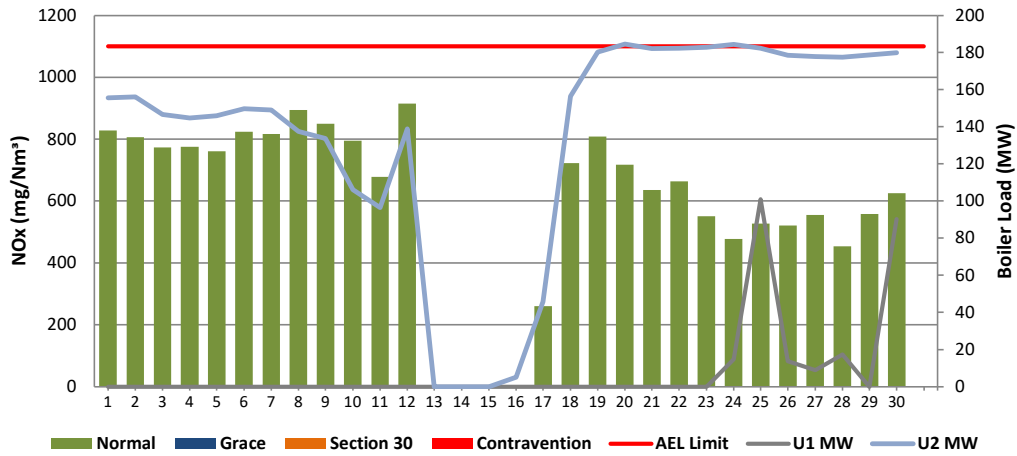


Figure 10: Camden Stack 2 NOx Emissions - June 2025

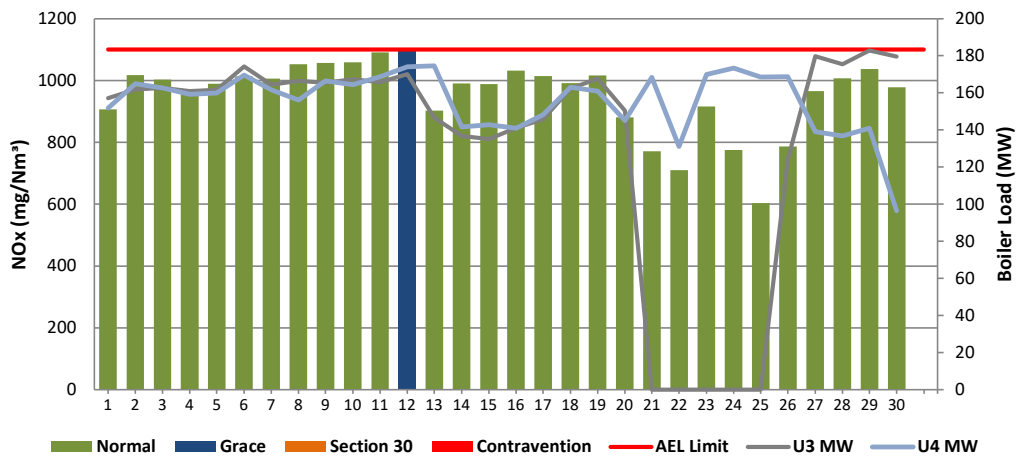


Figure 11: Camden Stack 3 NOx Emissions - June 2025

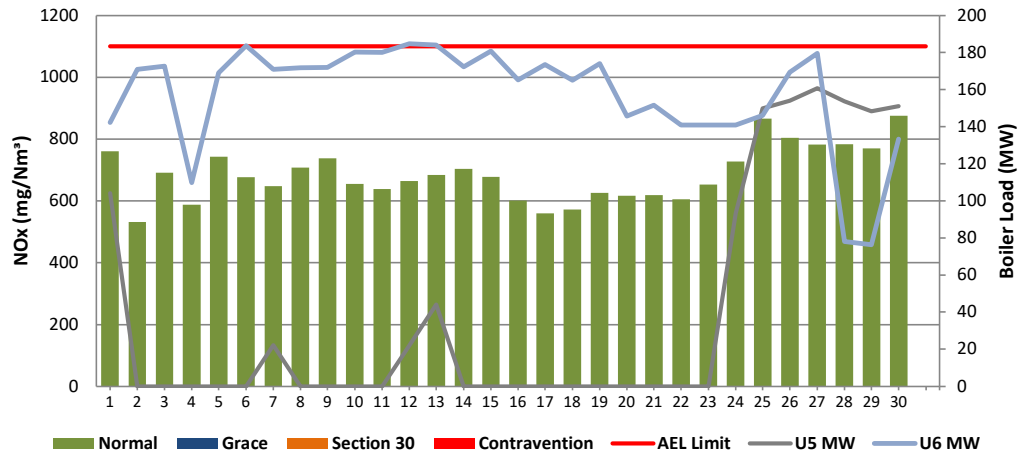
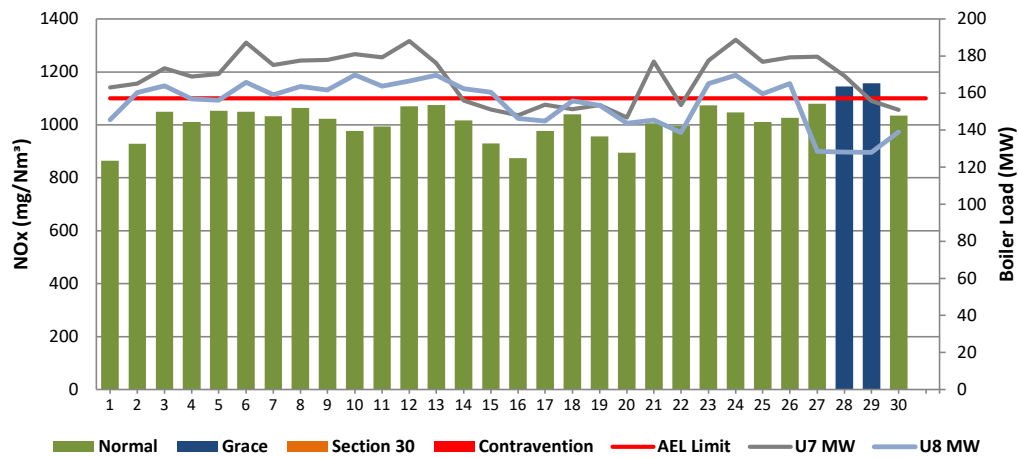


Figure 12: Camden Stack 4 NOx Emissions - June 2025



10 GENERAL / STATION EVENTS SUMMARY

Unit 1:

Unit 1 GO for most of the month

Unit 2:

403 FFP bags replace to reduce high stack emissions

Unit 3:

Stack 2 O2 probe lense faulty resulted in poor reliability for Stack 2, probe replaced 12 June 2025. Surrogate values used for O2

344 FFP bags replace to reduce high stack emissions

Unit 4:

Stack 2 O2 probe lense faulty resulted in poor reliability for Stack 2, probe replaced 12 June 2025. Surrogate values used for O2

260 FFP bags replace to reduce high stack emissions

Unit 5:

None

270 FFP bags replace to reduce high stack emissions

Unit 6:

None

Unit 7:

Stack 4 O2 probe and analyser contaminated, resulted in a data drift for O2. Faulty data removed.

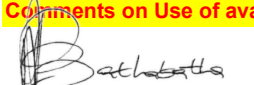
Overfiring on the boiler. HPH2 out of service resulted in elevated furnace temperatures, contributed to high NOx exceedances

Unit 8:

Stack 4 O2 probe and analyser contaminated, resulted in a data drift for O2. Faulty data removed.

Overfiring on the boiler. HPH2 out of service resulted in elevated furnace temperatures, contributed to high NOx exceedances

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


Engineering Manager

15/07/2025
Date


Environmental Manager

15/07/2025
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