

Mr Dan Hlanyane Gert Sibande District Municipality Cnr Joubert and Oosthesin Ermelo 2350

Date:

31 May 2018

Enquiries:

Ref: CAM-ANNUAL Report-17/18

Dear Mr Dan Hlanyane

CAMDEN POWER STATION'S ANNUAL EMISSIONS REPORT FOR FY 2017/8

This serves as the annual report required in terms of Section 7.6 in Camden Power Station's Atmospheric Emission License as well as in terms of the reporting requirements listed in the Minimum Emission Standards. The emissions are for Eskom's 2017/18 financial year, which is from 1 April 2017 to 31 March 2018. Verified emissions of particulates, SO_2 and NO_X (as NO_2) as measured by installed CEMS and CO_2 and N_2O , as calculated, are also included.

Name, description and reference number of plant as specified in the AEL:

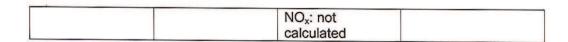
Name of facility	Eskom Holdings SOC Ltd	
Description of facility	Camden Power Station	
Reference number of plant	Msukaligwa/Eskom H SOC Ltd/CPS/0012/2015/F02)	

Emission Trends:

The emissions in the table below are that of the 2017/2018 financial year

Table 1.General oversight of emissions at Camden Power Station 2017/2018

Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Camden Power Station	N. Carlotte		1
	N₂O: 136	N ₂ O: not calculated	N₂O: 136
	PM: 1 721	PM: not	PM: 1 721
	SO ₂ : 126 638	calculated	SO ₂ : 127 920
	NO _x : 51 229	SO ₂ : 1282	NO _x : 51 229



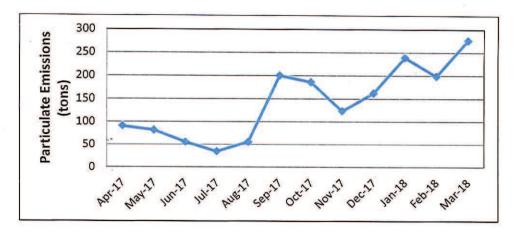


Figure 1. Monthly Particulate Emissions in tons from Camden Power Station 2017/2018

Please note: Gaseous emissions, in particular, are largely dependent on the power generated by the power station, and thus the amount of coal burnt.

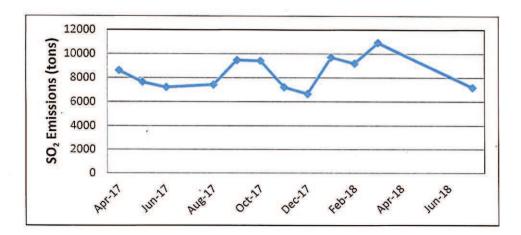


Figure 2. Monthly SO₂ Emissions in tons from Camden Power Station 2017/2018

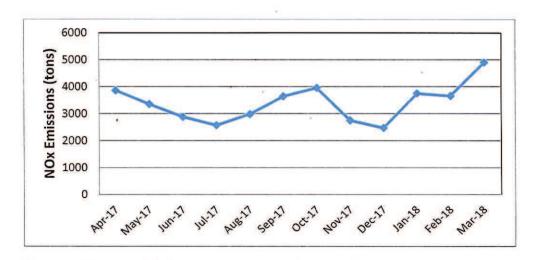


Figure 3. Monthly NO₂ Emissions in tons for Camden Power Station 2017/2018

Figure 4. Monthly CO₂ Emissions in tons from Camden Power Station 2017/2018

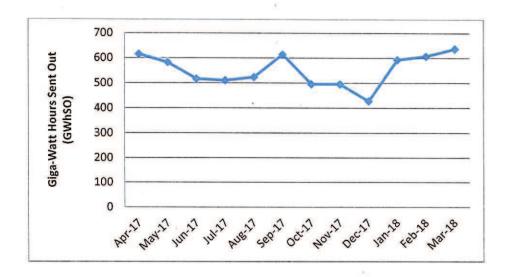


Figure 5. Monthly Energy sent out in GWh at Camden Power Station 2017/2018

Figures showing compliance with the daily average emission limits of the respective pollutants have been presented to you in the monthly emission reports sent to your offices.

Monitoring data availability

Table 2.General oversight of monitoring data availability (in %) for Camden Power Station 2017/2018 in terms of the number of full hours per annum that valid results were obtained for the CEMS in question

	Stack 1	Stack 2*	Stack 3	Stack 4
PM	96%	96%	96%	96%
SO ₂	96%	96%	96%	96%
NOx	96%	.96%	96%	96%

^{*}The monitor availability figures listed for Stack 2 is representative of monitor availability between April and September 2018 only.

Compliance Audit Report(s):

An Environmental Compliance Audit on the Camden Atmospheric Emissions License (Msukaligwa/Eskom H SOC Ltd/ CPS/0012/2015/F02) was conducted by Zitholele Consulting in April 2017. The audit report is attached as Annexure A.

Major upgrades projects:

For the major project, "Installation of Low NOx Burners" on unit 1 has been completed and unit 7 is planned for the next financial year. As it stands, installation on 4 units i.e. units 1, 2, 4 and 6 have been completed. Installation on further units will continue during upcoming outages. The project will see a reduction in the levels of NOx emissions produced by the power station.

Greenhouse gas emissions:

Greenhouse gas emissions as CO₂ and N₂O have been reported on in the above sections. These have been calculated.

Results of spot measurements or correlation tests:

Table 3. Overview of dates of last conducted CEMS verification tests for PM, SO₂ and NO_x (Please see annexure B for the verification test results)

Stack/ Unit	PM	SO ₂	NOx
1	21 Sept – 28 Sept 2017	21 Sept – 28 Sept 2017	21 Sept - 28 Sept 2017
2	04 Apr - 5 May 2017	30 Mar - 2 April 2017	30 Mar - 2 April 2017
3	25 Aug – 19 Sept 2017	25 Aug – 19 Sept 2017	25 Aug - 19 Sept 2017
4	30 Mar - 2 April 2017	30 Mar - 2 April 2017	30 Mar - 2 April 2017

An explanation of all instances where minimum emission standards were exceeded

Any daily average exceedances, as well as corresponding remediation measures are reported to your offices in the station's monthly emission reports.

Table 4. Overview of daily average limit exceedances for 2017/18 financial year

Exceedance	Stack/unit and pollutant	Exceedance date [from – to]	Reason for exceedance	Remediation measure and effectiveness
1	Stack 2: Camden power Station has reasons to believe that the readings on Stack two are not a true reflection of real emissions. The reason being that the stack masonry collapsed due to a lightning strike before the new curves could be	Possible Exceedances Sept 2017 - date	Collapsed Masonry	 Notification letter has been sent to GSDM and on a Monthly basis the Risk is highlighted. Internal limit of 30mg/Nm³ is adopted, regular bag changes are done as and when required

•2	implemented after Correlation tests were conducted.	Once the stack has been repaired and verification tests have been conducted, the station will be in a position to back-fit data and better report on any possible exceedances that might have occurred between September.
		September 2017 and March 2018

NAEIS reporting:

Camden Power Station submitted its annual report on the NAEIS system by the 31 March 2018.

The rest of the information demonstrating compliance with the emission license conditions is supplied in the monthly emission reports sent to your office.

Hoping the above will meet your satisfaction.

Yours sincerely

CAMDEN POWER STATION MANAGER