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Date:
 26 May 2016

Enquiries:
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Ref: **CAM-ENV16-EM001**

Dear Dr Khumalo

CAMDEN POWER STATION'S ANNUAL EMISSIONS REPORT

This serves as the annual report required in terms of Section 7.6 (Routine reporting and record keeping) in Camden Power Station's Atmospheric Emission License (Msukaligwa/Eskom H SOC Ltd/CPS/0012/2015/F02). The emissions are for Eskom's 2015/2016 financial year which is from 1 April 2015 to 31 March 2016. Verified emissions of particulates, SO₂, NO_x (as NO₂) and the greenhouse gases CO₂ and N₂O are also included.

Pollutant Emission Trends and Greenhouse Gas Emissions:

Particulate emissions are measured at all power stations with opacity monitors, which are correlated to obtain emission concentrations. Gaseous emissions (CO₂, N₂O, SO₂ and NO_x) are calculated from mass balances for SO₂ and CO₂, from station-specific emission factors for NO_x and from a generic emission factor for N₂O.

Continuous emission monitors are installed on all four stacks and Eskom will report on the gaseous emission measurements in the annual reports once we are satisfied that the continuous emission measurements are at least as accurate as the calculations.

Table 1: General oversight of emissions at Camden Power Station 2015/2016

Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Camden	CO ₂ : 8 893 024	CO ₂ : 56 622	CO ₂ : 8 949 646
	N ₂ O: 155.052	N ₂ O: not calculated	N ₂ O: 155.052
	PM: 1325	PM: not calculated	PM: 1325
	SO ₂ : 68 940	SO ₂ : 1 077.380	SO ₂ : 70 017.380
	NO _x : 40 385	NO _x : not calculated	NO _x : 40 385

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Table 2: Pollutant Emission Trends for 2015/2016

Month	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)	N ₂ O (tons)
April 2015	122	6 634	3 264	696 954	11.992
May 2015	88	5 444	3 348	730 718	12.755
June 2015	85	5 737	3 528	766 807	13.478
July 2015	83	5 665	3 096	678 993	11.887
August 2015	92	5 783	3 556	770 696	13.531
September 2015	70	6 432	3 164	708 577	12.270
October 2015	97	5 511	3 389	752 143	13.017
November 2015	102	4 898	3 442	784 160	13.550
December 2015	115	5 054	3 108	697 686	12.081
January 2016	158	6 514	3 561	771 710	13.521
February 2016	180	5 960	3 665	815 545	14.224
March 2016	133	5 308	3 264	719 035	12.745

Table 2 above provides information on the actual monthly emissions for PM, SO₂, NO_x, CO₂ and N₂O. This will be further illustrated graphically below.

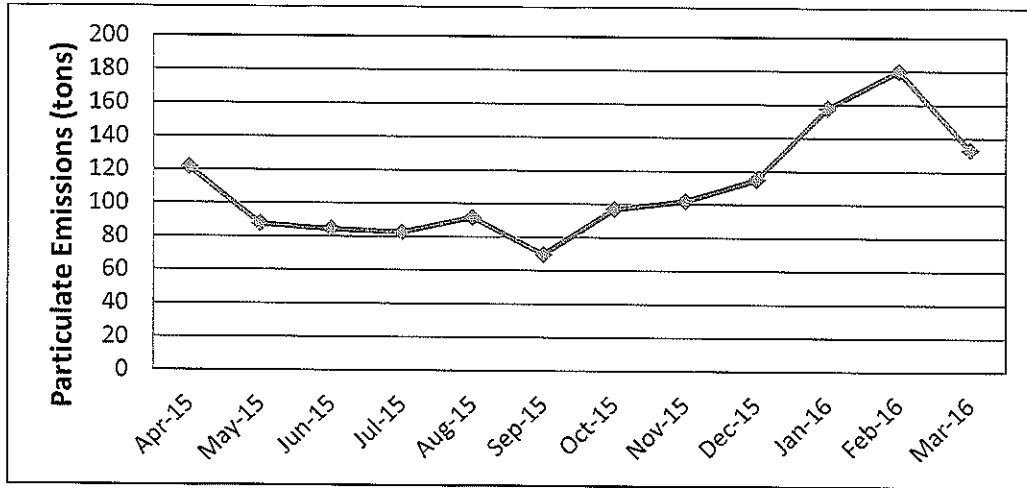


Figure 1: Monthly Particulate Emissions in tons from Camden Power Station 2015/2016

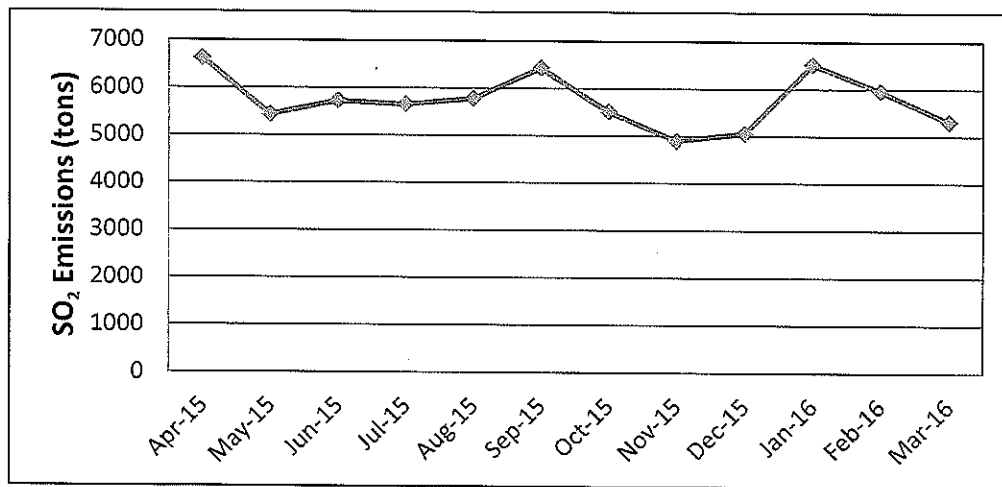


Figure 2: Monthly SO₂ Emissions in tons from Camden Power Station 2015/2016

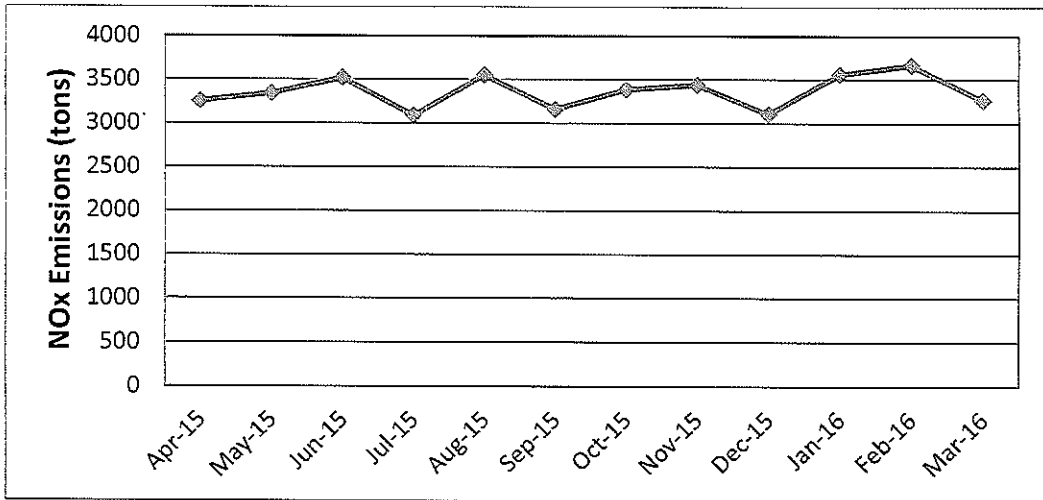


Figure 3: Monthly NO_x Emissions in tons for Camden Power Station 2015/2016

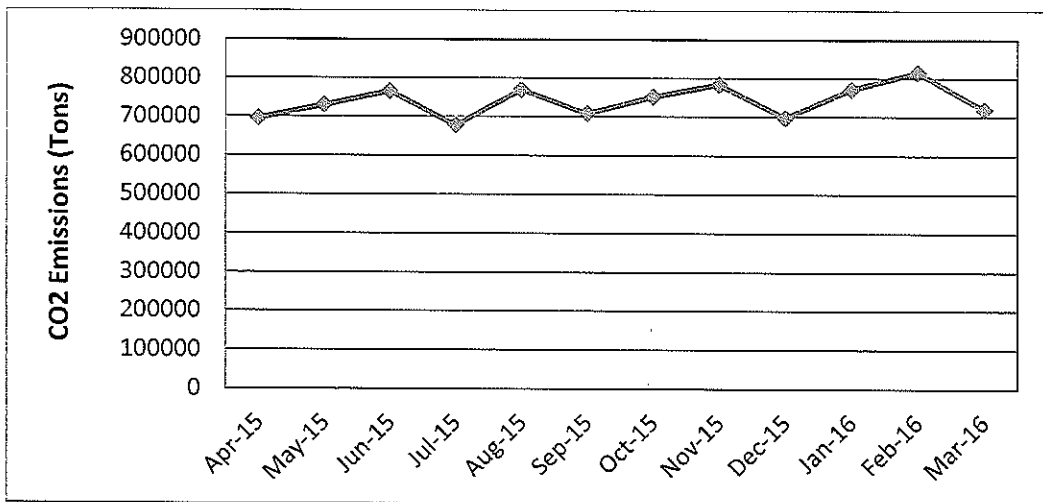


Figure 4: Monthly CO₂ Emissions in tons from Camden Power Station 2015/2016

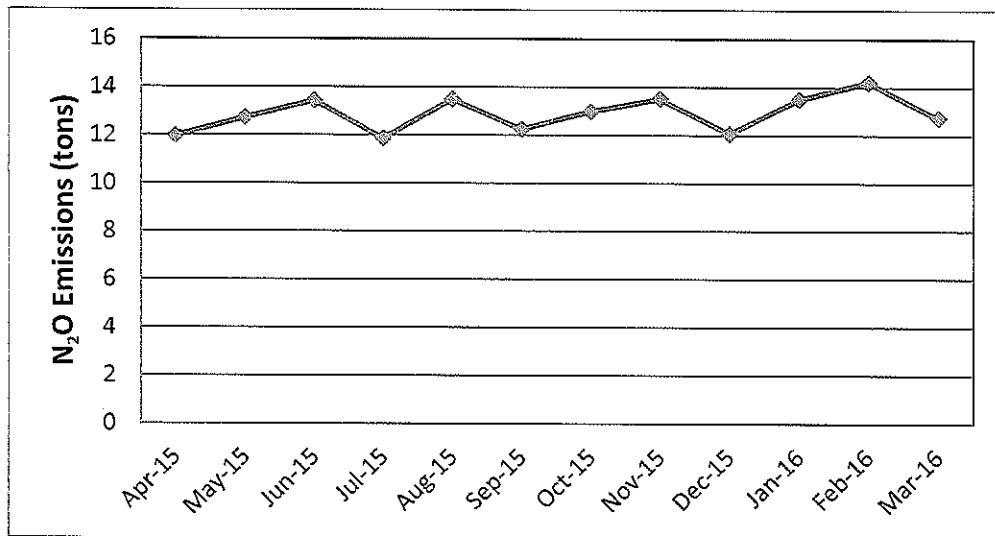


Figure 5: Monthly N₂O Emissions in tons from Camden Power Station 2015/2016

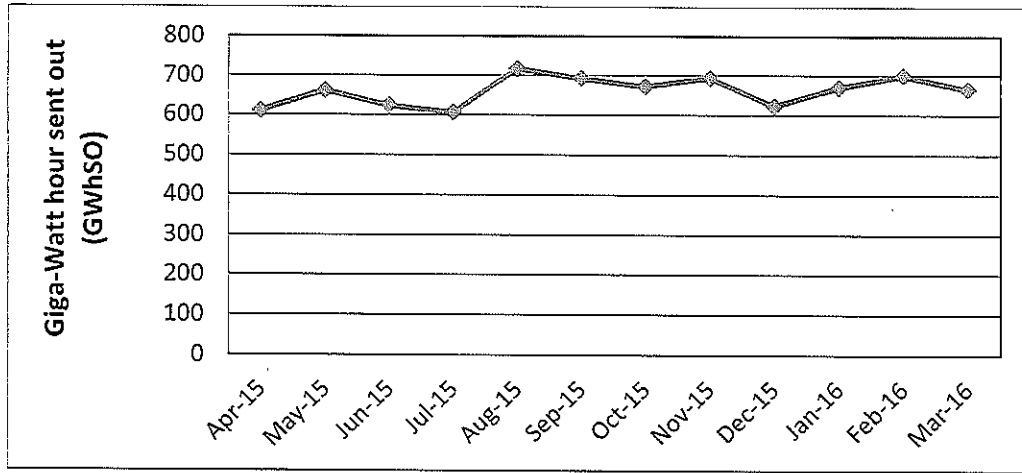


Figure 6: Monthly Energy sent out in GWh at Camden Power Station 2015/2016

Monitoring data availability:

	Stack 1	Stack 2	Stack 3	Stack 4
PM	100 %	100 %	100 %	100 %
SO ₂	100 %	100 %	100 %	100 %
NOx	100 %	100 %	100 %	100 %

Compliance Audit Reports:

An Environmental Compliance Audit on the Camden Atmospheric Emissions License (Msukaligwa/Eskom H SOC Ltd/ CPS/0012/2015/F02) was conducted by Renqe Kunene Inc. in November 2015. The audit report is attached for your perusal.

Major Upgrade Projects:

A major project for the Installation of Low NOx Burners began in August 2014. Currently, installations on unit 4 and unit 6 have been completed. Installation on further units will continue during upcoming outages, with the installation on unit 2 planned to commence in June 2016. The project will see a reduction in the levels of NOx emissions produced by the power station.

The second cycle of the Bagfilter Replacement Project began in April 2015 with units 1, 4, 7 & 8 already being completed. Units 2, 3, 5 & 6 will continue during this financial year and total completion of the project is expected to be in March 2017. The aim of the project is to replace the entire unit set of fabric filter plant bags with new bags due to end of life being reached.

Greenhouse Gas Emissions:

Greenhouse gas emissions (CO₂ and N₂O) are included in Table 2 as well as Figures 4 and 5 above.

Complaints Register:

No complaints were received during the reporting period.

The remaining information required by the licence is sent to your offices on a monthly basis.

Hoping the above will meet your satisfaction.

Yours sincerely

A handwritten signature in black ink, appearing to read "Christo Spammer". The signature is written in a cursive style with a prominent initial "C".

Mr. Christo Spammer
GENERAL MANAGER: CAMDEN