

Mr Dan Hlanyane
 Gert Sibande District Municipality
 PO BOX 1745
 Ermelo
 2350

Date:
 31 May 2018

Enquiries:

Ref: GVL/0372

Dear Mr Dan Hlanyane

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

This serves as the annual report required in terms of Section 7.6 in Grootvlei Power Station's Atmospheric Emission Licence, 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, as measured by installed CEMS and SO₂ and NO_x (as NO₂), as calculated, are also included.

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

Name of facility	Eskom Holdings SOC Limited, Grootvlei Power Station
Description of facility	Grootvlei Power Station

Emission Trends:

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

Table 1: General Overview of emissions at Grootvlei Power Station 2017/2018

Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Grootvlei Power Station	N ₂ O: 67.096	N ₂ O:	N ₂ O: 67.096
	PM: 141.80	PM:	PM: 141.80
	SO ₂ : 29694	SO ₂ : 1 095.55	SO ₂ : 30 789.55
	NO _x :14302	NO _x :	NO _x : 14302

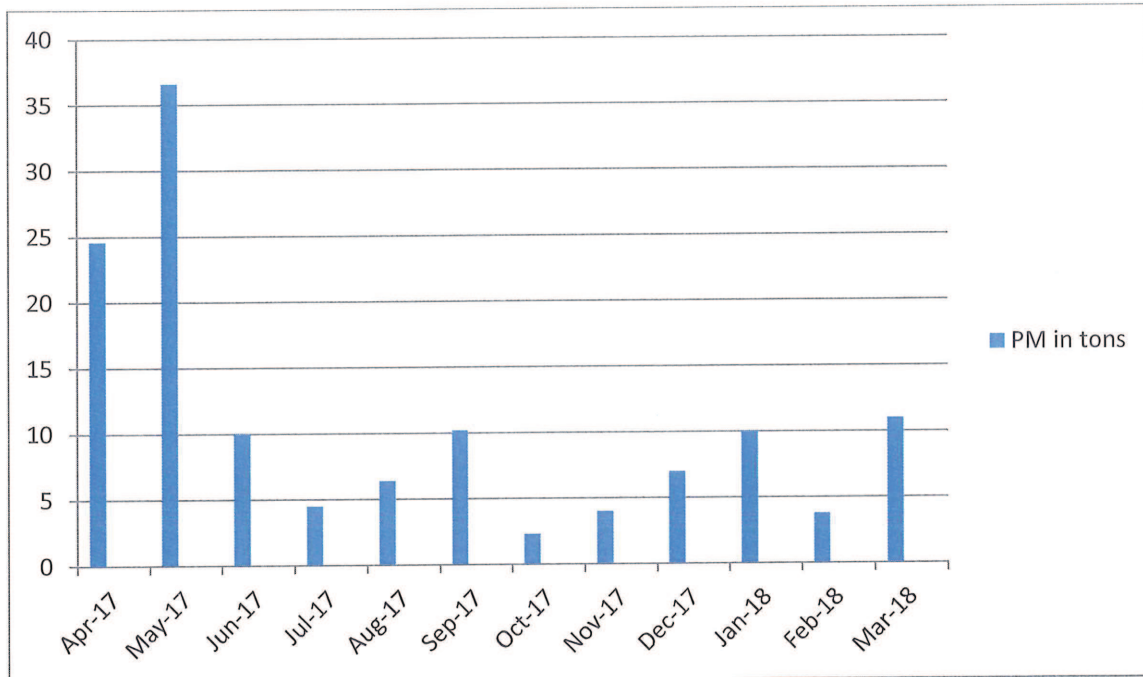


Figure 1: Monthly Particulate Emissions in tons from Grootvlei Power Station 2017/2018

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

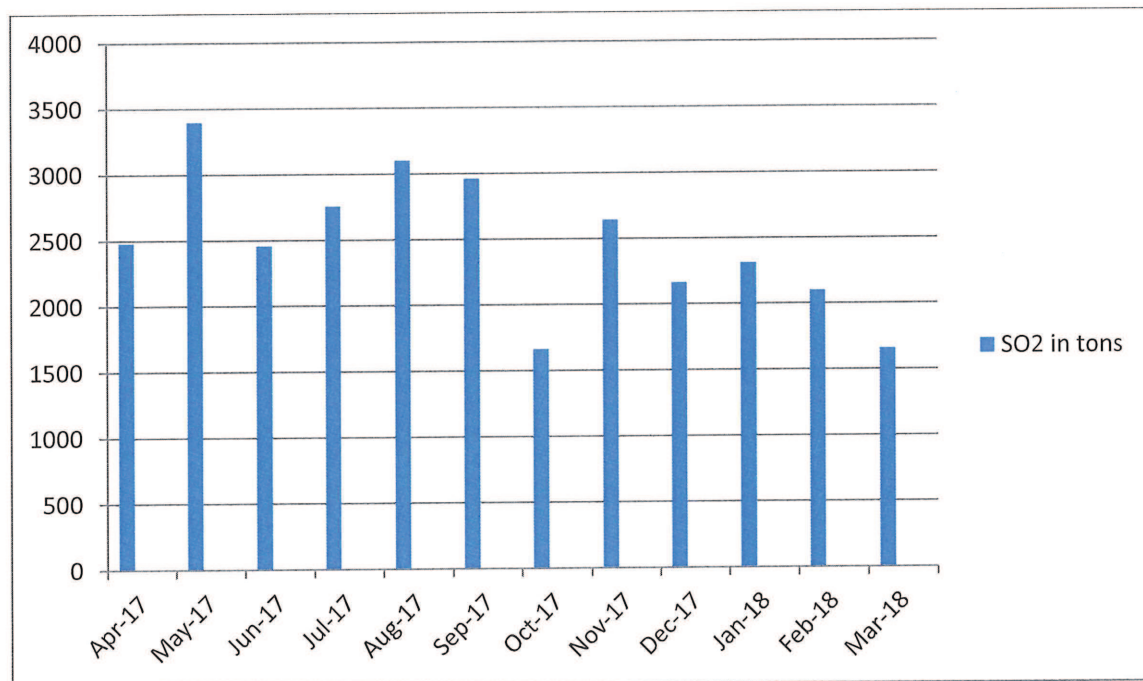


Figure 2: Monthly SO₂ Emissions in tons from Grootvlei Power Station 2017/2018

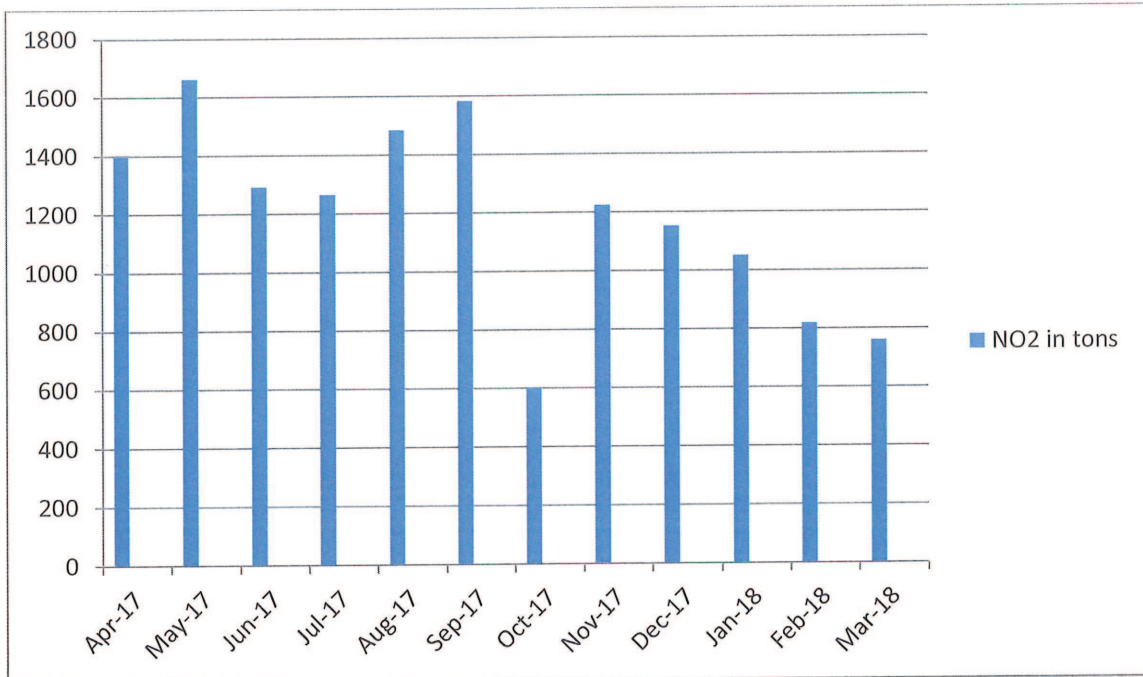


Figure 3: Monthly NO₂ Emissions in tons from Grootvlei Power Station 2017/2018

Figure 4: Monthly CO₂ Emissions in tons from Grootvlei Power Station 2017/2018

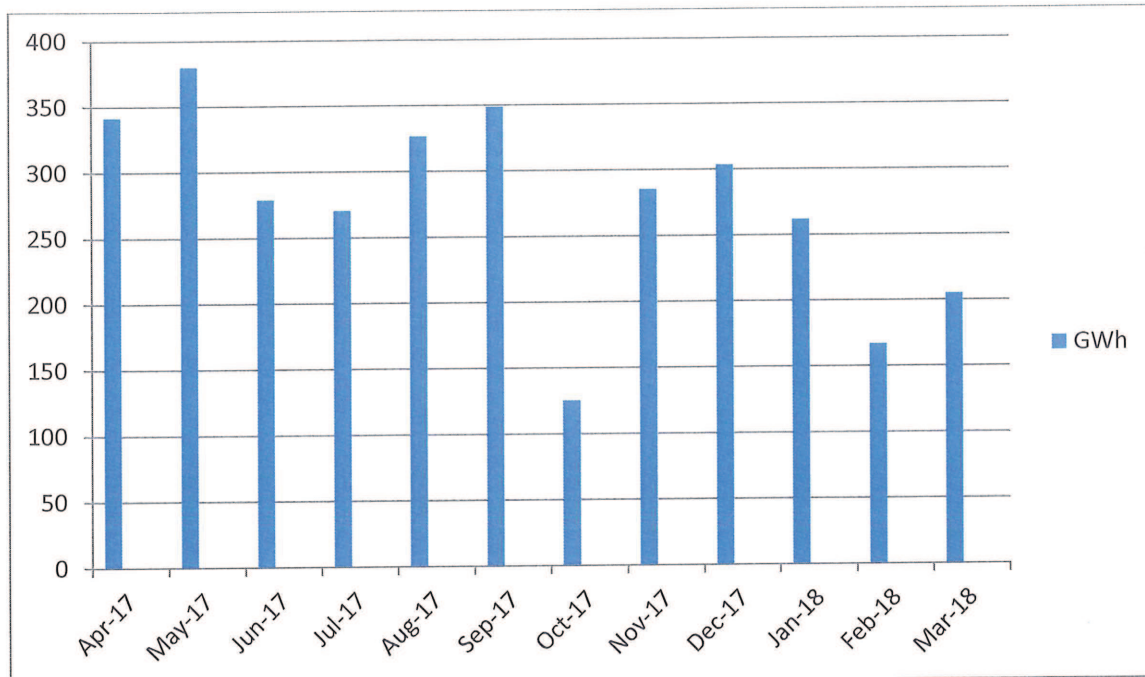


Figure 5: Monthly Energy sent out in GWh at Grootvlei Power Station 2017/2018

Figures showing compliance with the daily average emission limits of the respective pollutants have been presented as part of the monthly emission reports sent to authorities' office.

Monitoring data availability

Table 2. General oversight of monitoring monthly data availability for Grootvlei Power Station 2017/2018

Table 2 availability in percentages

Stack	PM		SO ₂		NO _x	
	North	South	North	South	North	South
April 2017	100	100	32	100	35	100
May 2017	100	100	100	43	100	43
June 2017	100	100	100	79	100	79
July 2017	100	100	100	100	100	100
August 2017	100	100	98.3	3.4	98	3.4
Sept 2017	100	100	100	31.8	100	32.8
Oct 2017	100	100	90.7	100	88.3	100
Nov 2017	51.7	100	100	89	100	87.5
Dec 2017	0	100	100	94.8	100	94.8
Jan 2018	42.3	100	98.9	93.1	92.1	98.1
Feb 2018	100	100	99.8	100	99.7	100
March 2018	95.3	100	32.3	100	31.6	100

Note: From October 2017 to march 2018 south stack was mostly off due to no unit running however monitors were available.

Compliance Audit Report(s):

An Air Quality and Waste Management compliance audit was conducted by officials from Gert Sibande District Municipality on 24 May 2017 report not yet received.

Major upgrades projects:

The FFP retrofit project that commenced in 2015 is now complete. This project was initiated to retrofit all the ESP (Electrostatic Precipitators) units (unit 2; 3; and 4) with the FFP (Fabric Filter Plant). This project was completed in September 2017.

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 A for the verification test results)

Stack/ Unit	PM	SO ₂	NO _x
North Stack	March 2017	September 2017	September 2017
South Stack	March 2017	November 2016	November 2016

An explanation of all instances where minimum emission standards were exceeded:

There was no exceedance during the 2017/18 financial year for Grootvlei Power Station. Also no section 30 incident incurred.

NAEIS reporting:

Grootvlei 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 licence conditions is supplied in the monthly emission reports sent to your office.

Hoping the above will meet your satisfaction.

Yours sincerely

GENERAL MANAGER: GROOTVLEI