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Ref: (12/4/12L-W4/A3)

Dear Mrs. Thivhafuni

MATIMBA POWER STATION'S ANNUAL EMISSIONS REPORT

This serves as the annual report required in terms of Section 7.7.3 of Matimba Power Station's Atmospheric Emission License "The License Holder must complete and submit to the Licensing Authority, an Annual Report as contemplated in paragraph 17 of Section 21 Notice (Government Notice No. 893) no later than thirty (30) days after the end of each reporting period. The report must include information for the year under review". The report is for periods April 2016 to end of March 2017. Verified emissions of particulates, SO₂ and NO_x (as NO₂) are also included.

The emissions in the table below are that of the 2016/2017 financial year

Table 1: General oversight of emissions at Matimba Power Station 2016/2017

Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Matimba Power station	CO ₂ : 28618198.83 PM: 1666.713 SO ₂ : 428642.3 NO _x : 76811.485	CO ₂ : 21 092 PM: SO ₂ : 394.08 NO _x :	CO ₂ : 28639290.83 PM: SO ₂ : 429036.38 NO _x :

Table 2: Pollutant Emission Trends.

Month	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)
April 2016	72.181	32780.4	5976.3	2167075
May 2016	82.533	44386.8	7471.4	2509539
June 2016	75.003	42035.6	7242.7	2680135
July 2016	100.715	41945	7687	2803007
August 2016	106.251	30567.1	5908.6	2278151
September 2016	132.005	31677.3	6235.9	2357935
October 2016	185.287	38540.3	7022.5	2514348.8
November 2016	194.762	33035.6	5608	2280196.4
December 2016	259.809	31487.5	5155.7	2146550
January 2017	209.761	39951.1	6873.8	2638133.6
February 2017	141.019	30849.7	5700.4	2071021.7
March 2017	107.387	31385.9	5929.185	2172106.328

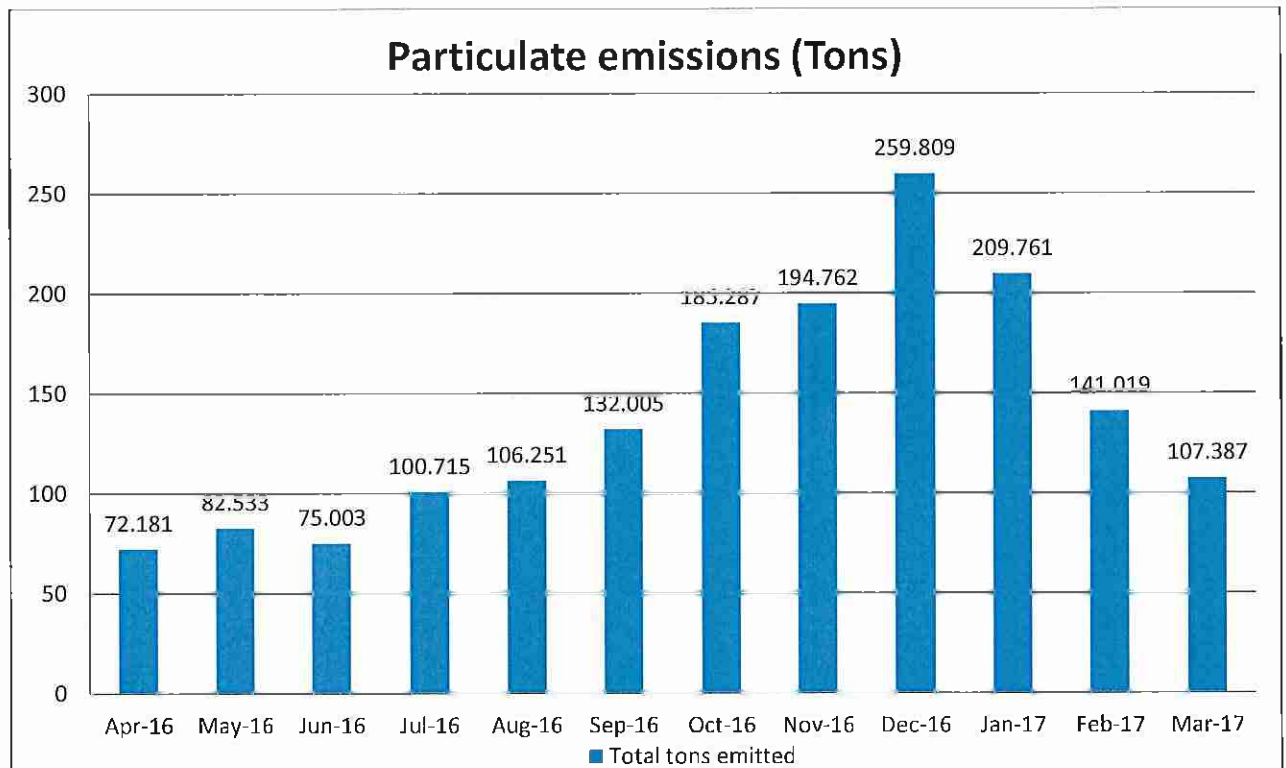


Figure 1: Monthly Particulate Emissions in tons from Matimba Power Station

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

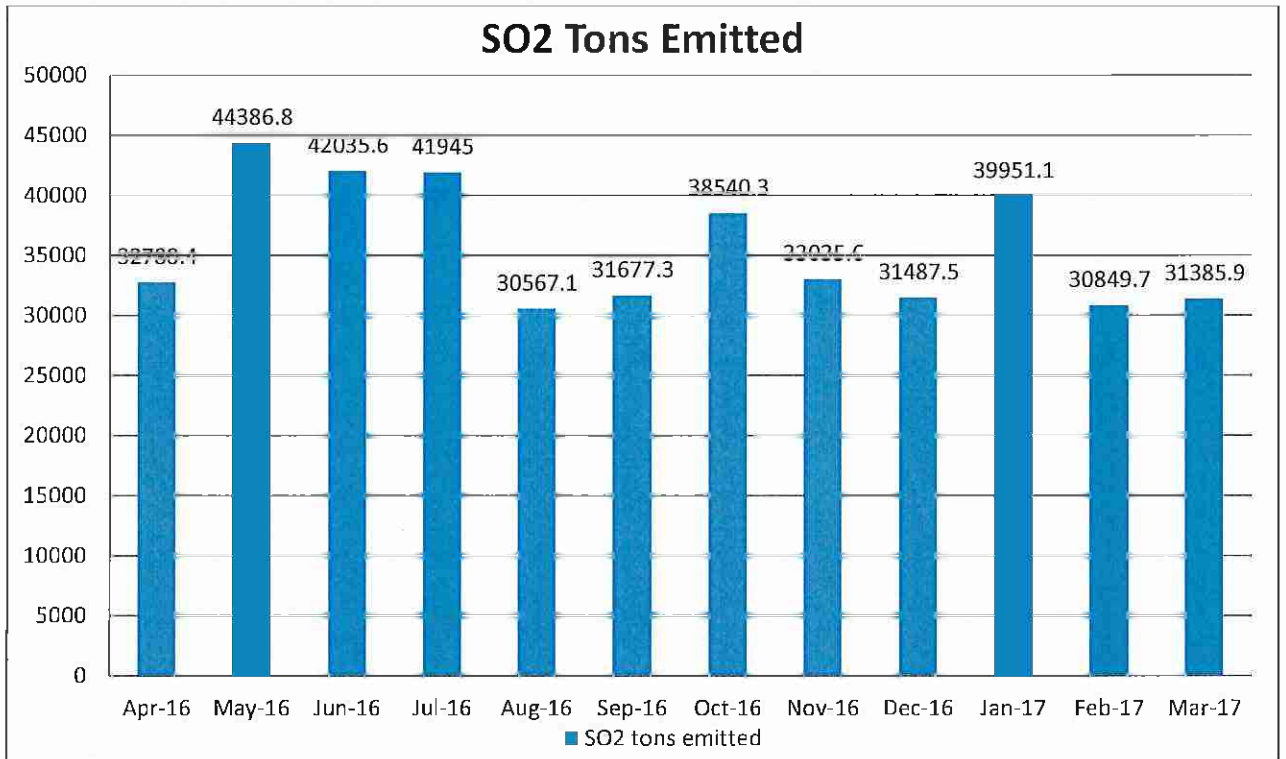


Figure 2: Monthly SO₂ Emissions in tons from Matimba Power Station

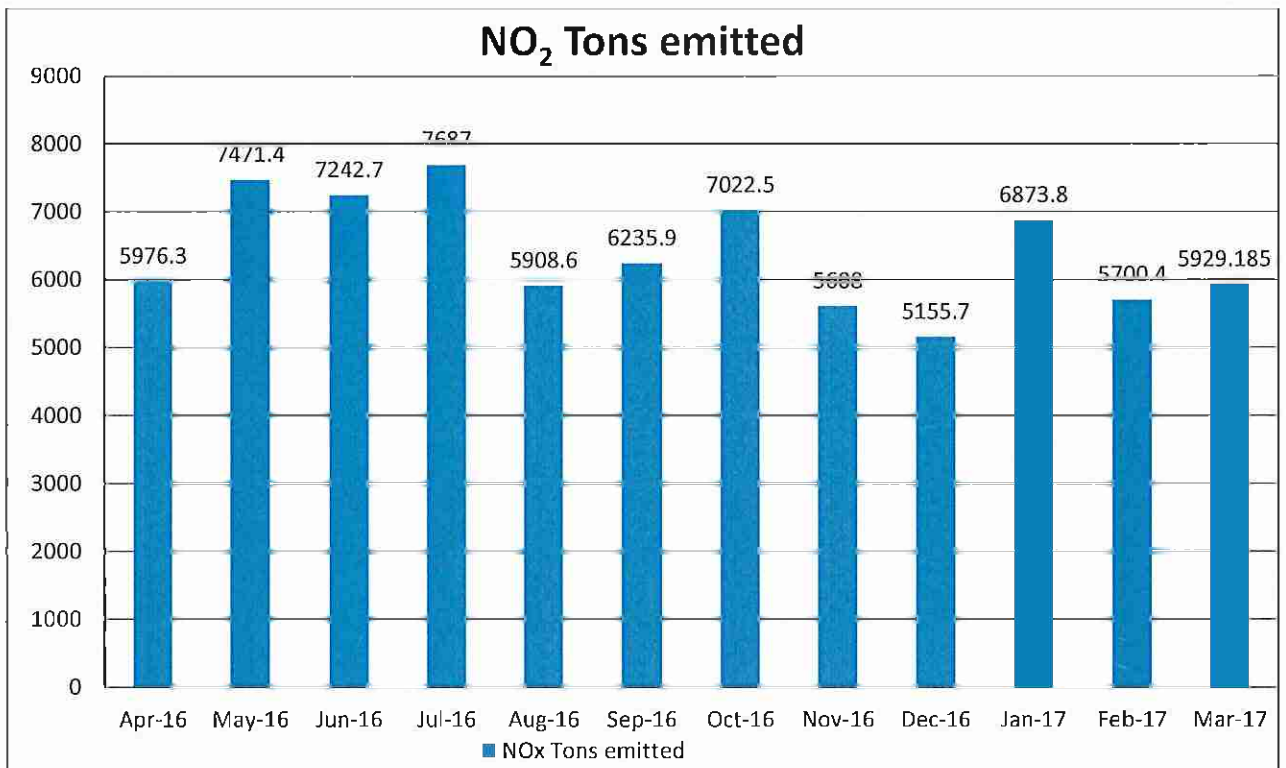


Figure 3: Monthly NO₂ Emissions in tons for Matimba Power Station

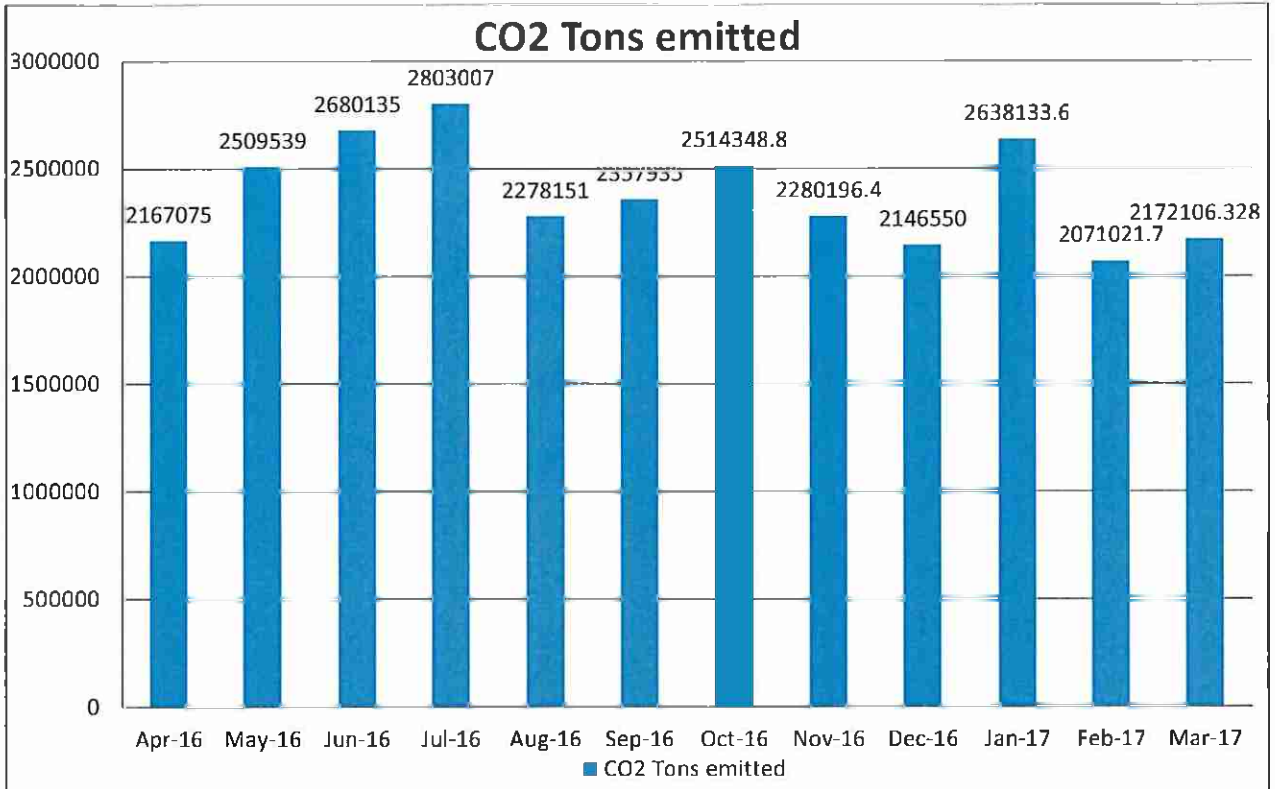


Figure 4: Monthly CO₂ Emissions in tons from Matimba Power Station

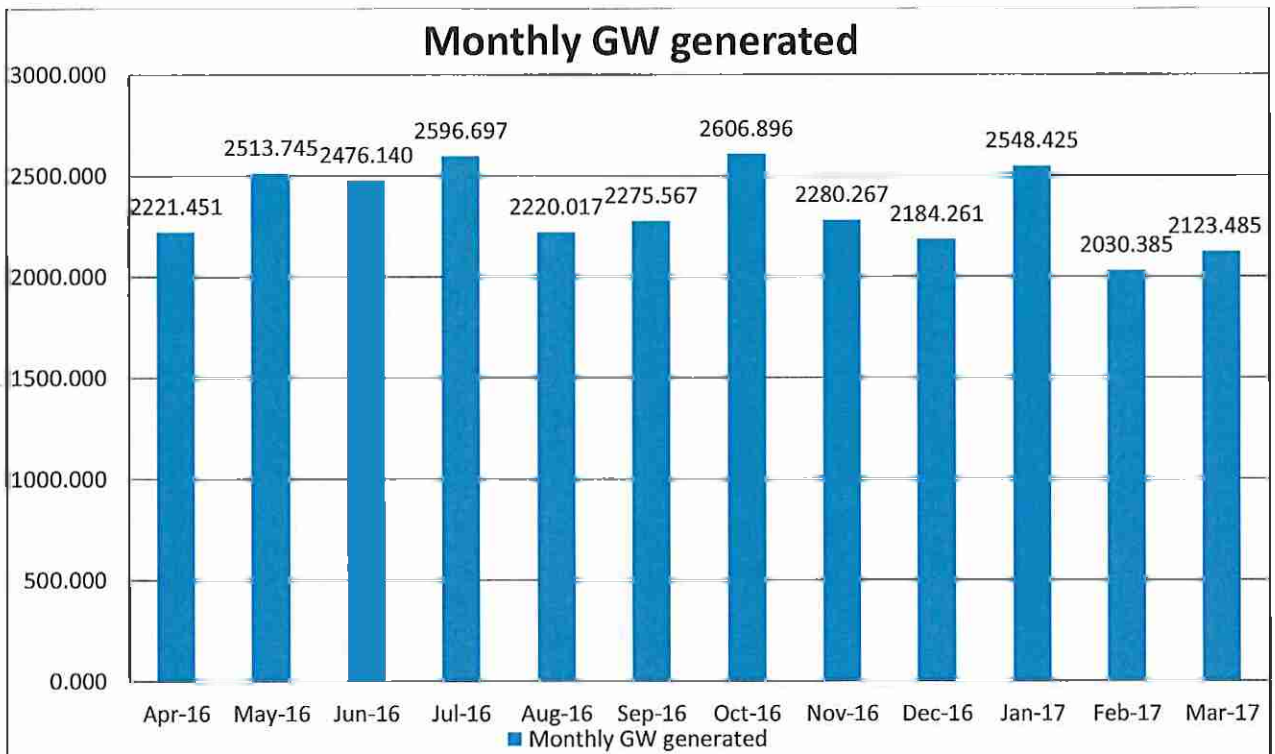


Figure 5: Monthly Energy Generated in GW at Matimba Power Station

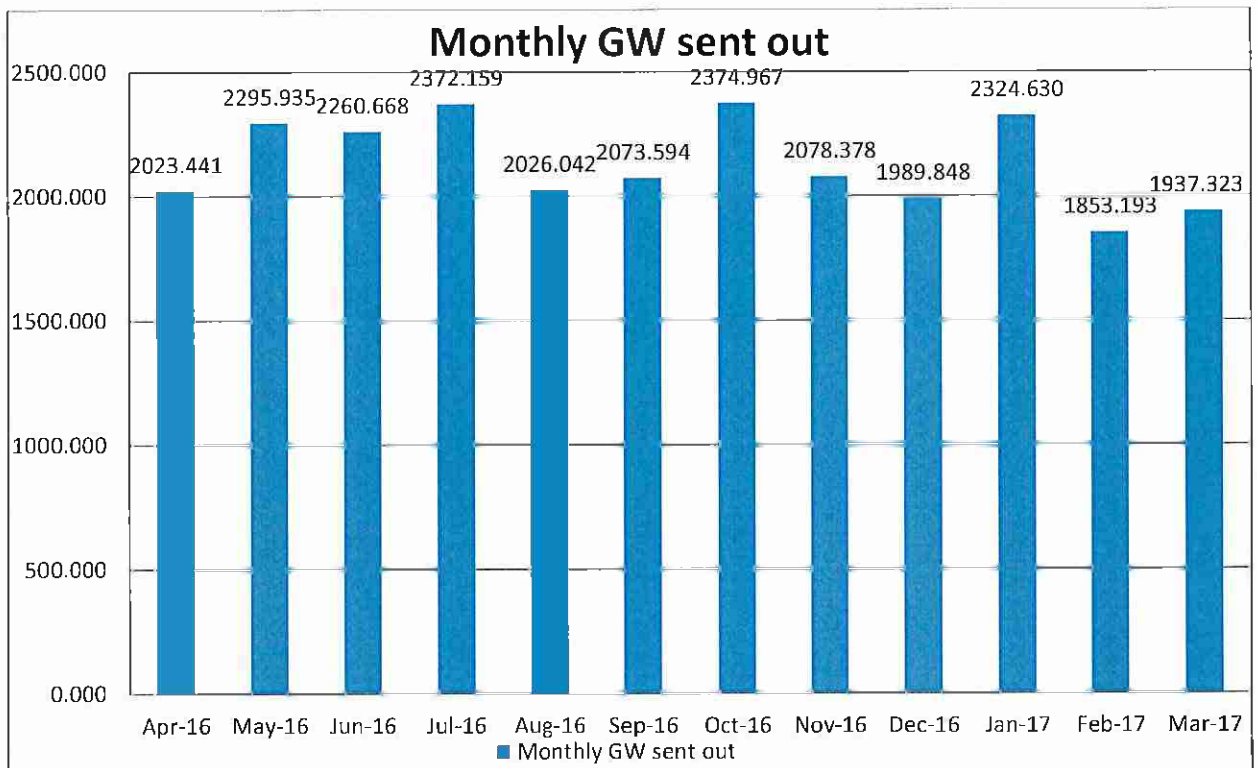


Figure 6: Monthly Energy Sent out GW at Matimba Power Station

Table 3: Monitoring data availability

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
PM	99.5	100.0	100.0	100.0	100.0	100.0
SO ₂	100.0	99.2	100.0	99.3	99.5	99.8
NO _x	99.8	99.0	100.0	99.1	99.4	99.8
CO ₂	99.7	98.9	99.9	99.0	98.9	99.8

Minimum emission standard exceedances

Matimba Power Station has been facing a challenge with high SO₂ emissions and has exceeded the grace period of 48h for high SO₂ emissions sporadically. Below is a summary of the exceedances experienced between periods April 2016 to March 2017. Exceedances are specified in monthly reports and are reported to the authorities. The cause was determined to be the high sulphur content in coal.

Table 4: Monthly exceedances per unit

	Number of times grace period was exceeded					
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
April 2016	1	2	0	0	0	1
May 2016	1	4	0	0	0	2
June 2016	1	2	0	0	0	0
July 2016	0	1	0	0	0	0
August 2016	0	0	0	0	0	0
September 2016	0	0	0	0	0	0
October 2016	0	0	0	0	0	0
November 2016	0	0	0	0	0	0
December 2016	0	0	0	0	0	0
January 2017	0	1	0	0	0	0
February 2017	3	0	0	0	2	0
March 2017	1	0	0	0	1	0
Total	7	10	0	0	3	3

Actions taken to prevent exceedances

1. Matimba has been engaging with Exxaro coal mine to find ways to reduce the sulphur content of the coal received.
2. Unit 2 air heater packs were replaced to try and eliminate air ingress as a contributory factor.
3. A number of investigations are in progress to determine contributory causes, and to find ways to reduce sulphur content in coal to help manage SO₂ emissions.

Compliance Audit Report:

See attached audit report (Annexure 1_Matimba Internal Audit report - 2016)

Major upgrades projects:

No major upgrades were done for 2017 financial year.

Correlation tests:

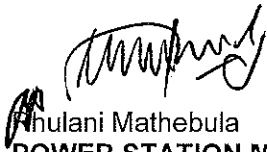
Last correlation tests were performed in September and October 2016, see attached report (Annexure 2_RSL229 Matimba Units No 1 to 6 AST 20161230). Formal notification of the correlation tests as required by the AEL was sent to Provincial air quality officer's office (Annexure 3_FW Eskom Matimba Power Station-Notification of planned correlation tests).

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.

I hereby declare that the information in this report is correct.

Yours sincerely



Nhulani Mathebula
POWER STATION MANAGER: MATIMBA POWER STATION