	<b>Medupi Power Station Annual Emissions Report</b>	Document No.	240-88543153
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		Revision	1
		No. of pages	3

Phumudzo Thivhafuni

Date: 2016/04/30

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Dear Phumudzo

### MEDUPI POWER STATION FOR THE FIRST 6 MONTHS OF OPERATION

This report is submitted as a fulfillment of Section 7.7.3 of the Medupi Power Station Provisional Atmospheric Emission License (12/4/12L-W2/A3). The emissions reported are for the period, September 2015 to March 2016 verified emissions of particulates (PM<sub>10</sub>), SO<sub>x</sub> and NO<sub>x</sub> (as NO<sub>2</sub>) are also included.

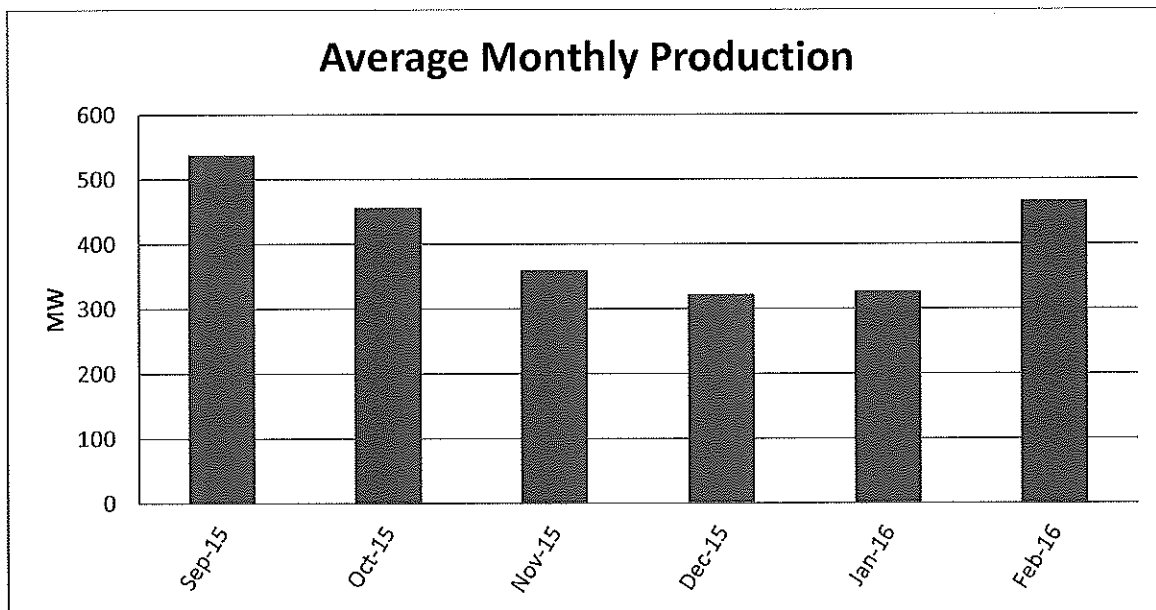
The emissions in the table represent the total monthly tonnages per pollutant from September 2015 to March 2016.

**Table 1: Pollutant Emission Trends for 2015/2016**

Month	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	CO <sub>2</sub> (tons)
April 2015	-	-	-	-
May 2015	-	-	-	-
June 2015	-	-	-	-
July 2015	-	-	-	-
August 2015	-	-	-	-
September 2015	131.75	3091.10	410.30	9.26
October 2015	273.76	3051.54	511.30	11.33
November 2015	18.53	2078.09	287.30	5.85
December 2015	24.37	4544.53	599.14	28.31
January 2016	20.13	3022.65	397.07	13.13
February 2016	22.71	3199.80	376.82	15.02
March 2016	48.92	3586.67	400.41	16.39

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**Figure 1: Average monthly production rate**

The following assumptions were made to calculate the emissions for Medupi:

- The calculated NO<sub>x</sub> emissions are based on Matimba Power Station's emission factor.
- The calculated SO<sub>x</sub> emissions are based on the emission factor for the Medupi type mills
- The calculated CO<sub>2</sub> emissions are based on ultimate coal analysis results, but exclude Carbon in ash
- PM emissions are based on actual measurements

**Compliance Audit Report(s):**

An internal air quality gap assessment was conducted on the 8<sup>th</sup> of September 2015. Findings arising from the Gap assessment have been closed, with the exception of finding number 2 which requires CO<sub>2</sub> monitoring at the smoke stack. Medupi Power station is in the process of procuring the instrument for monitoring CO<sub>2</sub>. Procurement process has been initiated and it is anticipated that the in-stack monitor will be in place by the end of June 2016.

**Major upgrades projects:**

There were no major updates during the reporting period.

**Deviation from license conditions and Actions to resolve the problem**

Particulates emissions above allowable limit were recorded on the 22 September 2015 and 16 March 2016 respectively and a NEMA Section 30 Emergency incident was reported to DEA in both instances. An action plan to address the problem was developed and submitted DEA, all damaged bags have been replaced and a progress report submitted.

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The rest of the information demonstrating emission performance, compliance statistics and Spot/Verification tests summary results is supplied in the monthly emission reports.

Hoping the above will meet the Annual Atmospheric Emission License requirements.

Yours sincerely



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**Prince Khumalo**  
**ACTING GENERAL MANAGER: MEDUPI POWER STATION**

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