

Mr Vusi Mahlangu: Air Quality Officer.  
Nkangala District Municipality  
2A Walter Sisulu Street  
Middelburg  
1050

Date:  
05.26.2022  
Enquiries:  
Mokgadi Mvambo  
27 (0)13 295 9454

Ref: **Komati Power Station Annual Emission Report**

Dear Mr Mahlangu

**KOMATI POWER STATION'S ANNUAL EMISSIONS REPORT FOR FY 2020/21**

This serves as the annual report required in terms of Section 7.6 in Komati Power Station's Atmospheric Emission License NDM/AEL/MP313/12/12, as well as in terms of other reporting requirements listed in the Minimum Emission Standards. The emissions are for Eskom's 2021/22 financial year, which is from 1 April 2021 to 31 March 2022 including Ambient Air Quality data. Verified emissions of particulates, as measured by installed CEMS and SO<sub>2</sub> and NO<sub>x</sub> (as NO<sub>2</sub>), as calculated, are also included.

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

Name of facility	Komati Power Station
Description of facility	Electricity Generation
Reference number of plant	NDM/AEL/MP313/12/12

**1. Emission Trends:**

The emissions in the table below are that of the 2021/2022 financial year

**Table 1.** General oversight of emissions at Komati Power Station 2021/2022

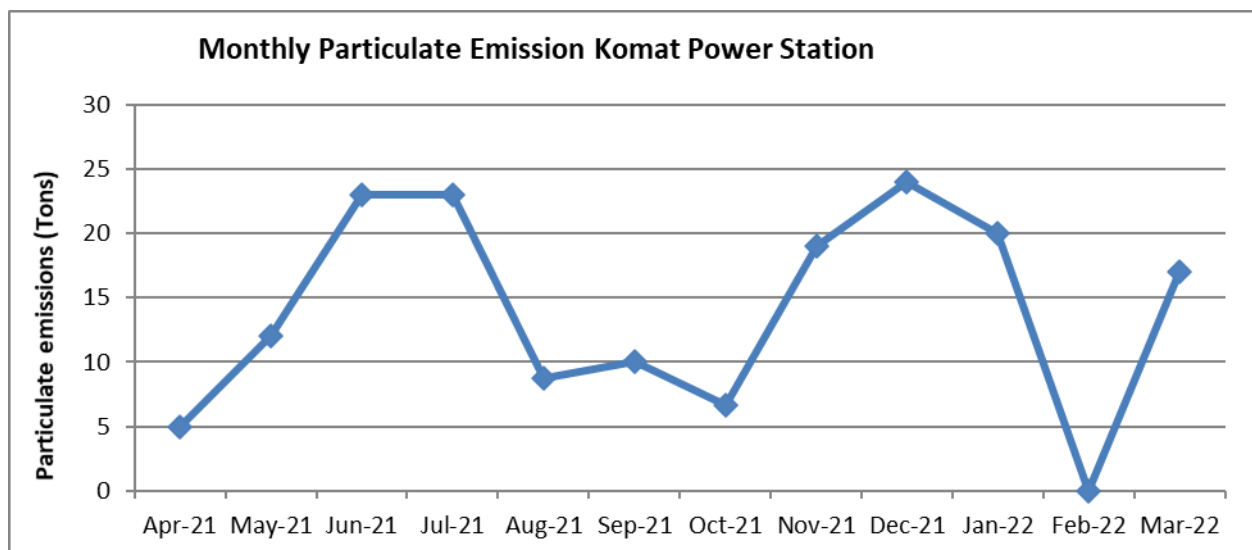
Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
<b>Komati</b>	CO <sub>2</sub> : 782547	CO <sub>2</sub> : 1542.114	CO <sub>2</sub> : 784089.11
	NO <sub>2</sub> : 6,060508	NO <sub>2</sub> : N/A	NO <sub>2</sub> : 6,060508

	PM: 168	PM: N/A	PM: 168
	SO <sub>2</sub> : 3850	SO <sub>2</sub> : 145.3	SO <sub>2</sub> : 3995.3
	NO <sub>x</sub> : 4195	NO <sub>x</sub> : N/A	NO <sub>x</sub> : 4195

**Table 2** Pollutant Emission Trends for 2021-2022 Financial Year.

Unit	PM (tons)	SO2 (tons)	NO2 (tons)	CO <sub>2</sub> (tons)
1	0.0	0.0	0.0	<b>0.0</b>
2	0.0	0.0	0.0	<b>0.0</b>
3	0.0	0.0	0.0	<b>0.0</b>
4	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	<b>0.0</b>
6	0.0	0.0	0.0	<b>0.0</b>
7	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	<b>0.0</b>
9	168	3850	4195	<b>782547</b>
SUM	<b>168</b>	<b>3850</b>	<b>4195</b>	<b>782547</b>

**Figure 1.** Monthly Particulate Emissions in tons Komati Power Station 2021/2022



Generation Division  
 Komati Power Station  
 R35 Middelburg – Bethal Road Blinkpan  
 Private Bag X2 Blinkpan 2250 SA  
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Please note: Gaseous emissions are largely dependent on the power generated by the power station, and thus the amount of coal burnt.

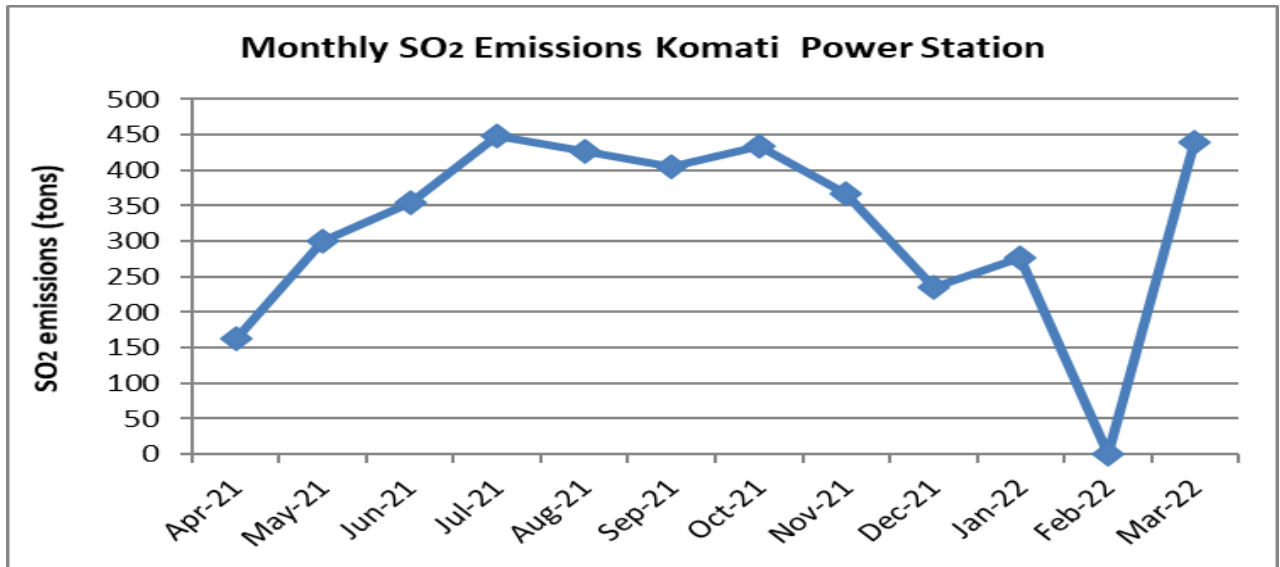


Figure 2. Monthly SO<sub>2</sub> Emissions in tons from Komati Power Station 2021/2022

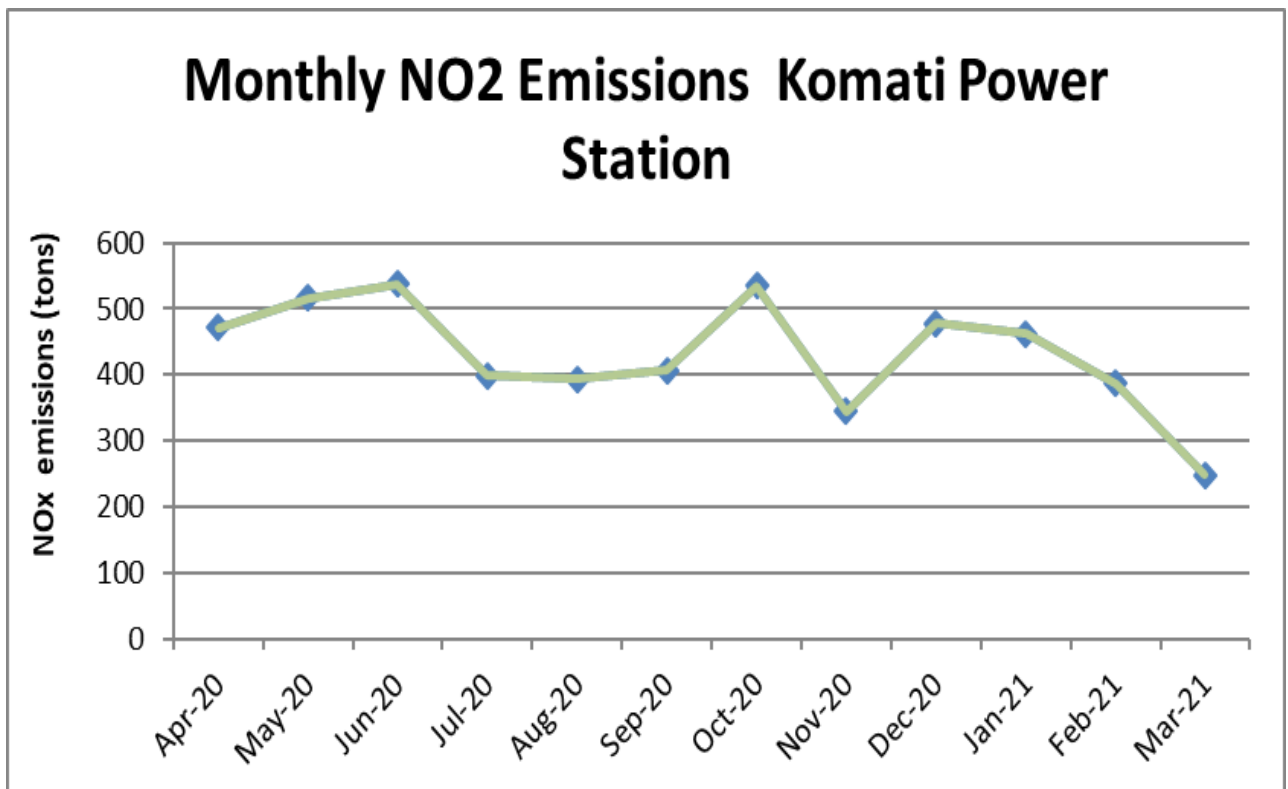
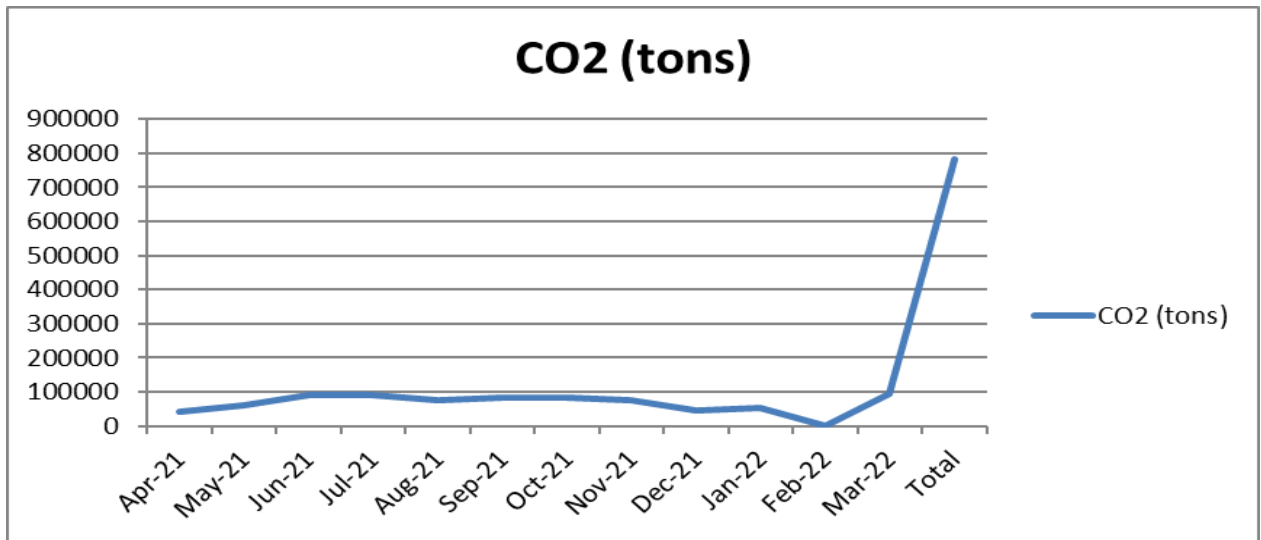
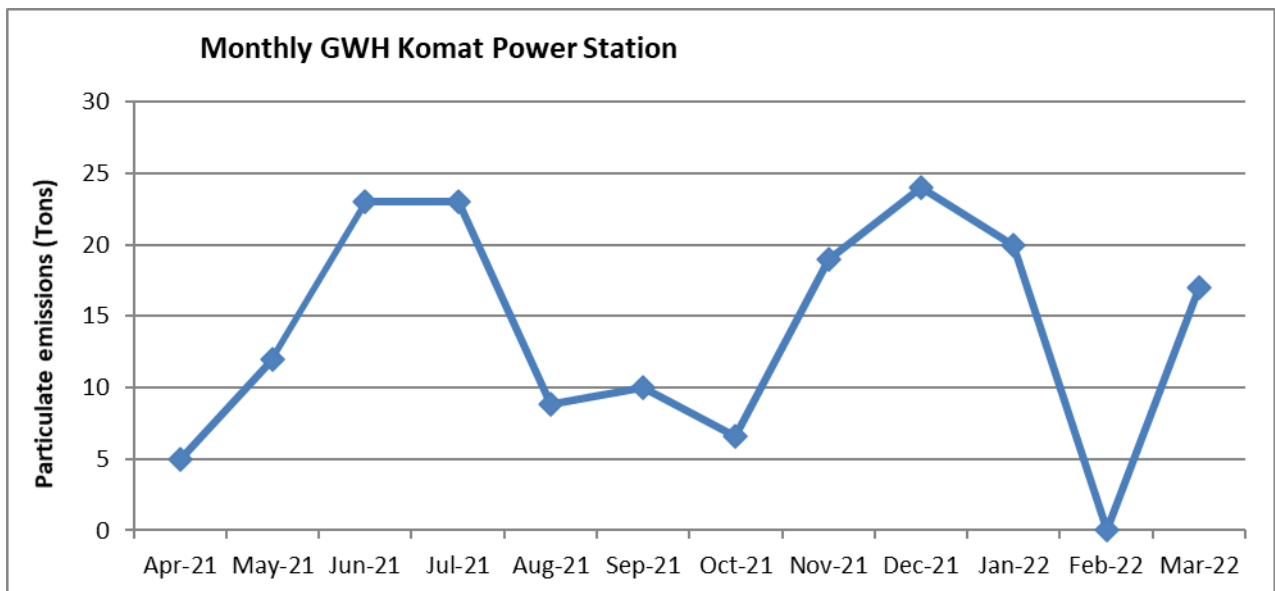


Figure 3. Monthly NO<sub>2</sub> Emissions in tons for Komati Power Station 2021/2022



**Figure 4.** Monthly CO<sub>2</sub> Emissions in tons from Komati Power Station Power Station 2021/2022



**Figure 5.** Monthly Energy sent out in GWh at Komati Power Station 2021/2022

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

## 2. Monitoring data availability

Table 2. General oversight of monitoring data availability for Komati Power Station 2021/2022 in terms of the number of full hours per annum that valid results were obtained for the CEMS in question

	<b>PM West</b>	<b>SOx West</b>	<b>NOx West</b>
April 2021	79%	80.1%	79.7%
May 2021	82.2%	83.2%	82.5%
June 2021	100%	98.5%	97.3%
July 2021	100%	98.9%	99%
August 2021	98.8%	99.1%	98.8%
Sep 2021	100%	99%	97.8%
Oct 2021	100%	87.4%	98%
Nov 2021	100%	97.2%	98.3%
Dec 2021	100%	99.2%	98.4%
Jan 2022	95.9%	74.5%	98%
Feb 2022	100%	65.6%	70.6%
March 2022	99.5%	94.6%	97.8%
<b>Total Average Availability</b>	<b>96%</b>	<b>90%</b>	<b>93.0%</b>

## 3. Compliance Audit Report(s):

External Legal compliance Audit was conducted from 11<sup>th</sup> until 14<sup>th</sup> January 2021 by Savannah Environmental Management Services.

**Greenhouse gas emissions:**

Greenhouse gas emissions as CO<sub>2</sub> and N<sub>2</sub>O have been reported on in the above sections. These have been calculated.

**Results of spot measurements or correlation tests:**

Parallel Emission Measurements conducted on Unit No. 9 West at Komati Power Station from the 5th to 7th August 2021 and submitted through NAEIS system.

**NAEIS reporting:**

Komati Power Station submitted its annual report on the NAEIS system by the 31 March 2022.

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

**Environmental Manager: Mokgadi Mvambo**

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**Risk and Assurance Manager (Acting): Daniel Mphuthi**

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**POWER STATION GENERAL MANAGER(Acting): Jurie Pieterse**

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