

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

Date:
 05.04.2021

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 2020/21 financial year, which is from 1 April 2020 to 31 March 2021 including Ambient Air Quality data. 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	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 2020/2021 financial year

Table 1. General oversight of emissions at Komati Power Station 2020/2021

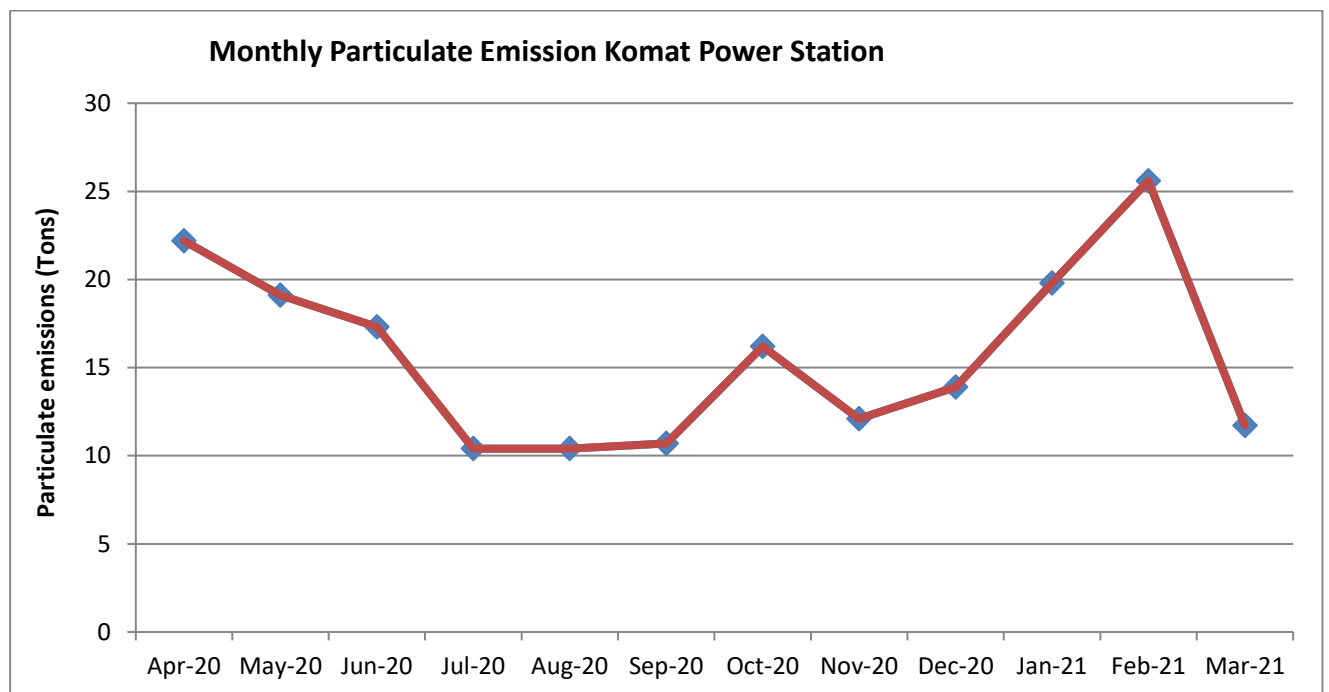
Power Station	Coal-fired emissions (tons/annum)	Fuel-oil emissions (tons/annum)	Total (tons/annum)
Komati	CO ₂ : 881246	CO ₂ : 2083	CO ₂ : 883329
	NO ₂ : 5178.1	NO ₂ : N/A	NO ₂ :5178.1

	PM: 189.42	PM: N/A	PM: 189.42
	SO ₂ : 7712.8	SO ₂ : 163.4	SO ₂ : 7876.2
	NO _x : 5178.1	NO _x : N/A	NO _x : 5178.1

Table 2 Pollutant Emission Trends for 2020-2021 Financial Year.

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)	CO ₂ (tons)
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	1.6	88.4	89.7	15 853.9
5	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0
7	10.7	370.5	303.4	52 337.2
8	0.0	0.0	0.0	0.0
9	6.9	243.9	215.6	35 273.3
SUM	19.2	702.8	608.7	103 464.5

Figure 1. Monthly Particulate Emissions in tons Komati Power Station 2020/2021



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

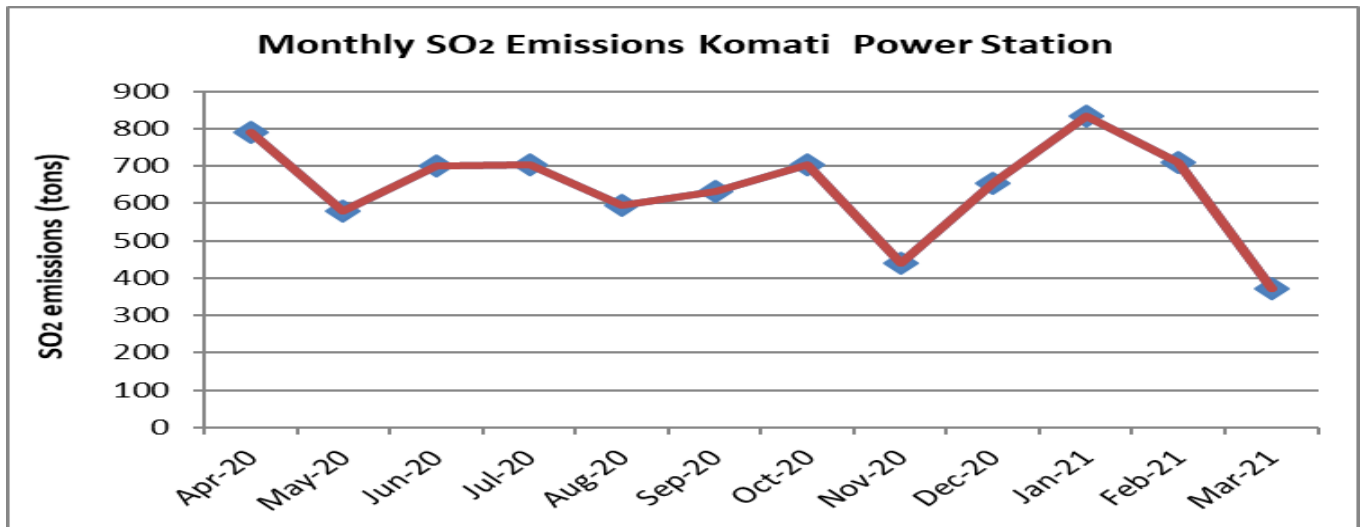


Figure 2. Monthly SO₂ Emissions in tons from Komati Power Station 2020/2021

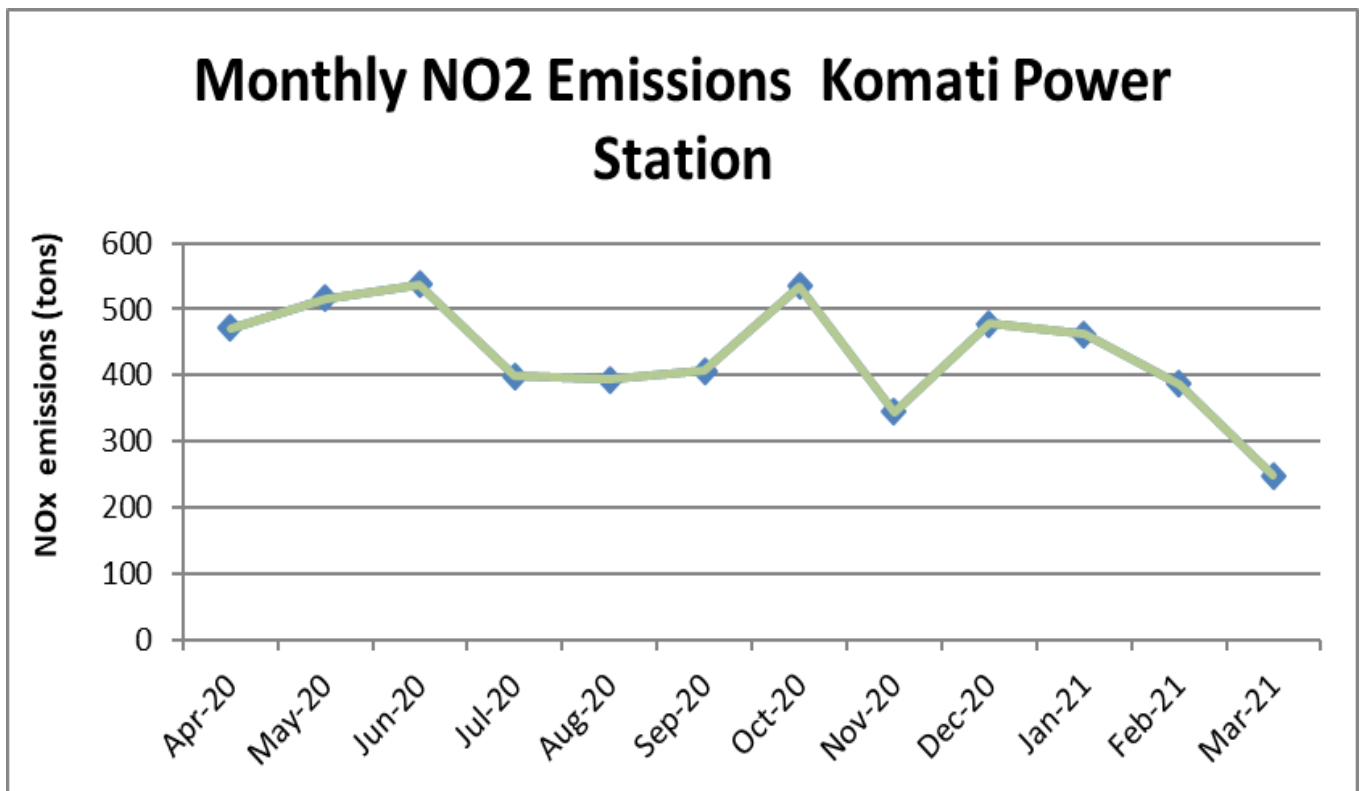


Figure 3. Monthly NO₂ Emissions in tons for Komati Power Station 2020/2021

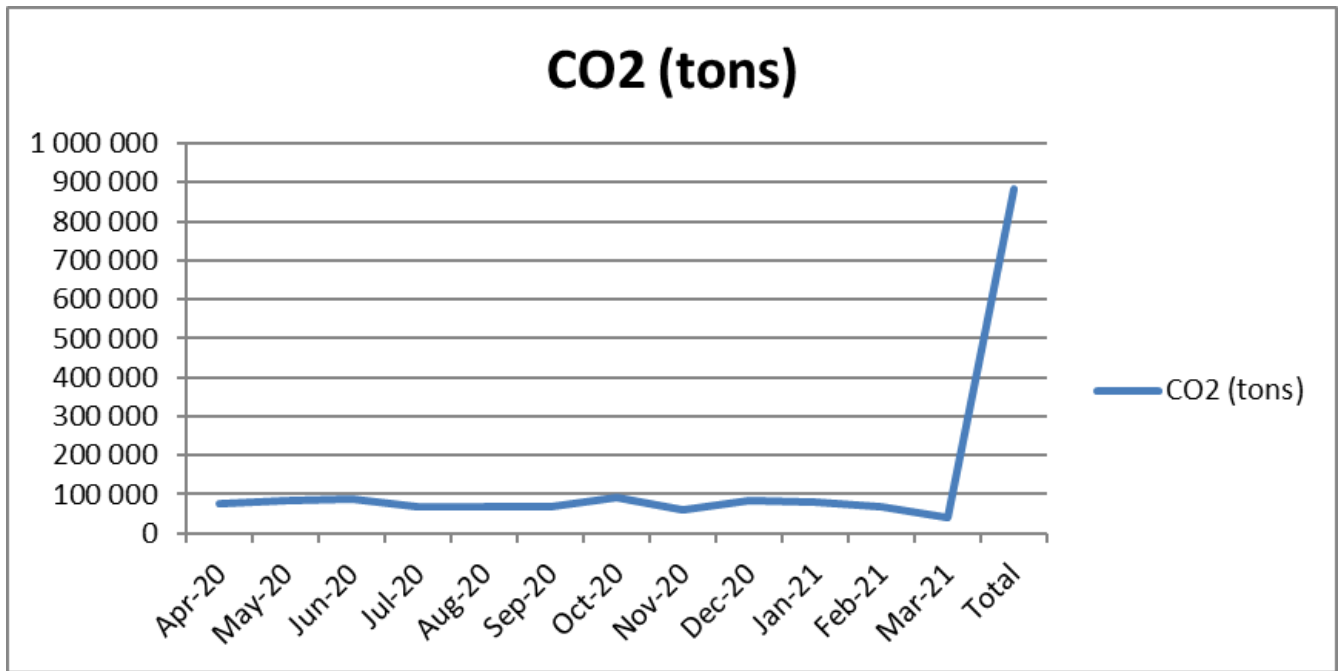


Figure 4. Monthly CO₂ Emissions in tons from Komati Power Station Power Station 2020/2021

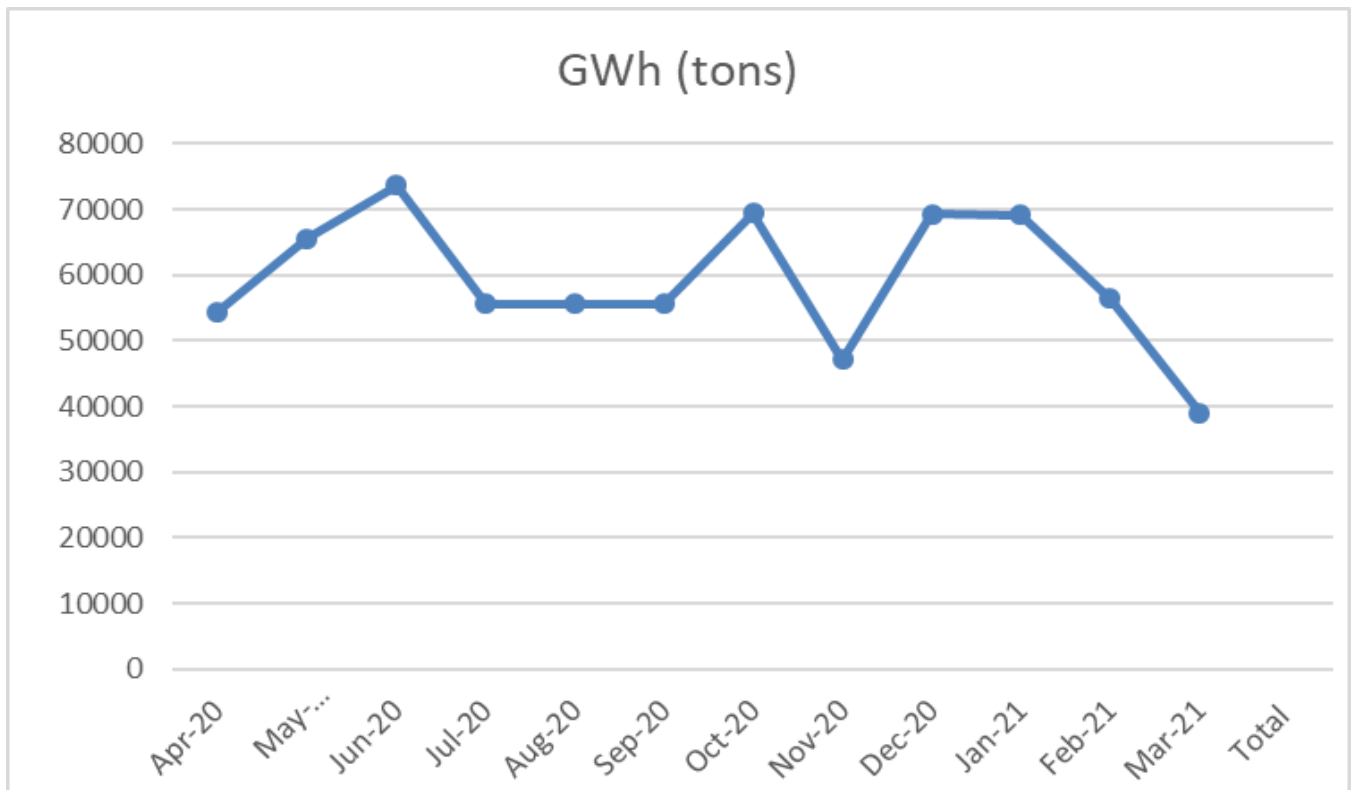


Figure 5. Monthly Energy sent out in GWh at Komati Power Station 2020/2021

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 2020/2021 in terms of the number of full hours per annum that valid results were obtained for the CEMS in question

	PM West	SOx West	NOx West
April 2020	99.5%	99.5%	99.5%
May 2020	89.2%	74%	87.6%
June 2020	97.9%	89.4%	94.6%
July 2020	95.8%	92%	91.9%
August 2020	93.5%	91.9%	91.5%
Sep 2020	94%	91.4%	91.3%
Oct 2020	98.8%	96.7%	96.9%
Nov 2020	90.3%	84.5%	90.8%
Dec 2020	99.2%	87.2%	98%
Jan 2021	96.5%	95.2%	94.8%
Feb 2021	90.6%	88.8%	87.6%
March 2021	88.9%	88.4%	88.1%
Total Average Availability	94.52%	89.9%	92.7%

3. Compliance Audit Report(s):

External Legal compliance Audit was conducted from 11th until 14th January 2021 by Savannah Environmental Management Services

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:**NAEIS reporting:**

Komati Power Station submitted its annual report on the NAEIS system by the 31 March 2021.

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



Risk and Assurance Manager (Acting): Daniel Mphuthi



POWER STATION GENERAL MANAGER: Marcus Nemadodzi



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