

Mr Vusi Mahlangu
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Date:
28 April 2016

Enquiries:
Justice Ramagoma
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Ref No. R/ENV200-12 R0

Dear Mr. Mahlangu

HENDRINA POWER STATION'S ANNUAL EMISSIONS REPORT FOR 2015/2016 FINANCIAL YEAR

This serves as the annual report required in terms of Section 7.6 of Hendrina Power Station's Atmospheric Emission License (17/4/AEL/MP/313/11/16). The emissions are for Eskom's 2015/2016 financial year, which is from 1 April 2015 to 31 March 2016. Calculated emissions based on coal properties of particulates, SO₂ and NO_x (as NO₂), N₂O and CO₂ are also included.

The emissions in the table below are for 2015/2016 financial year.

Table 1. General oversight of emissions at Hendrina Power Station 2015/2016

Hendrina Power Station	Coal-fired emissions (Total tons/annum)
Particulate Matter	PM: 831
Gaseous Emissions	CO ₂ : 9 782 189 N ₂ O: 165 SO ₂ : 89 088 NO _x : 36 653

Table 2. Pollutant Emission Trends for 2015/2016:

Month	PM (tons)	SO ₂ (tons)	NO _x (tons)	CO ₂ (tons)	N ₂ O (tons)
April 2015	64	8 279	3 400	900 567	15
May 2015	66	6 628	2 722	711 265	12
June 2015	84	6 324	2 597	677 451	11
July 2015	50	9 074	3 388	871 252	15
August 2015	47	6 091	2 780	730 230	12
September 2015	53	8 790	3 282	892 789	15
October 2015	65	8 710	2 981	816 212	14
November 2015	131	10 842	3 710	998 916	17
December 2015	89	7 785	3 552	956 322	16
January 2016	66	6 091	3 127	844 093	14
February 2016	46	4 574	2 087	571 658	10
March 2016	70	5 900	3 029	811 433	14

PM: Particulate matter (PM) is a by-product of coal combustion, in the form of ash emitted through stacks. PM emissions are largely dependent on the power generated by the power station, and thus the amount of and type/quality of coal burnt and the abatement technology used.

SO₂, NO_x, and CO₂, N₂O are by-products of coal combustion which are released as flue gasses through stacks.

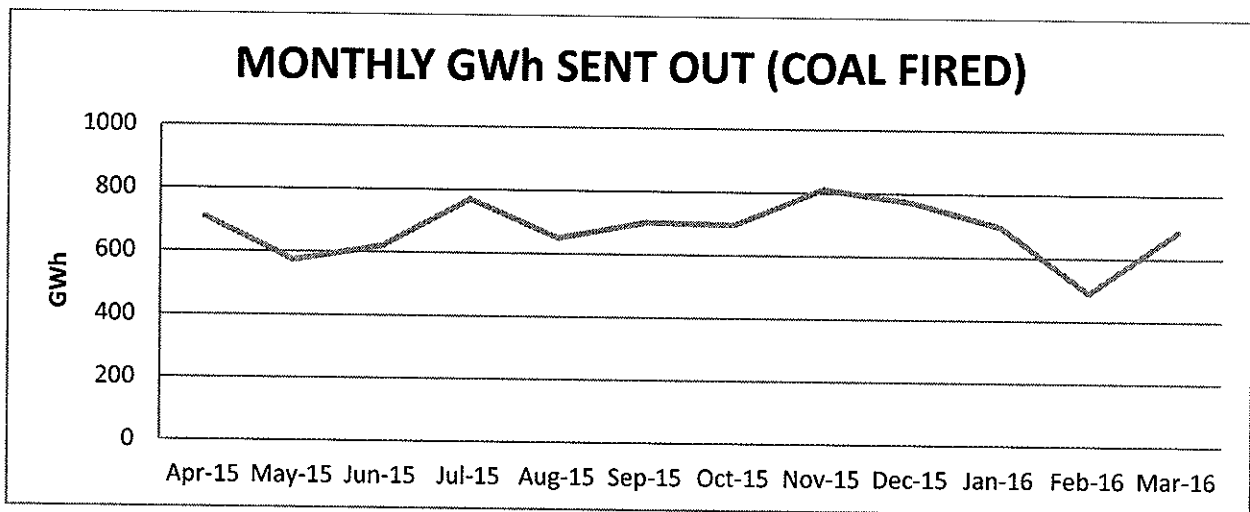


Figure 1. Monthly Energy sent out in GWh at Hendrina Power Station 2015/2016

Major upgrades projects:

The installation of new continuous emission monitoring system equipment for gaseous emissions on both stacks in June 2015 (correlation report is attached).

No other upgrades are planned at the moment.

Greenhouse gas emissions:

Greenhouses gasses emitted and measured by Hendrina Power Station are CO₂ and N₂O, which are reported in this report in Table 1, and 2.

Attachments:

- Compliance report: External Emission Audit report attached.
- Monitor verification/correlation report
- Annual fugitive emission report

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



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POWER STATION MANAGER: HENDRINA