

Mr. Vusi Mahlangu Air Quality Officer DEDET Private bag X11215 NELSPRUIT 1200 Date:

10 February 2021

Enquiries: Mariam Joseph Tel +27 13 297 9828

Fax + 27 86 661 7663

Dear Mr. Mahlangu

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF FEBRUARY 2021

This serves as the monthly report required in terms of Section 6 in Arnot Power Station's Atmospheric Emission License. The emissions are for the month of February 2021, Verified emissions of particulates; SO_2 and NO_x (as NO_2) are also included.

Raw Materials and Products

Table1: Quantity of Raw Materials and Products used/produced for the Month of February 2021

Raw Materials and	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of February 2021
Products used	Coal	Tons/month	1 050 330	397 730.0
	Fuel Oil	Tons/month	10 000	4088.19
一种人们是对外	ASSESSED BURNEY	MIR SHEET SHEET		
Production Rates	Product/ By- Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of February 2020
	Energy	GWh	1 785 600	738 378
	Ash	Tons/month	421 000	96 369.98
				新州 安徽 (1985年)

Abatement Technology

Table 2: Abatement Equipment Control Technology for month of February 2021

Associated Unit/Stack	Technology Type	Actual Utilisation (%) for the month of February 2021
North Stack	Fabric Filter Bags	99.8%
South Stack	Fabric Filter Bags	99.8%

Table 2.1

Associated Unit/Stack	Technology Type	Actual Utilisation (%) for the month of February 2021
North Stack	Fabric Filter Bags	100%
South Stack	Fabric Filter Bags	100%

Energy Source Characteristics

Table 3: Energy Source Material Characteristics for the month of February 2021

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.745
Ash Content	17 to < 40 (%)	24.23

Table 4 Operating days in compliance to PM AEL Limit -February 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm²)
North	28	0	0	0	0	63.6
South	28	0	0	0	0	51.0
SUM	56	0	0	0	0	

Table 5 Operating days in compliance to NOx AEL Limit - February 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	28	0	0	0	0	630.5
South	28	0	0	0	0	643.6
SUM	56	0	0	0	0	

Table 6: Operating days in compliance to SOx AEL Limit -February 2021

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	28	0	0	0	0	1221.3
South	28	0	0	0	0	1440.3
SUM	56	0	0	0	0	

Emissions Reporting

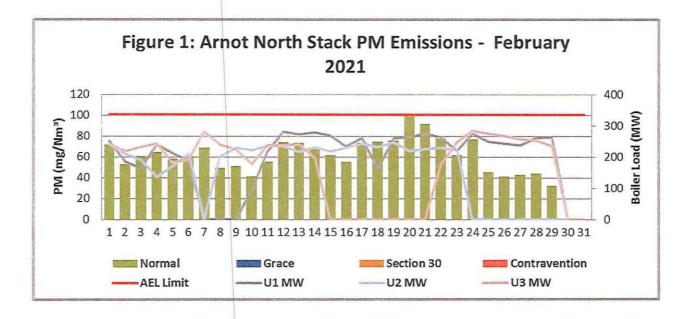


Figure 1: PM emissions (daily averages) for the month of February 2021 against emission limit for the North Stack

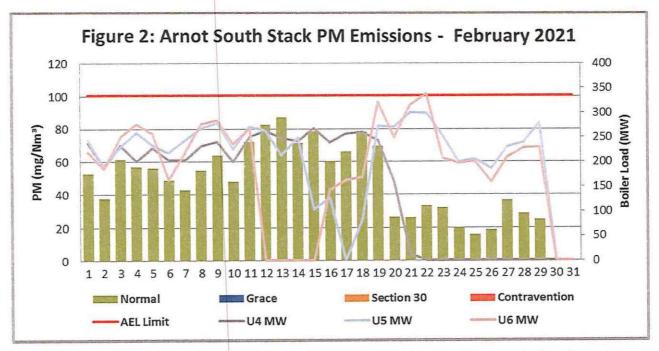


Figure 2: PM emissions (daily averages) for the month of February 2021 against emission limit for the South Stack

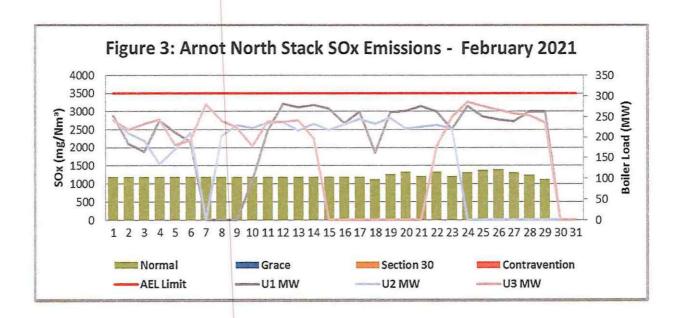


Figure 3: SO₂ emissions (daily averages) for the month of February 2021 against emission limit for the North Stack

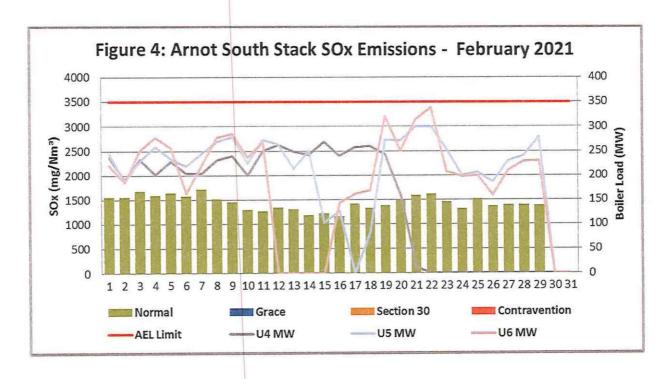


Figure 4: SO₂ emissions (daily averages) for the month of February 2021 against emission limit for the South Stack

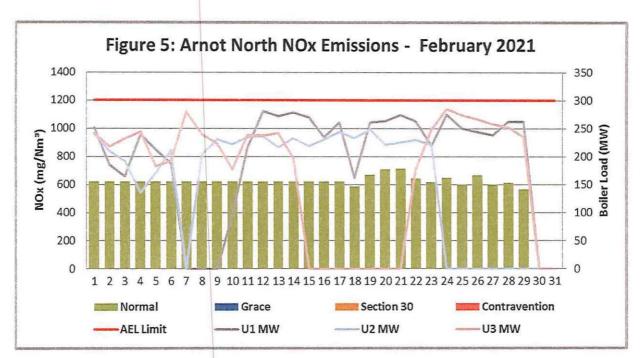


Figure 5: NO₂ emissions (daily averages) for the month of February 2021 against emission limit for the North Stack

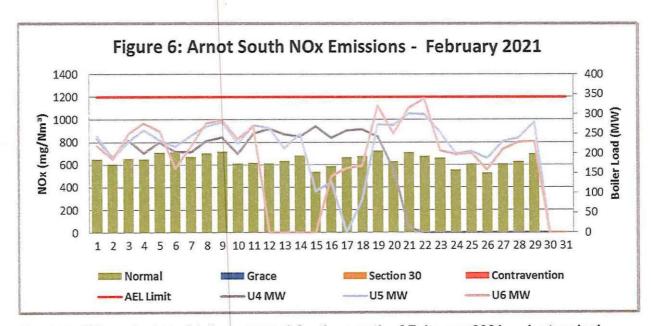


Figure 6: NO₂ emissions (daily averages) for the month of February 2021against emission limit for the South Stack

Table 4: Monthly tonnages for the month of February 2021

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
Total Tons (North & South Stack)	215.0	5 431.8	2 582.6

Table 5: Monitor Availability

Unit	PM (%)	SO ₂ (%)	NO ₂ (%)
North Stack	100.0	36.9	36.9
South Stack	100.0	95.7	96.3

Table 6: Each unit and respective days operating under normal operation, days in grace period, and section 30 days respectively

Unit	Days operating under normal operation	Days operating in grace period	Days operating under \$ 30	
1	28	0	0	
2	28	0	0	
3	28	0	0	
4	28	0	0	
5	28	0	0	
6	28	0	0	

Light up information

Continuous reporting is being done even during start-ups, emissions were not affected.

Complaints Register

Table 7. Complaints for the month of February 2021

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident	Dispersion modeling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implement ed
None					

General

The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission reports sent to your office.

Hoping the above will meet your satisfaction.

Compiled by

Lawrence Machebe

ENVIRONMENTAL OFFICER: ARNOT

Verified by

Marcho

Nomathemba Mpulo

SENIOR TECHNOLOGIST: ARNOT

Supported by

Rofhiwa Tshikovha

SENIOR ENVIRONMENTAL ADVISOR: ARNOT

Yours sincerely

Tsoro Samuel Mashao

ACTING GENERAL MANAGER: ARNOT