

Nkangala District Municipality 2A Walter Sisulu Middelburg 1050 Date: 2025.04.17

Inquiries: Mariam Joseph Tel +27 13 297 9828 Fax + 27 86 661 7663

Dear Mrs Simelane

## ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF FEBRUARY 2025

This serves as the monthly report required in terms of Section 6 in Arnot Power Station's Atmospheric Emission License. The emissions are for February 2025, 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 2025

Raw Materials and	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of February 2025
Floudets used	Coal	Tons/month	1 050 330	230 973.36
	Fuel Oil	Tons/month	10 000	3 315.78
	Product/ By- Product Name	Unit	Maximum  Production Capacity	Production Rate in  Month of February
Draduction Botos			Permitted (Quantity)	2025
Production Rates	Energy	GWh	1 785 600	371 130
Production Rates	Energy Ash	GWh Tons/month	` ',	

### **Abatement Technology**

Table 2.1 (a) Abatement Equipment Efficiency Control Technology for month of February 2025

Associated Unit/Stack	Technology Type	Actual Efficiency (%) for the month of February 2025
North Stack	Fabric Filter Bags	99.8%
South Stack	Fabric Filter Bags	99.8%

Table 2.1 (b) Abatement Equipment Utilisation (%) for the month of February 2025

Associated Unit/Stack	Technology Type	Utilisation February 2025
North	Fabric Filter Plant (FFP)	100 %
South	Fabric Filter Plant (FFP)	100 %

Table 2.1 (c) Monitor Reliability (%)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO
Stack 1	100.0	96.9	97.6
Stack 2	85.9	82.9	82.3

#### **Energy Source Characteristics**

Table 3: Energy Source Material Characteristics for the month of February 2025

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.487
Ash Content	17 to < 40 (%)	21.54

Table 4 Operating days in compliance to PM AEL Limit – February 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
North	28	0	0	0	0	27.6
South	28	0	0	0	0	32.8
SUM	56	0	0	0	0	

Table 5: Operating days in compliance to NOx AEL Limit – February 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	28	0	0	0	0	544.5
South	28	0	0	0	0	667.5
SUM	56	0	0	0	0	

Table 6: Operating days in compliance to Sox AEL Limit –February 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	28	0	0	0	0	1154.6
South	28	0	0	0	0	1439.2
SUM	56	0	0	0	0	

### **Emissions Reporting**

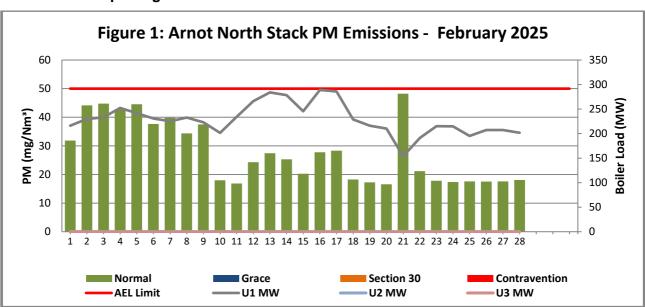


Figure 1: PM emissions (daily averages) for the month of February 2025 against the emission limit for the North Stack

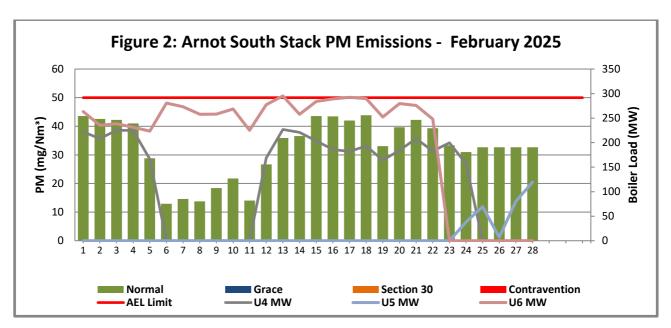


Figure 2: PM emissions (daily averages) for the month of February 2025 against emission limit for the South Stack

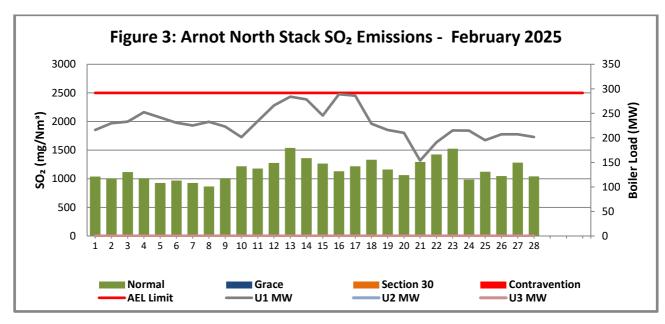


Figure 3: SO<sub>2</sub> emissions (daily averages) for the month of February 2025 against emission limit for the North Stack

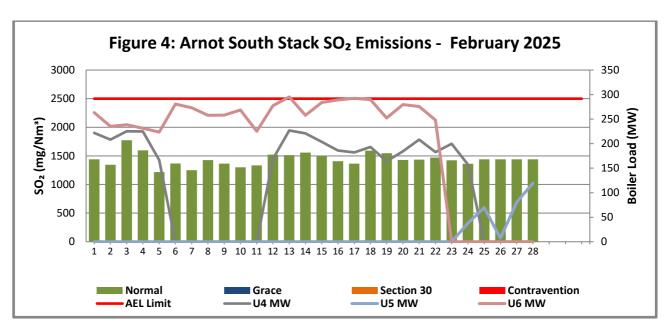


Figure 4: SO<sub>2</sub> emissions (daily averages) for the month of February 2025 against emission limit for the South Stack

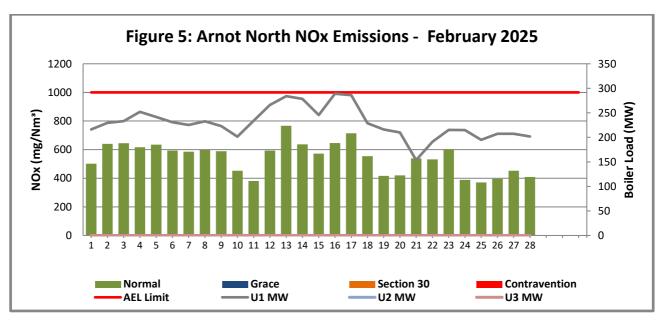


Figure 5: NO<sub>2</sub> emissions (daily averages) for the month of February 2025 against emission limit for the North Stack

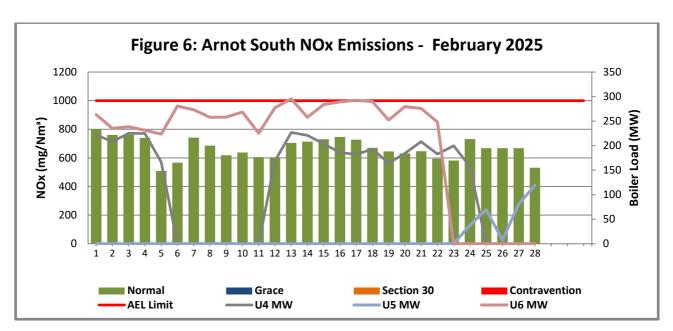


Figure 6: NO<sub>2</sub> emissions (daily averages) for the month of February 2025 against emission limit for the South Stack

Table 4: Monthly tonnages for the month of February 2025

Unit	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>2</sub> (tons)
Total Tons			
(North &	76.0	3347	1572
South Stack)			

Table 5: 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 6. Complaints for the month of February 2025

No Noise, dust and offensive odors complaints registered in the month of February 2025.

Source Code/ Name		Calculation of impacts/ citilssions	·	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
None	0	0	0	0	0

#### 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 Date: 2025.04.16

Lawrence Machebe

**ENVIRONMENTAL OFFICER: ARNOT POWER STATION** 

Verified by Date:

17-04-2025

Jan-Louis Human

**SYSTEM ENGINEER: ARNOT POWER STATION** 

Supported by: Date: 2025.04.17

Rofhiwa Tshikovha

SENIOR ENVIRONMENTAL ADVISOR: ARNOT POWER STATION

Yours sincerely

P.P

Marcus Nemadodzi Date: 2025/04/22

**GENERAL MANAGER: ARNOT POWER STATION**