

Nkangala District Municipality 2A Walter Sisulu Middelburg 1050 Date: 2025.06.26

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 MAY 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 May 2025, verified emissions of particulates; SO_2 and NO_x (as NO_2) are also included.

Raw Materials and Products

Table 1: Quantity of Raw Materials and Products used/produced for the Month of May 2025

Raw Materials and	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of May 2025
i roducts useu	Coal	Tons/month	1 050 330	321 892.32
	Fuel Oil	Tons/month	10 000	3631.70
Draduction Dates	Product/ By- Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of May 2025
Production Rates	Energy	GWh	1 785 600	547.62
	Ash	Tons/month	421 000	89711

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

Associated Unit/Stack	Technology Type	Actual Efficiency (%) for the month of May 2025
North Stack	Fabric Filter Bags	99.9%
South Stack	Fabric Filter Bags	99.9%

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

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

Table 2.1 (c) Monitor Reliability (%)

Associated Unit/Stack	PM	SO₂	NO
Stack 1	82.8	97.6	97.4
Stack 2	99.3	94.0	96.8

Energy Source Characteristics

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

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.760
Ash Content	17 to < 40 (%)	27.87

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
North	31	0	0	0	0	22.6
South	30	1	0	0	1	37.6
SUM	61	1	0	0	1	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	31	0	0	0	0	693.1
South	31	0	0	0	0	712.9
SUM	62	0	0	0	0	

Table 6: Operating days in compliance to Sox AEL Limit -May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	31	0	0	0	0	1421.3
South	31	0	0	0	0	1422.5
SUM	62	0	0	0	0	

Emissions Reporting

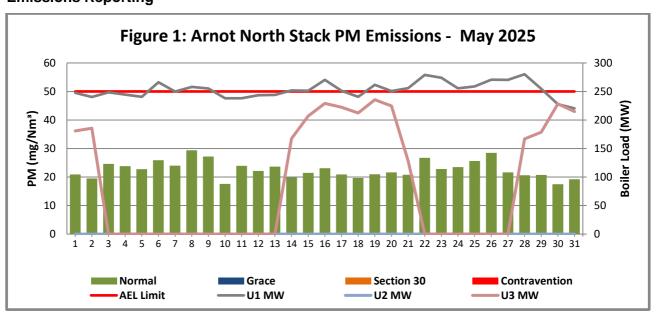


Figure 1: PM emissions (daily averages) for the month of May 2025 against the emission limit for the North Stack

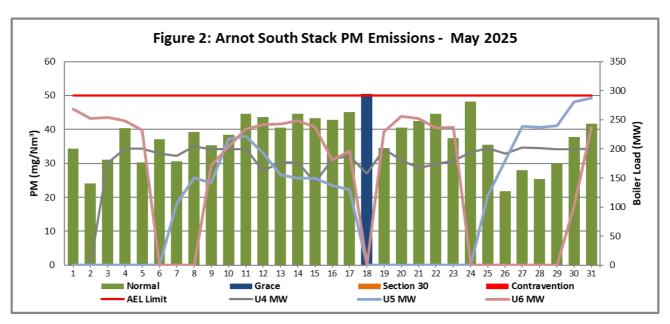


Figure 2: PM emissions (daily averages) for the month of May 2025 against emission limit for the South Stack

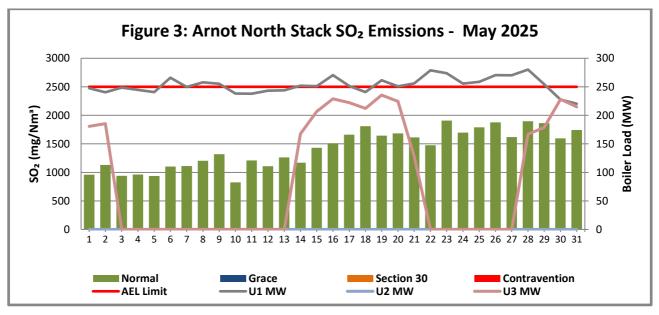


Figure 3: SO₂ emissions (daily averages) for the month of May 2025 against emission limit for the North Stack

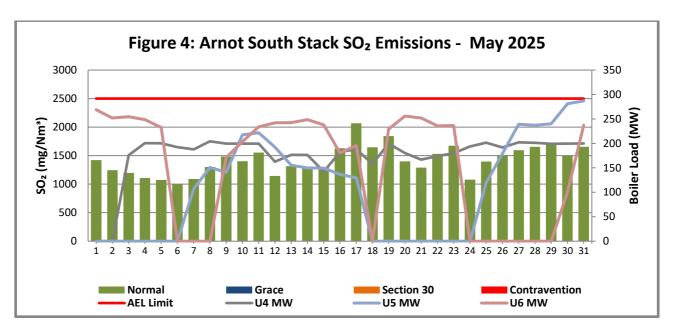


Figure 4: SO₂ emissions (daily averages) for the month of May 2025 against emission limit for the South Stack

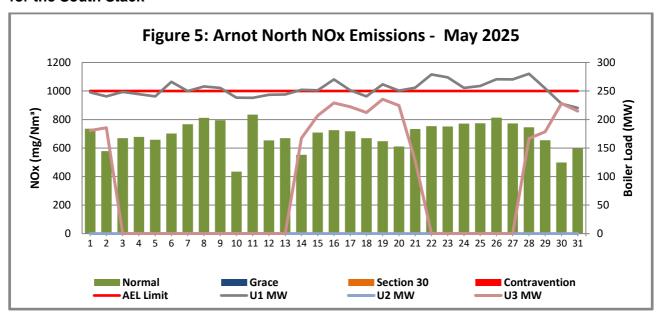


Figure 5: NO₂ emissions (daily averages) for the month of May 2025 against emission limit for the North Stack

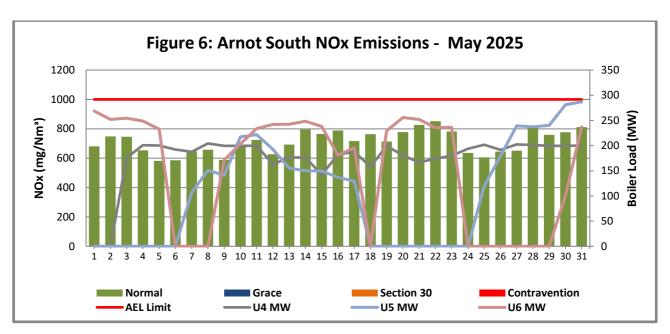


Figure 6: NO₂ emissions (daily averages) for the month of May 2025 against emission limit for the South Stack

Table 7: Monthly tonnages for the month of May 2025

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
Total Tons			
(North &	106.9	5580	2713
South Stack)			

Table 8: 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	31	0	0
2	31	0	0
3	31	0	0
4	30	1	0
5	31	0	0
6	31	0	0

Light up information

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

Complaints Register

Table 9. Complaints for the month of May 2025

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

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

General

O2 analyzer struck by lightning. 8,13% constant reading replaced with 8.69% avg from QAL 2 report. Analyzer replaced 19 May 2025.

On 18-May-25 grace period on South Stack is due to Unit 4 FFP leaking bag change.

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:

Lawrence Machebe

2025 06 30

ENVIRONMENTAL OFFICER: ARNOT POWER STATION

Verified by Date: 01-07-2025

Jan-Louis Human

SYSTEM ENGINEER: ARNOT POWER STATION

Supported by: Date: 2025.07.01

Rofhiwa Tshikovha

SENIOR ENVIRONMENTAL ADVISOR: ARNOT POWER STATION

Yours sincerely

Marcus Nemadodzi Date: 01 July 2025

GENERAL MANAGER: ARNOT POWER STATION