

Mr. Vusi Mahlangu
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Date:
 15 September 2020

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Dear Mr. Mahlangu

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

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 August 2020, Verified emissions of particulates; SO₂ and NO_x (as NO₂) are also included.

Raw Materials and Products

Table1: Quantity of Raw Materials and Products used/produced for the Month of August 2020

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of August
	Coal	Tons/month	1 050 330	524 263.2
	Fuel Oil	Tons/month	10 000	1355.35
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of August 2020
	Energy	GWh	1 785 600	973 404.54
	Ash	Tons/month	421 000	118 693.19



ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

Abatement Technology

Table 2: Abatement Equipment Control Technology for month of August 2020

Associated Unit/Stack	Technology Type	Actual Utilisation (%) for the month of June 2020
North Stack	Fabric Filter Bags	99.8%
South Stack	Fabric Filter Bags	99.6%

Energy Source Characteristics

Table 3: Energy Source Material Characteristics for the month of August 2020

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.655
Ash Content	17 to < 40 (%)	22.64

Table 4 Operating days in compliance to PM AEL Limit –August 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
North	31	0	0	0	0	34.6
South	27	0	0	0	0	62.9
SUM	58	0	0	0	0	

Table 5 Operating days in compliance to NOx AEL Limit – August 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	31	0	0	0	0	687.5
South	27	0	0	0	0	591.3
SUM	58	0	0	0	0	

Table 6: Operating days in compliance to SOx AEL Limit –August 2020

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	31	0	0	0	0	1 494.5
South	27	0	0	0	0	1 522.5
SUM	58	0	0	0	0	

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

Emissions Reporting

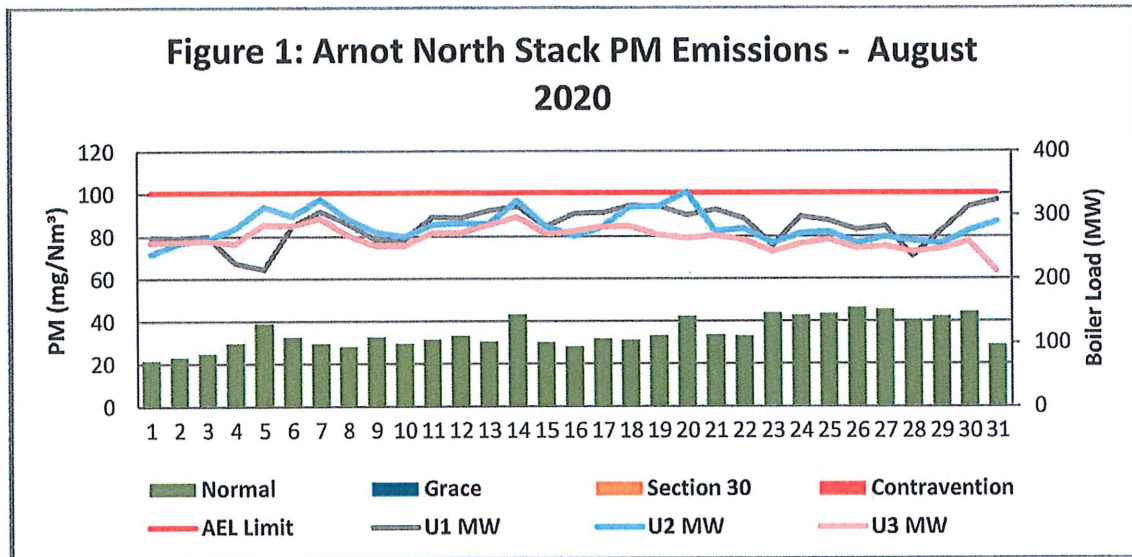


Figure 1: PM emissions (daily averages) for the month of August 2020 against emission limit for the North Stack

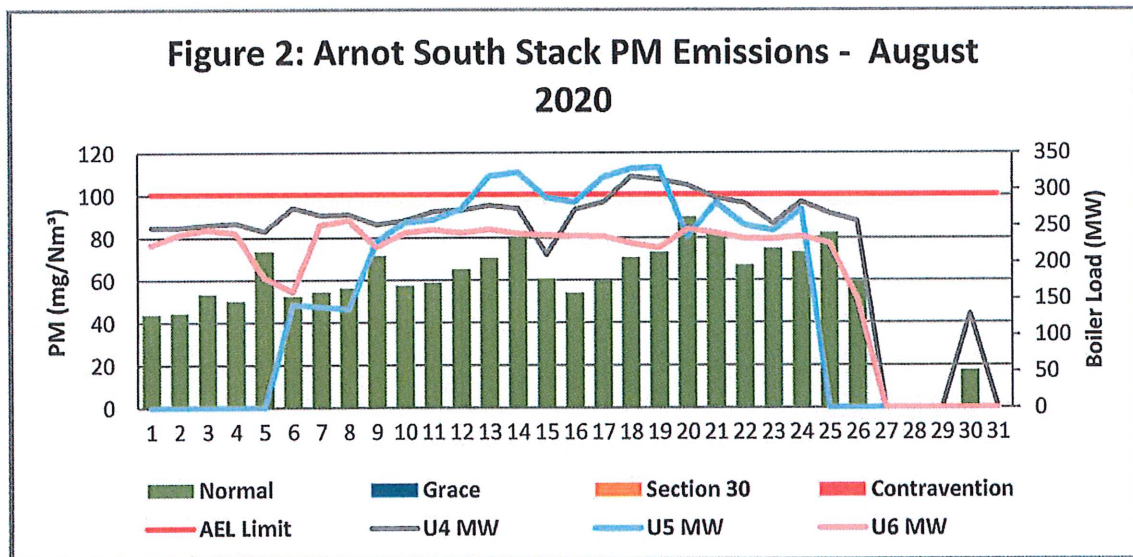


Figure 2: PM emissions (daily averages) for the month of August 2020 against emission limit for the South Stack

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

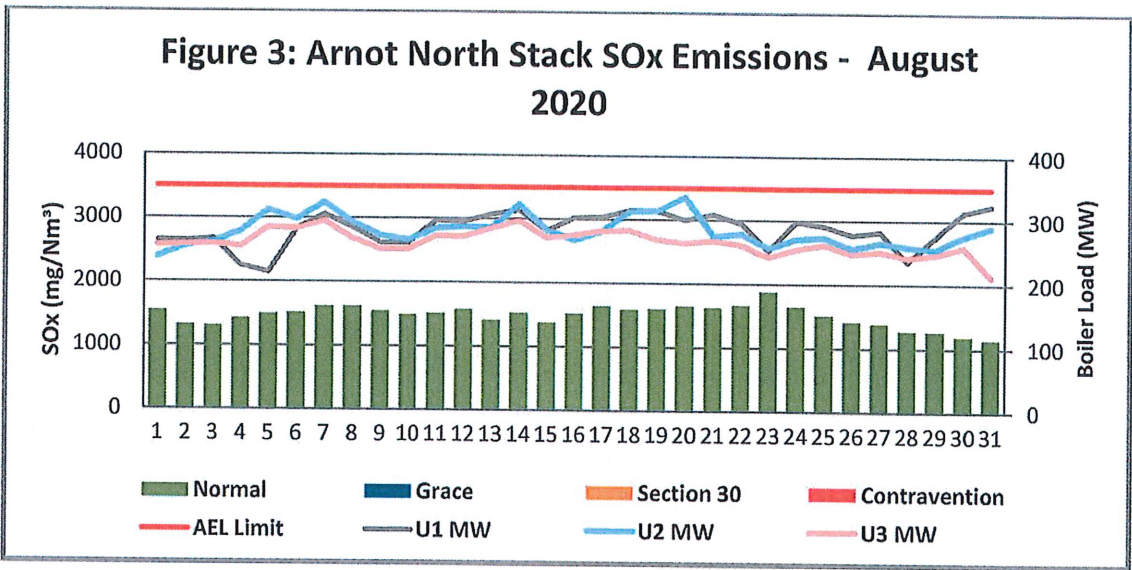


Figure 3: SO₂ emissions (daily averages) for the month of August 2020 against emission limit for the North Stack

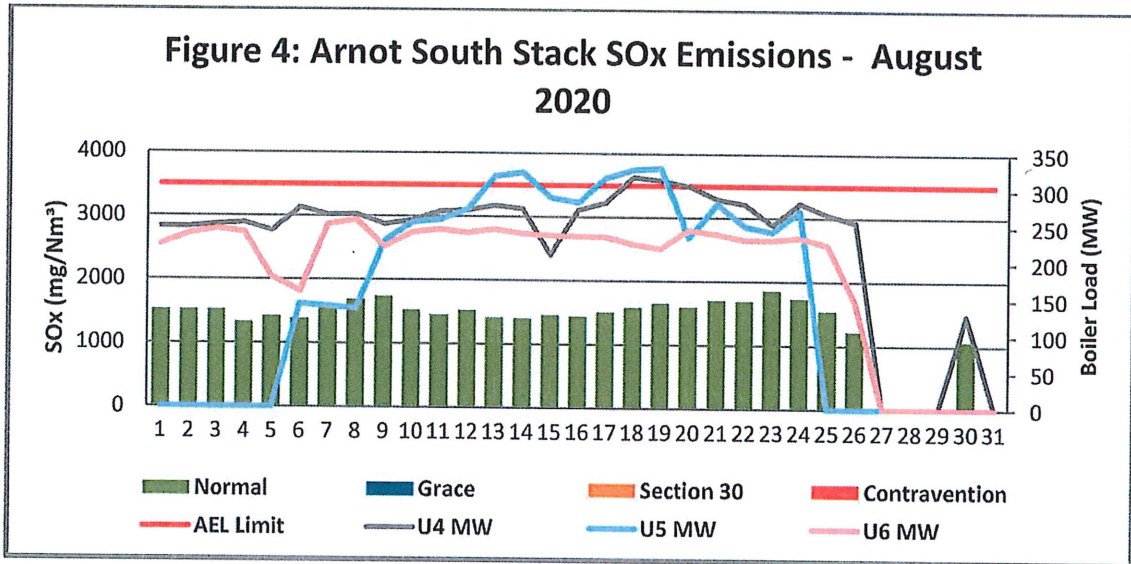


Figure 4. SO₂ emissions (daily averages) for the month of August-2020 against emission limit for the South Stack.



ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

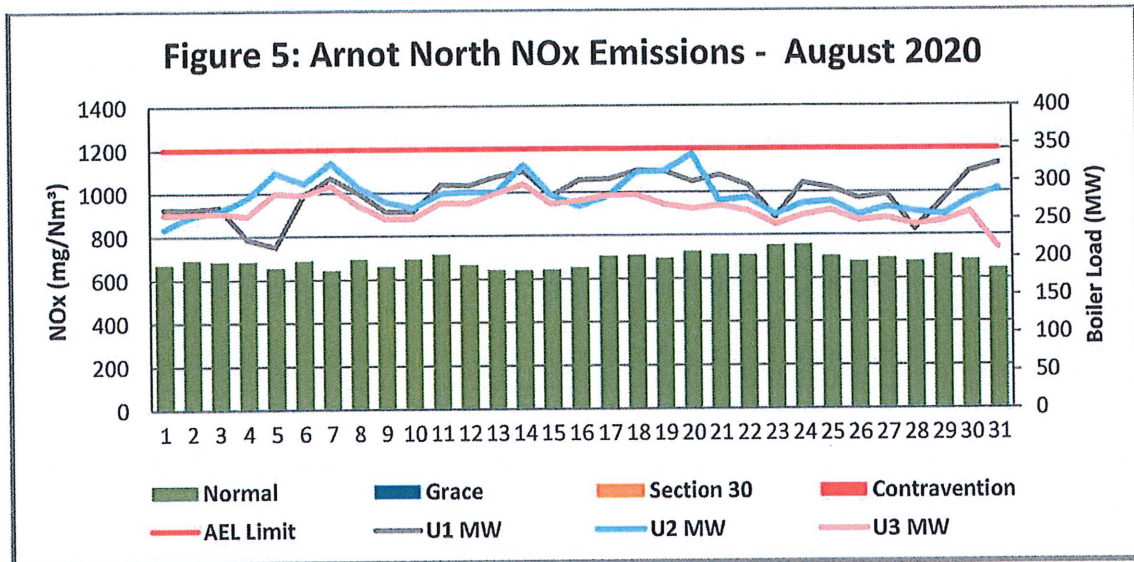


Figure 5: NO₂ emissions (daily averages) for the month of August -2020 against emission limit for the North Stack

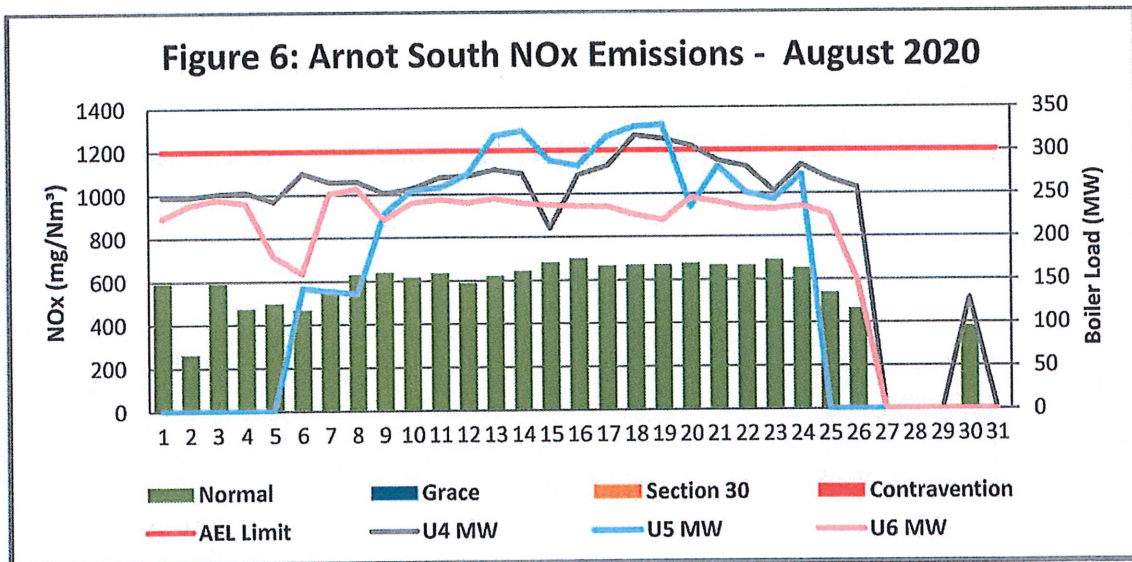


Figure 6: NO₂ emissions (daily averages) for the month of August -2020 against emission limit for the South Stack

ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST 2020

Table 4: Monthly tonnages for the month of August 2020

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)	CO ₂ (tons)
Total Tons (North & South Stack)	245.3	7 940.5	3 407.7	892 686

Table 5: Monitor Availability

Unit	PM (%)	SO ₂ (%)	NO ₂ (%)
North Stack	100.0	100.0	100.0
South Stack	98.9	82.3	82.3

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 S 30
1	31	0	0
2	31	0	0
3	31	0	0
4	27	0	0
5	27	0	0
6	27	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 August 2020

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 implemented
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.

**ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST
2020**

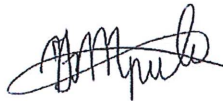
Hoping the above will meet your satisfaction.

Compiled by

PP 

Lawrence Machebe
ENVIRONMENTAL OFFICER: ARNOT

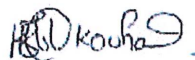
Verified by



2020-09-15

Nomathemba Mpulo
SENIOR TECHNOLOGIST: ARNOT

Supported by



Rofhiwa Tshikovha
SENIOR ENVIRONMENTAL ADVISOR: ARNOT



ARNOT POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF AUGUST
2020

Yours sincerely

A handwritten signature in black ink, appearing to read "Rampersad", written over a set of three parallel diagonal lines that serve as a signature line.

Ashwin Rampersad

ACTING GENERAL MANAGER: ARNOT