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Date:
20 April 2020

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Dear Mr. Mahlangu

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

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Consumption/ Rate in Month of March 2020
	Coal	Tons/month	1 050 330	591684.14
	Fuel Oil	Tons/month	10 000	2335.73
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of March 2020
	Energy	GWh	1 785 600	965043
	Ash	Tons/month	421 000	147.388

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Abatement Technology

Table 2 Abatement Equipment Control Technology for month of March 2020

Associated Unit/Stack	Technology Type	Actual Utilisation (%) for the month of October
North Stack	Fabric Filter Bags	99.5%
South Stack	Fabric Filter Bags	99.6%

Energy Source Characteristics

Table 3 Energy Source Material Characteristics for the month of March 2020

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.5 to < 1 (%)	0.84
Ash Content	17 to < 40 (%)	24.91

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
North	31	0	0	0	0	56.3
South	30	1	0	0	1	71.6
SUM	61	0	0	0	1	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm ³)
North	31	0	0	0	0	742.6
South	31	0	0	0	0	704.0
SUM	62	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm ³)
North	31	0	0	0	0	1761.7
South	31	0	0	0	0	1799.7
SUM	62	0	0	0	0	

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Emissions Reporting

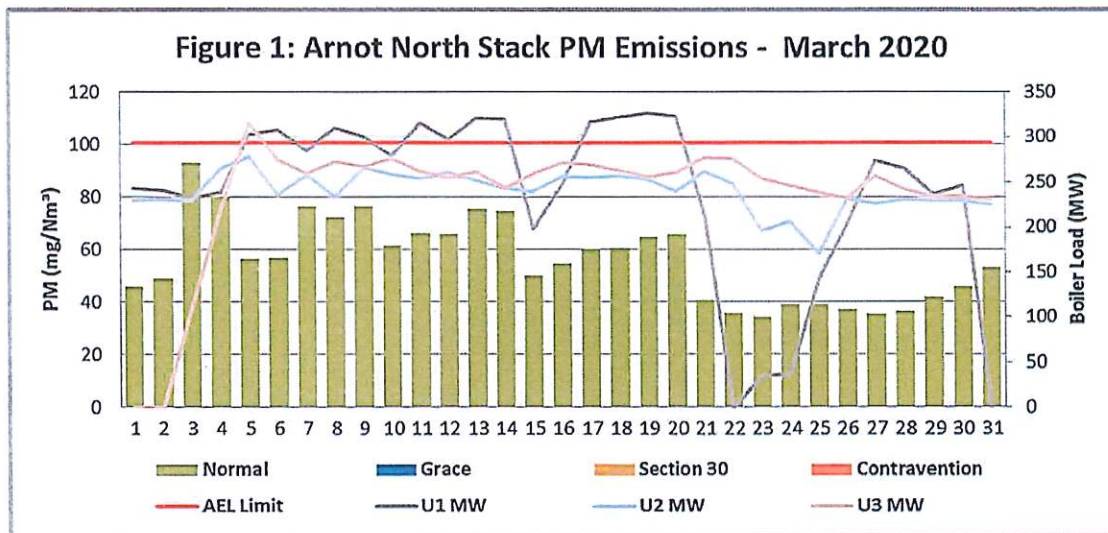


Figure 1: PM emissions (daily averages) for the month of March 2020 against emission limit for the North Stack

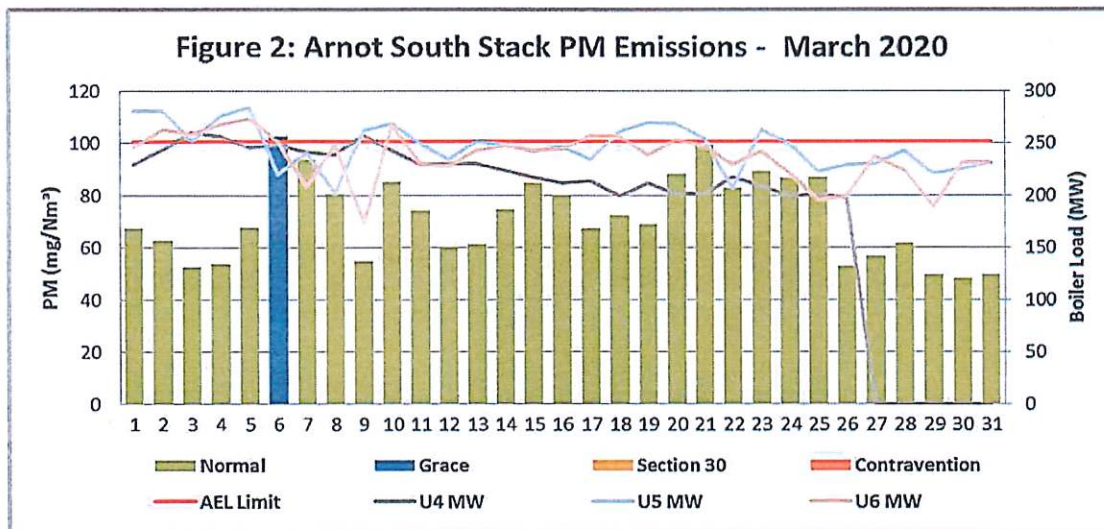


Figure 2: PM emissions (daily averages) for the month of March 2020 against emission limit for the South Stack

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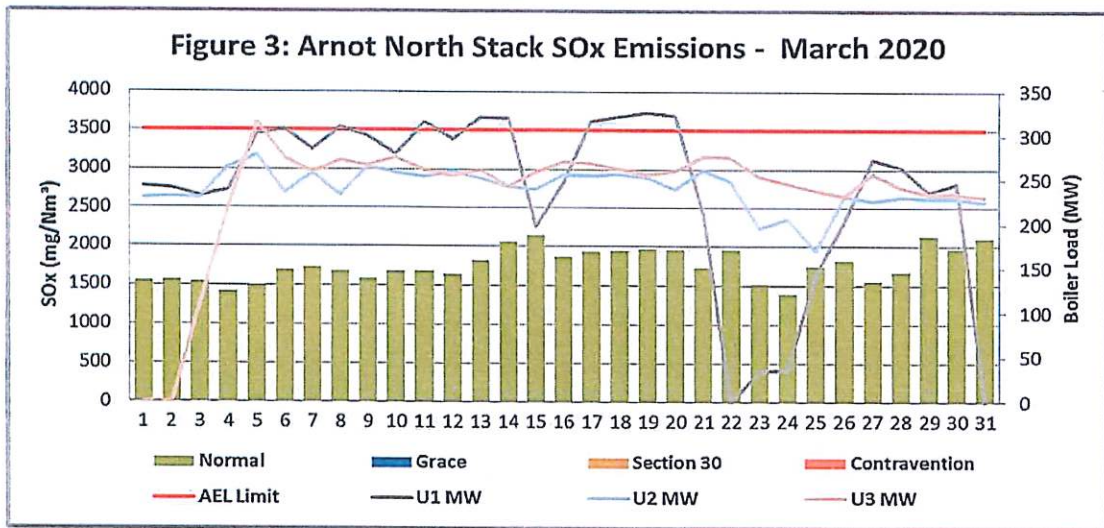


Figure 3: SO₂ emissions (daily averages) for the month of March -2020 against emission limit for the North Stack

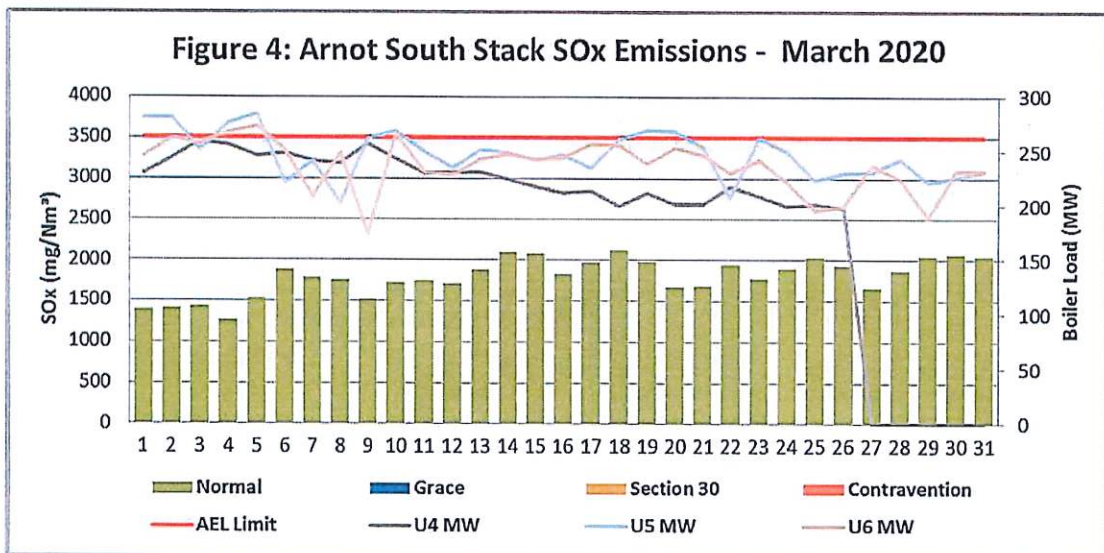


Figure 4. SO₂ emissions (daily averages) for the month of March -2020 against emission limit for the South Stack.

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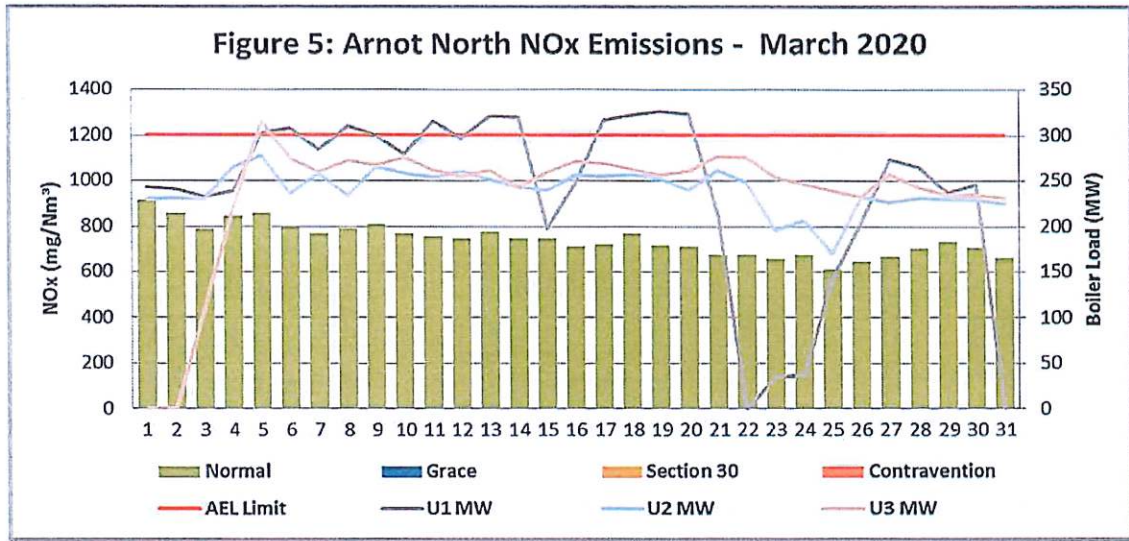


Figure 5: NO₂ emissions (daily averages) for the month of March-2020 against emission limit for the North Stack

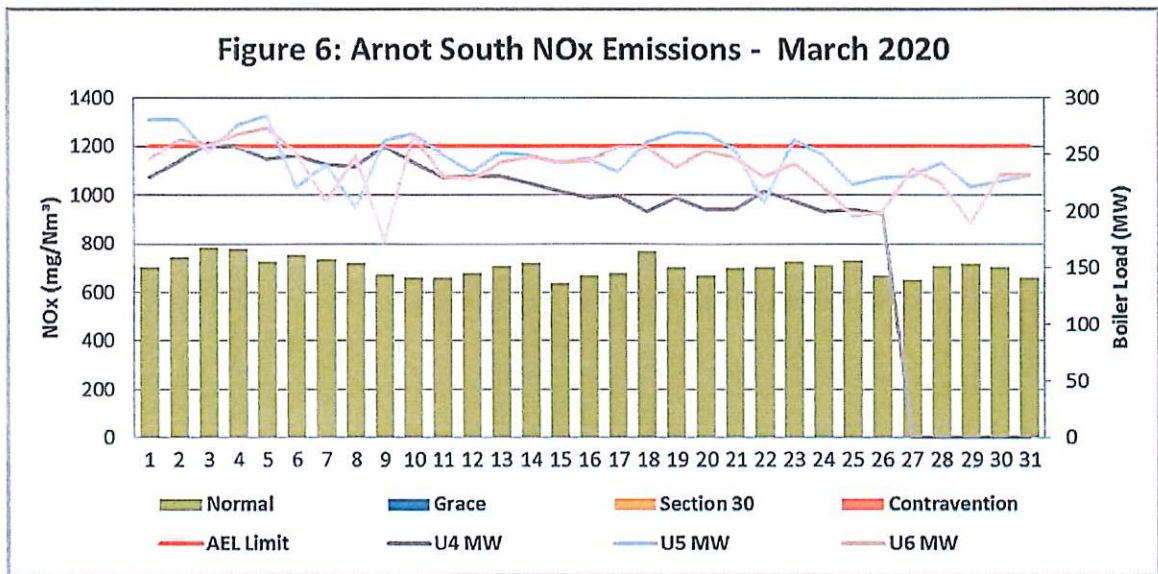


Figure 6: NO₂ emissions (daily averages) for the month of March-2020 against emission limit for the South Stack

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Table 7 Monthly tonnages for the month of March 2020

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
Total Tons (North & South Stack)	355 5	9844 2	4013 3

Table 8 Monitor Availability

Unit	PM (%)	SO ₂ (%)	NO ₂ (%)
North Stack	100	99 9	99 3
South Stack	100	98 9	98 4

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 March 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

Hoping the above will meet your satisfaction

Compiled by



Lawrence Machebe

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2020**

ENVIRONMENTAL OFFICER: ARNOT

Verified by

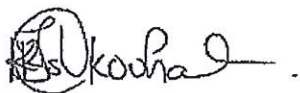


2020-04-20

Nomathemba Mpulo

SENIOR TECHNOLOGIST: ARNOT

Supported by



Rofhiwa Tshikovha

SENIOR ENVIRONMENTAL ADVISOR: ARNOT

Yours sincerely



Ashwin Rampersad

ACTING GENERAL MANAGER: ARNOT

