

Generation

Nkangala District Municipality

P O Box 437

Middleburg

1050

Date: 2023/02/09

Enquiries: Lufuno Tshidzumba -Matla Environmental

2 +27 17 612 6909

Attention:

Ms M Nembilwi

Enquiries: Lindokuhle Ngobese

2 +27 17 612 6291

AND

Directorate: Air Quality Management Services

The Director:

Mr Vumile Senene

Department of Environmental Affairs

Private Bag X447

PRETORIA

0001

Tel: (012) 310 3263

Fax: (012) 320 0488

Total number of pages:

15

Total number of annexes:

MATLA POWER STATION

Atmospheric Emission License 17/4/AEL/MP312/11/14

BOILER ENGINEERING MANAGER

ENVIRONMENTAL MANAGER

ENGINEERING MANAGER

14/02/2023

2023/02/14

DATE

14/02/200



MATLA POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License 17/4/AEL/MP312/11/14



1 RAW MATERIALS AND PRODUCTS

Raw Materials and	Raw Material Type Units		Max Permitted Consumption Rate	Consumption Rate Dec-2022
Products	Coal	Tons	1 475 000	879 077
	Fuel Oil	Tons	3 500	574
STATE OF THE PARTY OF		In the second second		
	Product / By-Product Name	Units	Max Production Capacity Permitted	Production Rate Dec 2022
Production Rates		Units GWh	777777777777777777777777777777777777777	Production Rate Dec 2022 1 062
Production Rates	Name		Capacity Permitted	2022

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
Sulphur Content	%	0.8-1.1	1.00
Ash Content	%	21-40	27.62

Table 6.2: Operating days in compliance to PM AEL Limit - December 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm³)
South	4	3	0	24	27	333.5
Unit 4	0	0	0	0	0	
Unit 5	16	10	5	0	15	151.9
Unit 6	5	5	4	0	. 9	200.8
· SUM	25	18	9	24	51	

Table 6.3: Operating days in compliance to SO₂ AEL Limit - December 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
South	31	0	0	Ö	0	2 943.9
Unit 4	0	0	0	0	0	
Unit 5	31	0	0	0	0	2 223.5
Unit 6	14	0	0	0	0	2 416.8
SUM	76	0	0	0	0	The state of the s

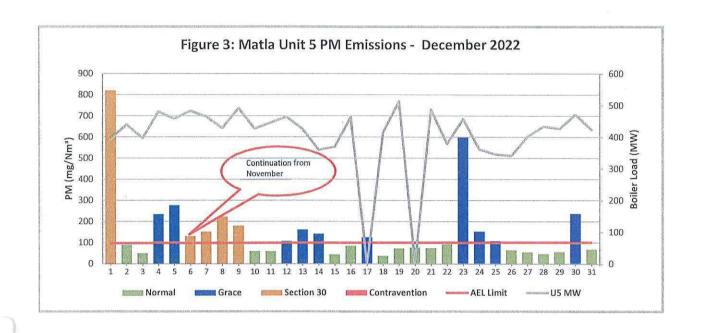
Table 6.4: Operating days in compliance to NOx AEL Limit - December 2022

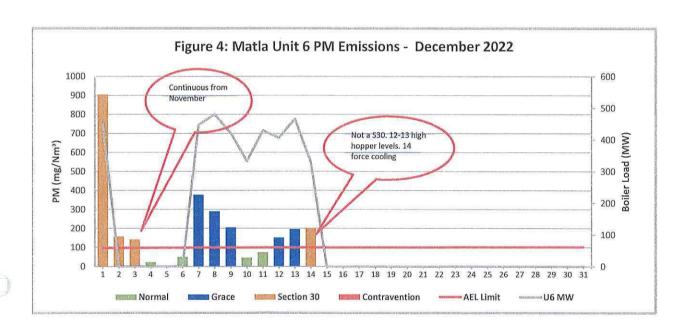
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
South	31	0	0	0	0	467.7
Unit 4	0	0	0	0	0	/
Unit 5	31	0	0	0	0	913.2
Unit 6	14	0	0	0	0	737.6
SUM	76	0	0	0	0	

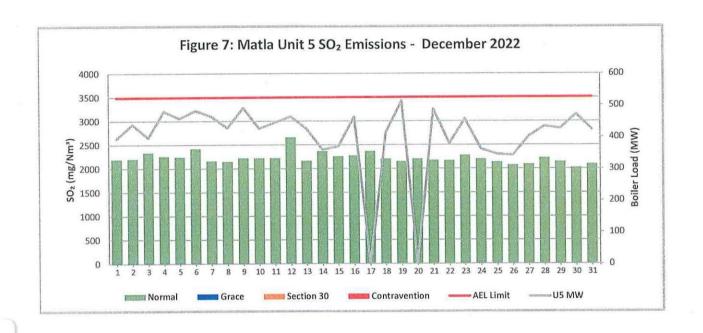
Note: NOx emissions is measured as NO in PPM. Final NOx value is expressed as total NO 2

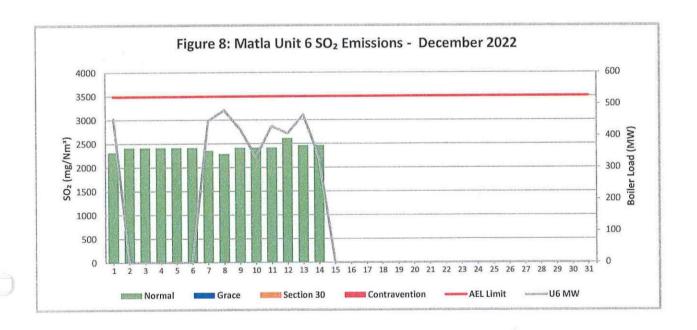
Table 6.5: Legend Description

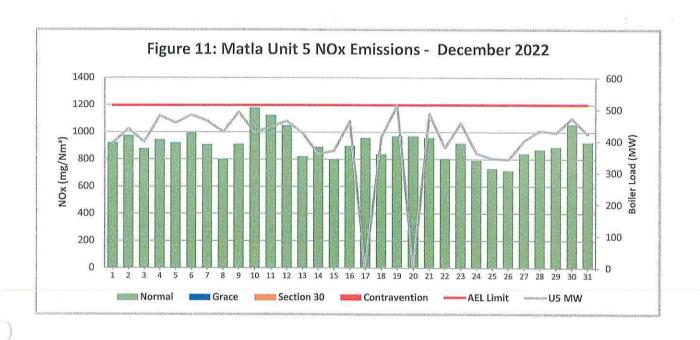
Condition	Colour	Description	
Normal		Emissions below Emission Limit Value (ELV)	
Grace	AND AND AND	Emissions above the ELV during grace period	******************************
Section 30		Emissions above ELV during a NEMA S30 incident	
Contraventio	n	Emissions above ELV but outside grace or S30 incident conditions	

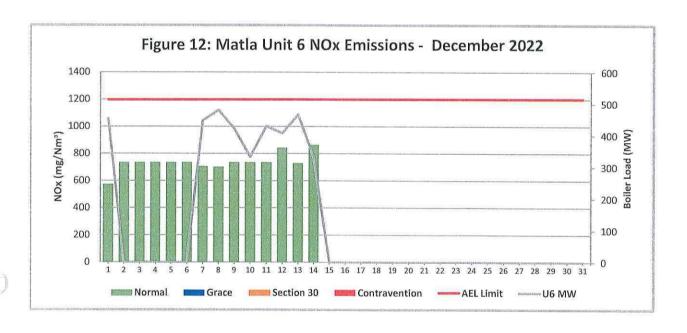












Unit No. 4	Event 1	Event 2		Event 3	Event 4
Breaker Open (BO)					
Draught Group (DG) Shut Down (SD)					
BO to DG SD (duration)	DD:HH:MM	DD:H	н:мм	DD:HH:MM	DD:HH:MM
Fires in time					
Synch. to Grid (or BC)					
Fires in to BC (duration)	DD:HH:MM	DD:H	HH:MM	DD:HH:MM	DD:HH:MM
Emissions below limit from BC (end date)					
Emissions below limit from BC (duration)	DD:HH:MM	DD:H	н:мм	DD:HH:MM	DD:HH:MM

Unit No. 5	Event 1	Event 2	Event 3	Event 4
Breaker Open (BO)				
Draught Group (DG) Shut Down (SD)				
BO to DG SD (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM
Fires in time				
Synch. to Grid (or BC)				
Fires in to BC (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM
Emissions below limit from BC (end date)				
Emissions below limit from BC (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM

Unit No. 6	Event 1	Event 2	Event 3	Event 4
Breaker Open (BO)				
Draught Group (DG) Shut Down (SD)				
BO to DG SD (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM
Fires in time				
Synch. to Grid (or BC)				
Fires in to BC (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM
Emissions below limit from BC (end date)				
Emissions below limit from BC (duration)	DD:HH:MM	DD:HH:MM	DD:HH:MM	DD:HH:MM

^{7.2:} Point Source emissions released during start-up (fires-in) and Shut-down (SD) for the month of December-2022 in mg/Nm³

[Include reference to once off test showing typical emissions rates during fires in and SD]

ADDENDUM TO MONTHLY EMISSIONS REPORT

8 EMERGENCY GENERATION

Emergency Generation [This is only required for stations that are requested to report on this information]

Table 8. Emergency Generation per unit for the month of December 2022

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Emergency Generation hours declared by national Control						
Emergency Hours declared including hours after stand down						
Hours over the Limit during Emergency Generation						

9 COMPLAINTS REGISTER

Table 9 Complaints for the month of December 2022

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 measure will be implemented
name of	(Insert root cause for incident)	(Insert emissions associated with incident)	(Insert dispersion model information where applicable)	(Insert mitigation measures taken)	(Insert date of implementation of

10 S30 INCIDENT OR LEGAL CONTRAVENTION REGISTER

To be completed in the case of a S30 incident or a legal contravention:

Unit no	Incident Start Date	Incident End Date	Incident Cause	Remedial action	S30 initial notification sent	Date S30 investigation report sent	Date DEA Acknowledg- ment	Date DEA Acceptabe	Comments / Reference No.
SS	01-12-2022	31-12-2022	Plant breakdown and a backlog.		no				
5	01-12-2022	109-12-2022	High hopper level backlog from November 2022		Yes				Final report submitted
6	01-12-2022	03-12-2022	High hopper level backlog from November 2023		Yes				Final report submitted

11 General

Gas are reported using parallel tests averages where monitor is defective.

South stack has incurred non compliance from 01-12-2022 to 31-12-22.

Unit 6 exceeded the limit from 12-12-2022 to 13-12-2022 due to high hopper levels. The 3rd day of exceedance on the 14-12-2022 was due to force cooling after the unit was shut down.

Unit 6 correlation curve expired and testing planned on return from outage.

Boiler Engineering

09-02-2023

Date

Environmental Department

Date

09/02/2023

General Manager

For:

Copies:

Date

Compiled by: Boiler Engineering Department

Department of Environmental Affairs and Tourism

27.74

Group Technology Engineering

Eskom Environmental Management

Matla Power Station:

ESP & SO₃ System Engineer

Chief Air Pollution Control Officer

D Herbst

B Mccourt

R Rampiar

E. Patel

Engineering Manager Operating Manager

Maintenance Manager Unit Production Manager

Boiler Engineering Manager

System Engineer
Environmental Officer
Performance and Test

Production Manager