	<b>Medupi Power Station Monthly Emissions Report</b>	Template Identifier	240-43921804	Rev	6
		Document Identifier	240-88543153	Rev	2
		Effective Date	January 2021		
		Review Date	January 2024		

Phumudzo Thivhafuni

Date: 2021/07/15

Limpopo Dept. of Economic Development, Environment and Tourism

Enquiries: TR. Rammutla

Private Bag 9484  
POLOKWANE  
0700

Tel: 014 762 6375

[ThivhafuniPO@ledet.gov.za](mailto:ThivhafuniPO@ledet.gov.za)

Ref: 12/4/12L-W2/A3 – Feb 2020 Rev1

Dear Phumudzo

## MEDUPI POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF FEBRUARY 2020

This document serves as the monthly report required in terms of Section 7.7.1 of Medupi Power Station Provisional Atmospheric Emission License (AEL), 12/4/12L-W2/A3.

This report is a reflection of Unit 2, 3, 4, 5 and 6 gaseous and particulate emissions performance against the AEL limit for the month of February 2020 only.

### 1. Raw Materials and Products


Table 1: Quantity of raw materials and products for Unit 2, 3, 4, 5 and 6 in February 2020

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Unit 2,3, 4, 5 and 6 consumption February 2020
	Coal	Tons/month	1 875 000	660 004
	Fuel Oil	Tons/month	40 000	2 708
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Unit 2, 3, 4, 5 and 6 Production Rate in Month of February 2020
	Energy	MW	4 800	2304
	Ash Emitted	Tons/month	not specified	277.8

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>	
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>	
		<b>Effective Date</b>	<b>January 2021</b>			
		<b>Review Date</b>	<b>January 2024</b>			

**Table 2: Daily consumption and production rates**

Date	Reportable hours of Operation					Fuel Consumption (tons)				Production (MW)
	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Oil			Coal	Units
						Aux Boiler	Units	Total	Units	2,3,4,5 & 6
01- Feb -20	24.0	0.0	24.0	24.0	24.0	0	2	2	24345	2354.3
02- Feb -20	24.0	0.0	24.0	24.0	24.0	0	19	19	24923	2366.7
03- Feb -20	24.0	0.0	24.0	24.0	24.0	0.539	1	1.539	23890	2207.5
04- Feb -20	24.0	0.0	24.0	24.0	24.0	0.47	28	28.47	24811	2316.5
05- Feb -20	24.0	0.0	24.0	24.0	24.0	0	0	0	25008	2183.6
06- Feb -20	24.0	0.0	24.0	24.0	24.0	0	12	12	25291	2236.6
07- Feb -20	24.0	0.0	24.0	24.0	24.0	0	33	33	24098	2298.3
07- Feb -20	24.0	0.0	24.0	24.0	24.0	0	75	75	26136	2347.6
09- Feb -20	24.0	0.0	24.0	24.0	12.2	0	18	18	24711	2269.9
10- Feb -20	24.0	0.0	24.0	24.0	4.7	0	106	106	25008	2534.2
11- Feb -20	24.0	0.0	24.0	24.0	24.0	0	66	66	25452	2417.0
12- Feb -20	24.0	0.0	24.0	24.0	24.0	0	53	53	25244	2419.5
13- Feb -20	24.0	0.0	24.0	24.0	24.0	0	79	79	21687	2434.3
14- Feb -20	24.0	0.0	24.0	24.0	24.0	0	193	193	22339	2501.3
15- Feb -20	24.0	0.0	24.0	24.0	7.2	1.7	197	198.75	23992	2533.1
16- Feb -20	24.0	0.0	24.0	24.0	0.0	0	159	159	24501	2300.4
17- Feb -20	24.0	0.0	7.1	24.0	6.2	0	58	58	25953	2427.7
18- Feb -20	24.0	0.0	6.8	24.0	24.0	0	56	56	23397	2365.8
19- Feb -20	24.0	0.0	24.0	24.0	24.0	0	10	10	22468	2535.1
20- Feb -20	24.0	0.0	24.0	24.0	24.0	0	25	25	23475	2212.8
21- Feb -20	24.0	0.0	24.0	24.0	24.0	0	17	17	23042	2050.9
22- Feb -20	24.0	0.0	24.0	24.0	24.0	0	187	187	20413	2199.5
23- Feb -20	24.0	0.0	24.0	24.0	24.0	0	324	324	23120	2104.3
24- Feb -20	24.0	0.0	24.0	24.0	11.8	0	37	37	20607	2095.0
25- Feb -20	24.0	0.0	24.0	24.0	1.3	0	181	181	15691	2241.6
26- Feb -20	24.0	0.0	24.0	13.3	24.0	0	554	554	16032	2256.4
27- Feb -20	24.0	0.0	14.8	0.0	21.2	0	47	47	17868	1980.7
28- Feb -20	24.0	0.0	3.0	0.0	0.0	0	12	12	18051	1597.5
29- Feb -20	24.0	0.0	24.0	0.0	17.5	0	157	157	18455	1718.7


## 2. Abatement Technology

**Table 3: Abatement Equipment Control Technology utilisation for month of February 2020**

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	Template Identifier	240-43921804	Rev	6	
		Document Identifier	240-88543153	Rev	2	
		Effective Date	January 2021			
		Review Date	January 2024			

Associated Unit/Stack	Technology Type	Efficiency
Unit 1	<i>Fabric Filter Plant (FFP)</i>	-
Unit 2	<i>Fabric Filter Plant (FFP)</i>	99.950%
Unit 3	<i>Fabric Filter Plant (FFP)</i>	-
Unit 4	<i>Fabric Filter Plant (FFP)</i>	99.893%
Unit 5	<i>Fabric Filter Plant (FFP)</i>	99.809%
Unit 6	<i>Fabric Filter Plant (FFP)</i>	99.743%

### 3. Energy Source Characteristics

Table 4: Energy Source Material Characteristics for the month of February 2020

Characteristic	Stipulated Range (% by weight on a dry basis)	Monthly Average Content (% by weight on a dry basis)
<b>Coal</b>		
Sulphur Content	1.3 - 2.2	1.6
Ash Content	35 - 39	34.1

### 4. Emissions Reporting

Medupi Power Station uses Continuous Emission Monitoring System which uses the extractive method for analysis.

The emission limits are as follows:

SO<sub>2</sub> Monthly = 3500 mg/Nm<sup>3</sup> Dust Daily= 50 mg/Nm<sup>3</sup> NO<sub>2</sub> Daily= 750 mg/Nm

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

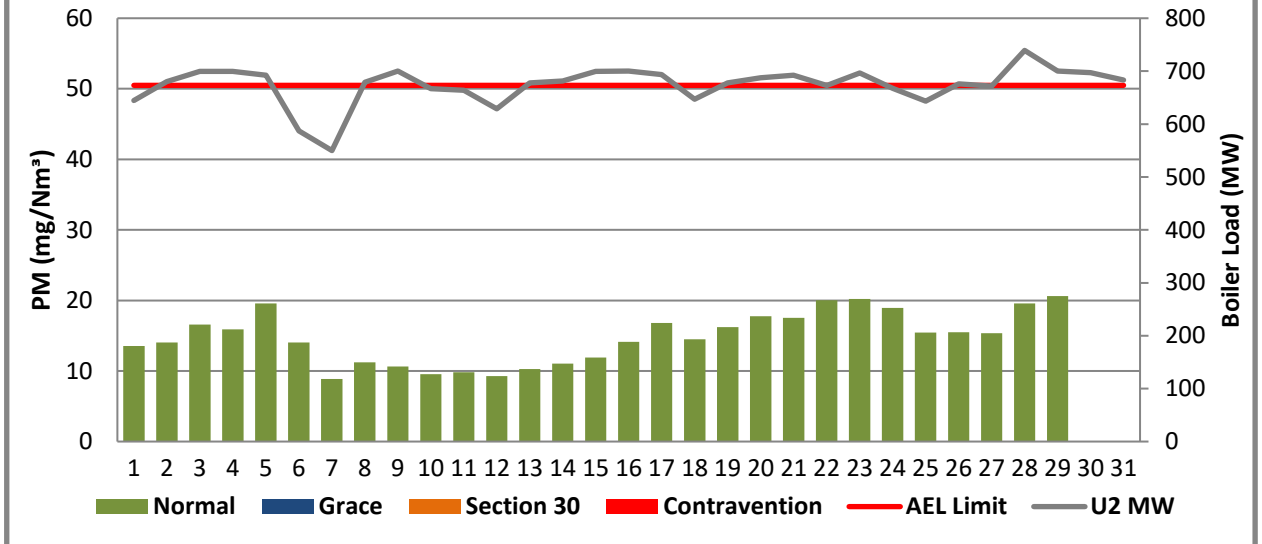
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



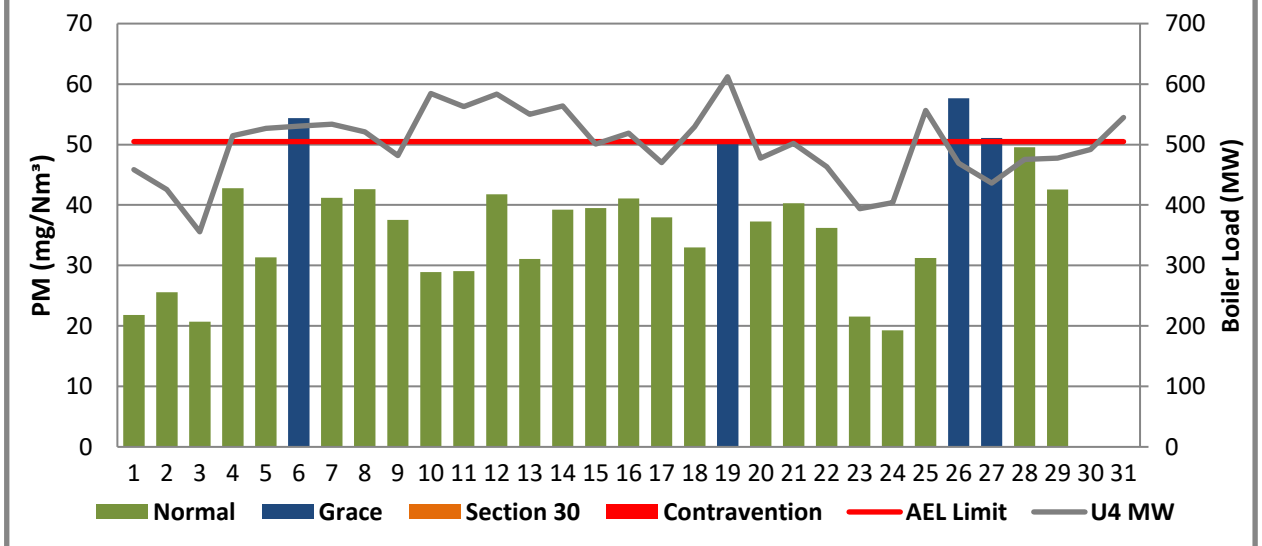
### Medupi Power Station Monthly Emissions Report

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		

#### Figure 2: Medupi Unit 2 PM Emissions - February 2020



#### Figure 4: Medupi Unit 4 PM Emissions - February 2020



### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

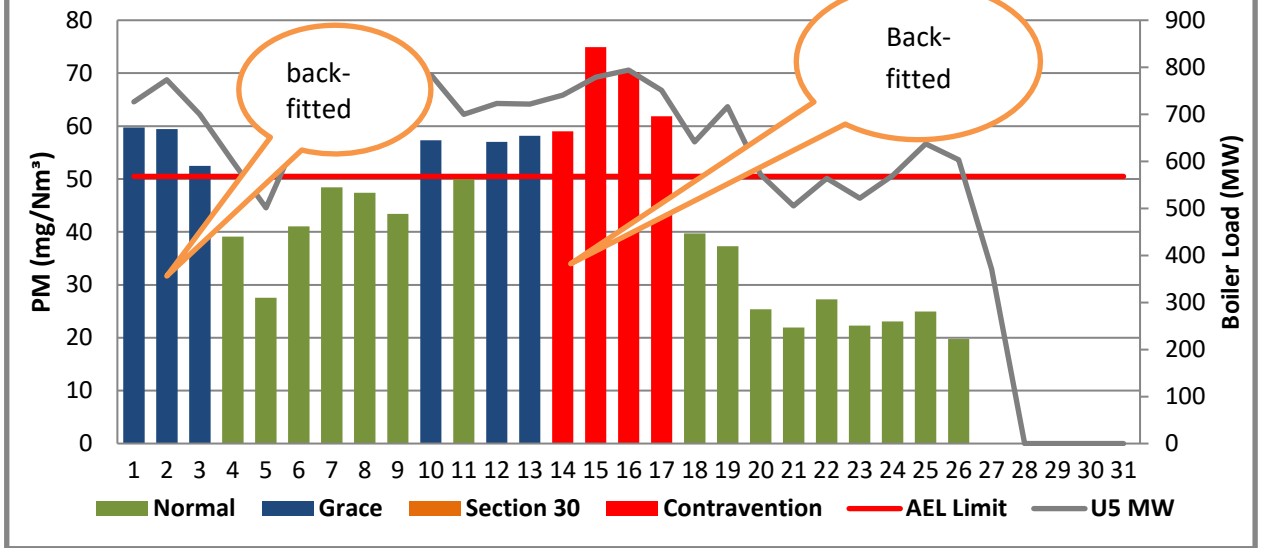
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



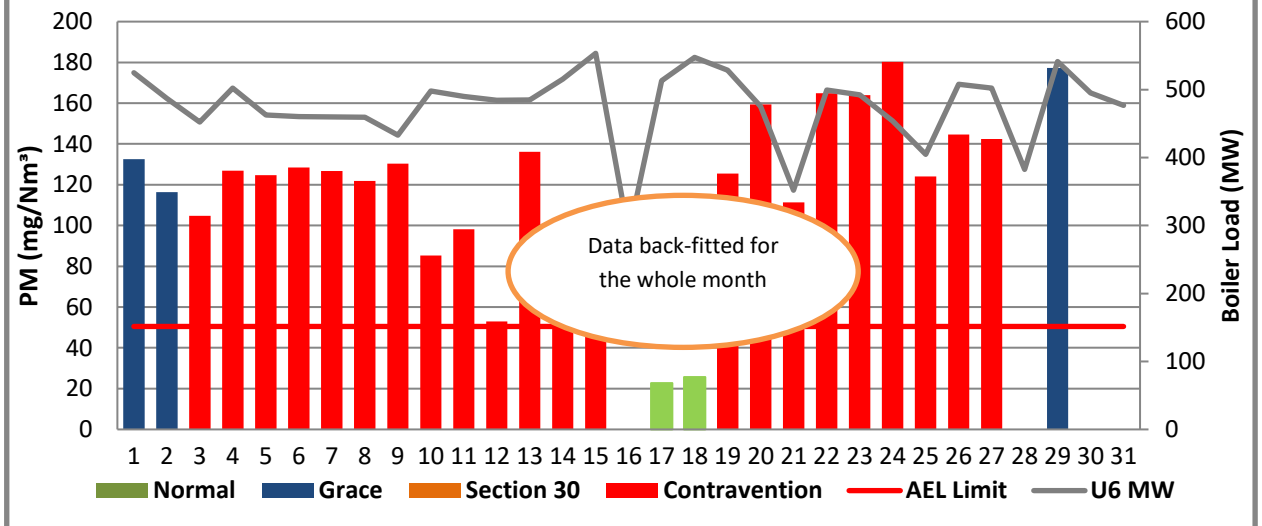
**Medupi Power Station Monthly Emissions Report**

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		

**Figure 5: Medupi Unit 5 PM Emissions - February 2020**



**Figure 6: Medupi Unit 6 PM Emissions - February 2020**



**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

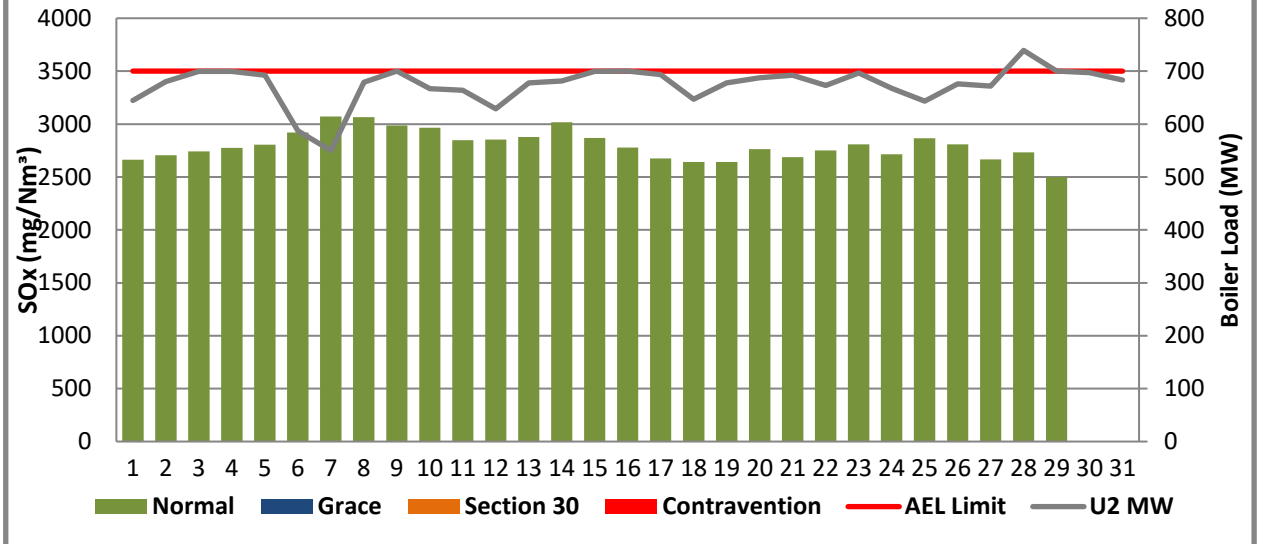
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



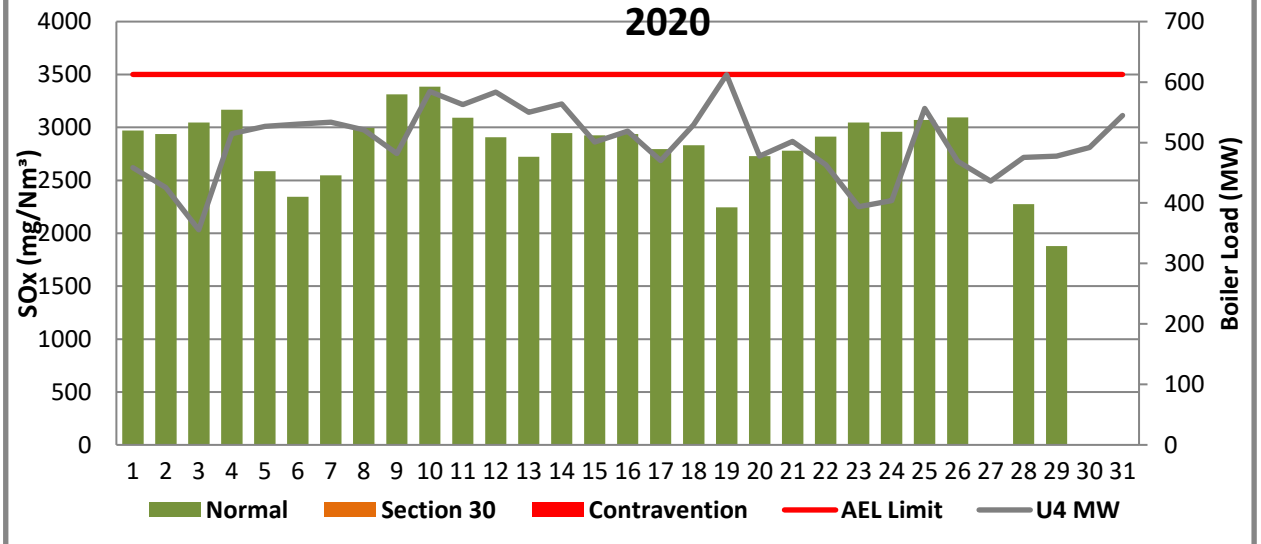
**Medupi Power Station Monthly Emissions Report**

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		

**Figure 8: Medupi Unit 2 SOx Emissions - February 2020**



**Figure 10: Medupi Unit 4 SOx Emissions - February 2020**



**CONTROLLED DISCLOSURE**

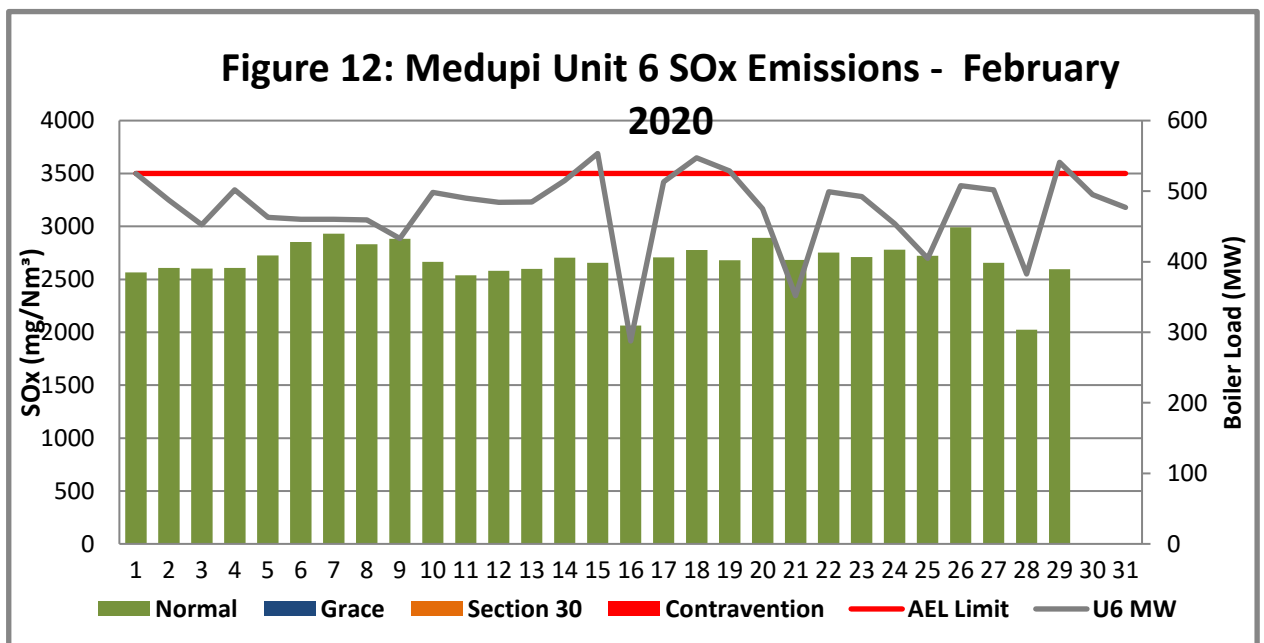
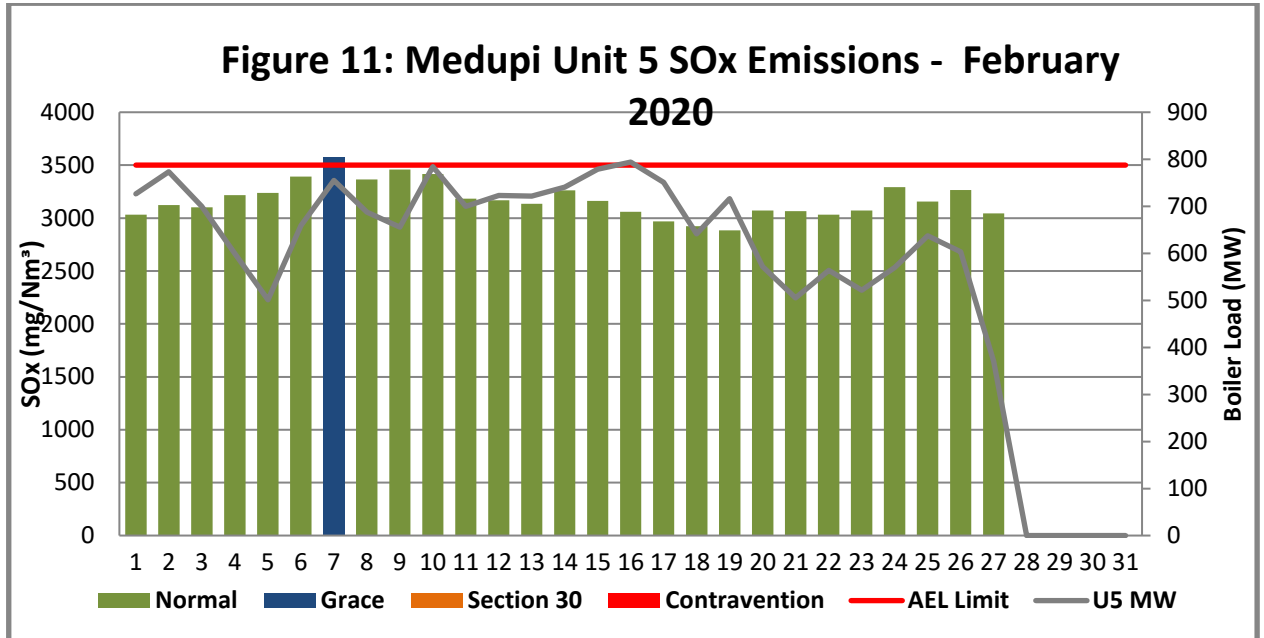
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



**Medupi Power Station Monthly Emissions Report**

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		



**CONTROLLED DISCLOSURE**

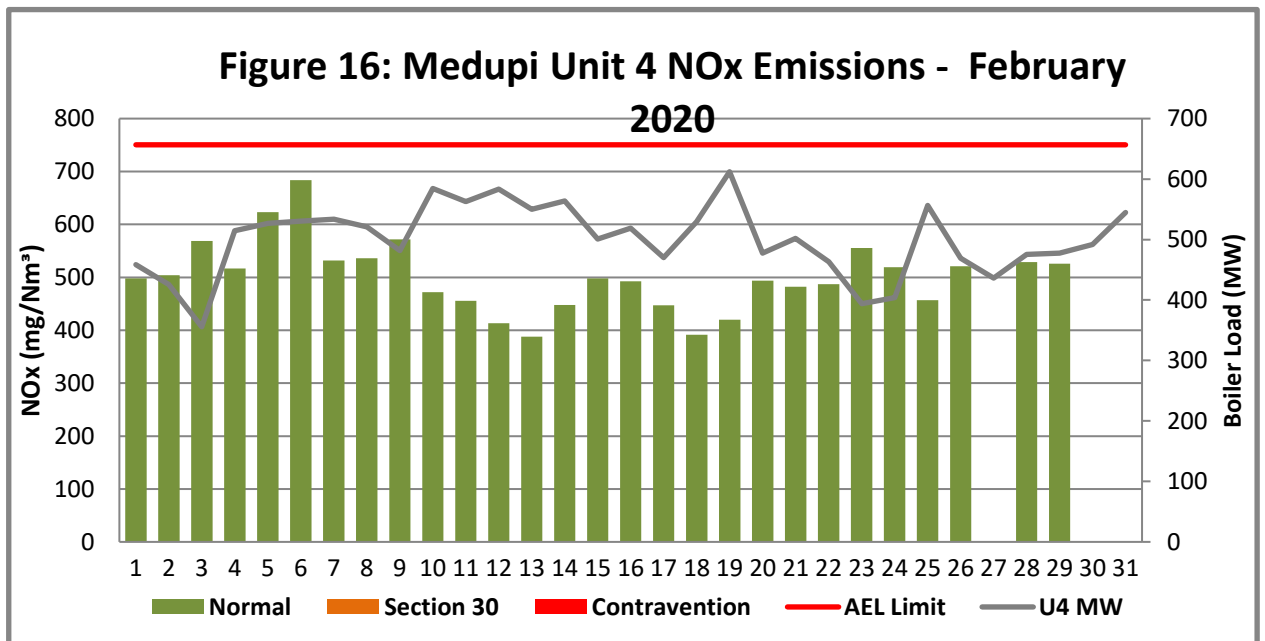
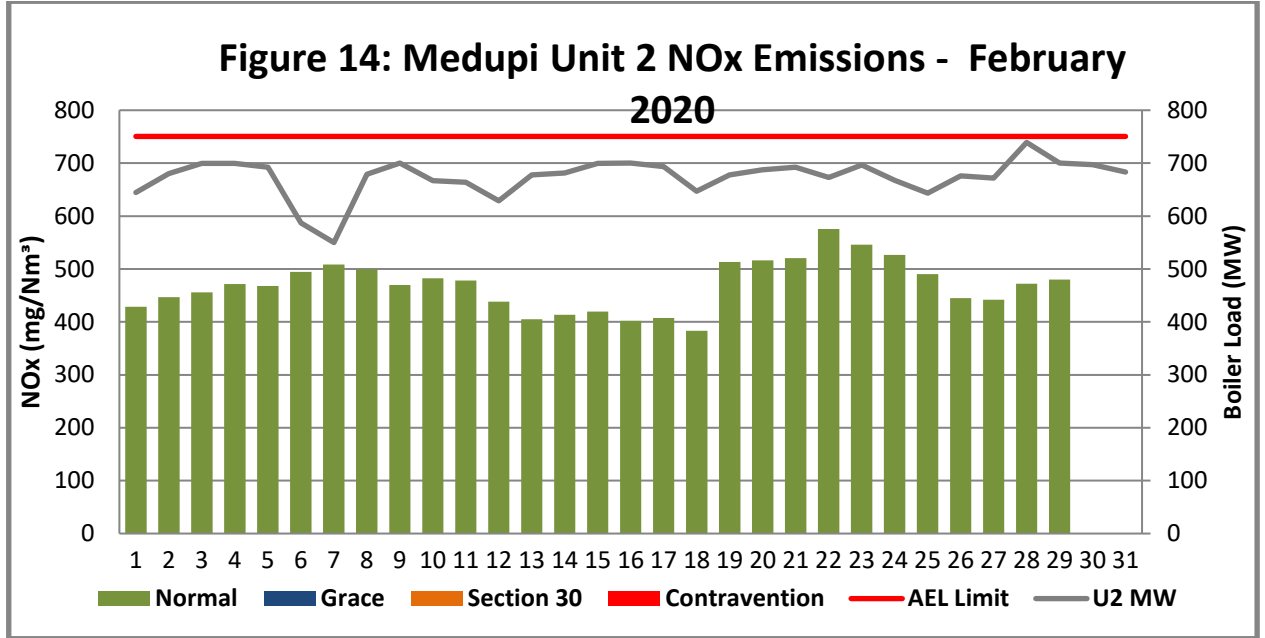
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



**Medupi Power Station Monthly Emissions Report**

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		



**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

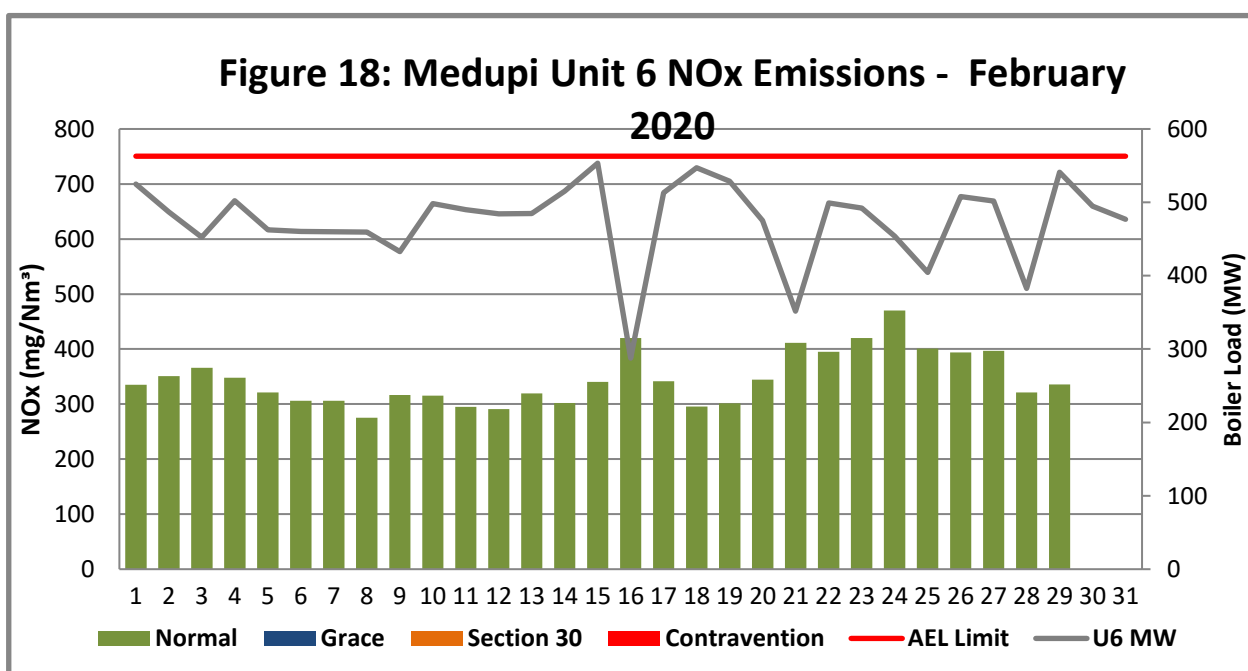
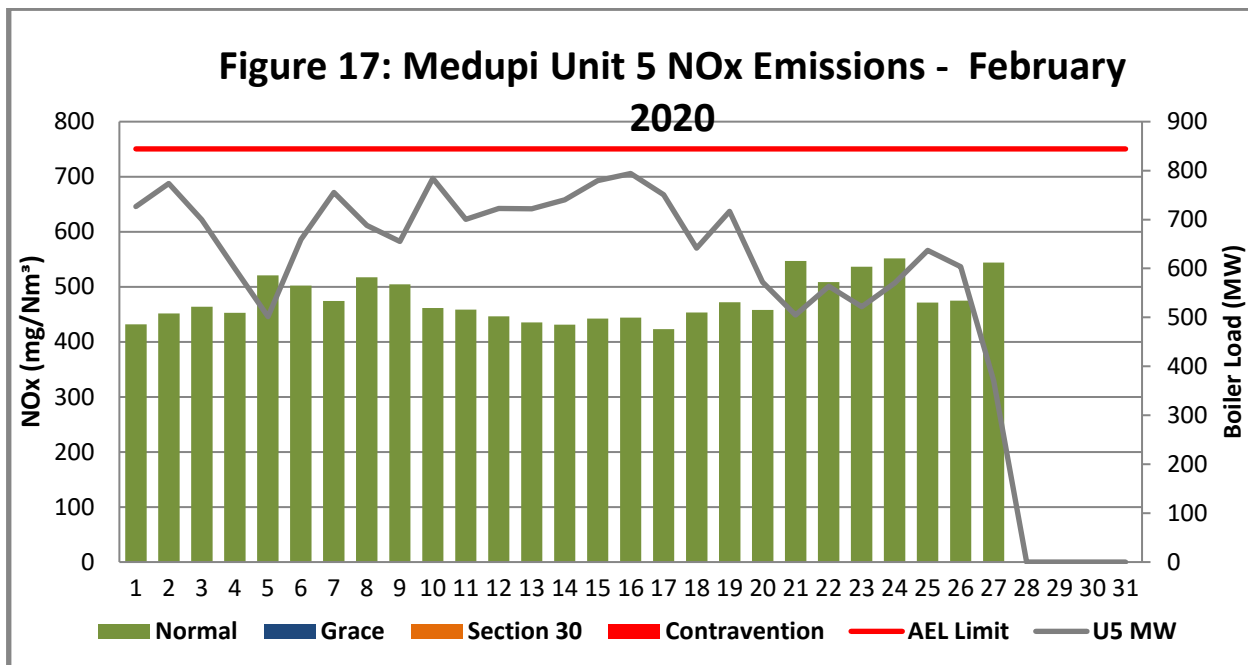
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.





**Medupi Power Station Monthly Emissions Report**


Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	2
Effective Date	January 2021		
Review Date	January 2024		



**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		

**Table 5: Monthly tonnages for the month of February 2020**

Unit	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>2</sub> (tons)	CO (tons)
1	-	-	-	-
2	33.9	6 358	1 066	37
3	0.0	0	0	0
4	48.0	4 026	703	48
5	91.7	6 409	954	30
6	104.3	2 767	347	25
SUM	277.8	19 559	3 070	140

## 5. Comments on the performance and availability of each unit

Gaseous emissions on all units were within the limit for February reporting period. Unit 5 and 6 PM emissions exceeded the limit during February 2020 reporting period. Exceedances were picked during back-fitting of data and are related to leakages from the damaged pulse jet fabric filter plant.

## 6. Continuous Emission Monitoring Systems (CEMS)

Unit 2, 4, 5 and 6 Continuous Emission Monitoring Systems were in operation at all times when the unit was on load.

**Table 6: Periods during which CEMS was inoperative**

Date	Time	CEMS status	Comments
N/A	N/A	N/A	Data for the reporting period is available


**Table 7: CEMS Monitor Reliability**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>2</sub>
Unit 2	99.9	100.0	99.9	99.7
Unit 4	100.0	91.6	91.6	91.4
Unit 5	99.9	99.6	99.6	99.6
Unit 6	99.7	99.0	95.0	93.4

## CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		

**7. CEMS Calibration certificates and equipment used for calibration**

See attached Appendix A

**8. Ambient Air Quality Monitoring Report**

The Ambient Air Quality Monitoring and Dust fall-out report are emailed to the Licensing authority on a monthly basis.


**9. Visual inspection of the exterior walls of the fuel oil tanks and TVOC Estimation**

Visual inspection was conducted and there were no leaks observed on the exterior walls of the fuel oil tanks.

**CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		


**Table 8: Total Volatile Organic Compound (TVOC) for February 2020**

CALCULATION OF EMISSIONS OF TOTAL VOLATILE COMPOUNDS FROM FUEL OIL STORAGE TANKS*		
<b>Date:</b>	31 March 2020	
<b>Station:</b>	Medupi Power Station	
<b>Province:</b>	Limpopo Province	
<b>Tank no.</b>	1-2	
<b>Description:</b>	Outdoor fuel oil storage tank	
<b>Tank Type:</b>	Vertical fixed roof (vented to atmosphere)	
<b>Material stored:</b>	Fuel Oil 150	
<b>MONTHLY INPUT DATA FOR THE STATION</b> Please only insert relevant monthly data inputs into the <b>blue cells</b> below Choose from a dropdown menu in the <b>green cells</b> The total VOC emissions for the month are in the <b>red cells</b> IMPORTANT: Do not change <b>any</b> other cells without consulting the AQ CoE		
<b>MONTH:</b>	<b>February</b>	
<b>GENERAL INFORMATION:</b>	<b>Data</b>	<b>Unit</b>
Total number of fuel oil tanks:	2	NA
Height of tank:*	14.2	m
Diameter of tank:	12	m
Net fuel oil throughput for the month:	<b>2708</b>	tons/month
Molecular weight of the fuel oil:	166.00	Lb/lb-mole
<b>METEROLOGICAL DATA FOR THE MONTH</b>	<b>Data</b>	<b>Unit</b>
Daily average ambient temperature	26.20	°C
Daily maximum ambient temperature	32.94	°C
Daily minimum ambient temperature	20.71	°C
Daily ambient temperature range	12.24	°C
Daily total insolation factor	5.72	kWh/m <sup>2</sup> /day
Tank paint colour	<b>Aluminum/Specular</b>	NA
Tank paint solar absorbance	0.39	NA
<b>FINAL OUTPUT:</b>	<b>Result</b>	<b>Unit</b>
<b>Breathing losses:</b>	<b>0.70 kg/month</b>	
<b>Working losses:</b>	<b>0.08 kg/month</b>	
<b>TOTAL LOSSES (Total TVOC Emissions for the month):</b>	<b>0.77 kg/month</b>	
<small>*Calculations performed on this spreadsheet are taken from the USEPA AP-42- Section 7.1 Organic Liquid Storage Tanks - January 1996. This spreadsheet is derived from materials provided by Jimmy Peress, PE, Tritech Consulting Engineers, 85-93 Chevy Chase Street, Jamaica, NY 11432 USA, Tel - 718-454-3920, Fax - 718-454-6330, e-mail - PeressJ@nyc.rr.com.</small>		

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		

## 10. Air quality improvements initiatives and public education and awareness campaigns

No awareness campaign.

## 11. Complaints Register


Table 9: Complaints for the month of February 2020

Source Code/ Name	Air pollution complaints received	Calculation of Impacts/ emissions associated with the incident	Date of complaint and date of response by the license holder	Results of investigation	Action taken to resolve the complaint
N/A	No complaints received	N/A	N/A	N/A	N/A

### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		

**Compiled by:** Lufuno Tshidzumba   
**Senior Environmental Advisor**

**Verified by:** Malose Langa   
**System Engineer Boiler**

**Supported by:** Sithokozile Hlongwa   
**Boiler Engineering Manager**

**Supported by:** Rosetta Rammutla   
**Environmental Manager**

**Supported by:** Jabulani Mkhathshwa   
**Engineering Group Manager**

I Dan Mashigo, declares that the information provided in this report is accurate and correct.

Yours sincerely


  
 \_\_\_\_\_  
 Dan Mashigo

**GENERAL MANAGER: MEDUPI POWER STATION (Acting)**


### **CONTROLLED DISCLOSURE**

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		

### APPENDIX 1: CEMS Calibration certificates



**Elemental  
Analytics**  
Analysers Specialists

12 Angeller Street, Bardene,  
BOKSBURG, SA, 1459  
PO Box 328, ISANDO, SA, 1600  
VAT REG #: 421 021 2249  
[www.e-analytics.co.za](http://www.e-analytics.co.za)

Tel: 0861 000 032  
Intl. Tel: +27 11 918 6994  
Fax: +27 11 894 1037  
CO REG #: 2004/007607/07  
[info@e-analytics.co.za](mailto:info@e-analytics.co.za)

---

### CALIBRATION CERTIFICATE

<b>CERTIFICATE NO:</b>
3316

<b>CUSTOMER:</b>	Medupi Power Station	<b>JOB NO:</b>	SC1583
<b>CONTACT NAME:</b>	Christo Vorster	<b>PHONE:</b>	014 762 2255
<b>MODEL:</b>	Dr Fodisch MGA 23	<b>SERIAL NO:</b>	13668
<b>AUXILIARY EQUIPMENT:</b>	Unit 4		




  



CHAN		PRIOR	FINAL	TEST GAS	TEST GAS VALUE	GAS CERTIFICATE NUMBER	EXPIRY DATE
1	ZERO	-4 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	807 ppm	804 ppm	CO	803.9 ppm	80A	
2	ZERO	-3 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	819 ppm	851 ppm	NO	850.9 ppm	132	
3	ZERO	-13 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	2199 ppm	2162 ppm	SO2	2161.7 ppm	5905E	
4	ZERO	0.09 %	0.0 %	N2	99.99 %	132	
	SPAN	21.03 %	20.95 %	O2	20.95 %	Air	

**REPORT:** Wash and clean rotameter, change inlet plastic fitting, inlet filter in analyser should be change. Inspect all sample lines and rotameter. Calibrate analysers with zero and span gas, calibration was done according to cylinder standards, analysers were responding to all test gas.

**Date of Calibration:** 26 Nov 2019  
**Calibration Due Date:** Feb 2020  
**Technician:** J Faber



  

  

  
A MEASURED ADVANTAGE  
Document Number: TH-PFC-002-F1 Rev 2



  

  
A Teledyne Technologies Company

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		



**Elemental Analytics**  
Analyser Specialists

12 Angeller Street, Bardene,  
BOKSBURG, SA, 1459  
PO Box 328, ISANDO, SA, 1600  
VAT REG #: 421 021 2249  
[www.e-analytics.co.za](http://www.e-analytics.co.za)

Tel: 0861 000 032  
Intl. Tel: +27 11 918 6994  
Fax: +27 11 894 1037  
CO REG #: 2004/007607/07  
[info@e-analytics.co.za](mailto:info@e-analytics.co.za)

---

### CALIBRATION CERTIFICATE

				<b>CERTIFICATE NO:</b>			
				3317			
<b>CUSTOMER:</b>	Medupi Power Station		<b>JOB NO:</b>	SC1593			
<b>CONTACT NAME:</b>	Christo Vorster		<b>PHONE:</b>	014 762 2255			
<b>MODEL:</b>	Dr Fodisch MGA 23		<b>SERIAL NO:</b>	13670			
<b>AUXILIARY EQUIPMENT:</b>	Unit 5						


CHAN		PRIOR	FINAL	TEST GAS	TEST GAS VALUE	GAS CERTIFICATE NUMBER	EXPIRY DATE
1	ZERO	1 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	761 ppm	804 ppm	CO	803.9 ppm	80A	
2	ZERO	-3 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	815 ppm	851 ppm	NO	850.9 ppm	132	
3	ZERO	-17 ppm	0 ppm	Air	21.0 %	Air	
	SPAN	2206 ppm	2162 ppm	SO2	2161.7 ppm	5905E	
4	ZERO	-0.08 %	0.0 %	N2	99.99 %	132	
	SPAN	20.85 %	20.95 %	O2	20.95 %	Air	

**REPORT:** *Inspect all sample lines and rotameter. Calibrate analysers with zero and span gas, calibration was done according to cylinder standards, analysers were responding to all test gas.*


**Date of Calibration:** 26 Nov 2019

**Calibration Due Date:** Feb 2020

**Technician:** J Faber



**Bieler + Lang**  
**SERVOMEX**  
A MESAERBAK COMPANY  
Document Number: TH-PFC-002-F1 Rev 2




**TELEDYNE ANALYTICAL INSTRUMENTS**  
A Teledyne Technologies Company


### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		



12 Angeller Street, Bardene,  
BOKSBURG, SA, 1459  
PO Box 328, ISANDO, SA, 1600  
VAT REG #: 421 021 2249  
[www.e-analytics.co.za](http://www.e-analytics.co.za)

Tel: 0861 000 032  
Intl. Tel: +27 11 918 6994  
Fax: +27 11 894 1037  
CO REG #: 2004/007607/07  
[info@e-analytics.co.za](mailto:info@e-analytics.co.za)

---

### CALIBRATION CERTIFICATE

				<b>CERTIFICATE NO:</b>	
				3318	
<b>CUSTOMER:</b>	Medupi Power Station	<b>JOB NO:</b>	SC1503		
<b>CONTACT NAME:</b>	Christo Vorster	<b>PHONE:</b>	014 762 2255		
<b>MODEL:</b>	Dr Fodisch MGA 23	<b>SERIAL NO:</b>	13669		
<b>AUXILIARY EQUIPMENT:</b>	Unit 6				


CHAN	PRIOR	FINAL	TEST GAS	TEST GAS VALUE	GAS CERTIFICATE NUMBER	EXPIRY DATE
1	ZERO	-3 ppm	0 ppm	Air	21.0 %	Air
	SPAN	817 ppm	804 ppm	CO	803.9 ppm	80A
2	ZERO	-11 ppm	0 ppm	Air	21.0 %	Air
	SPAN	883 ppm	851 ppm	NO	850.9 ppm	132
3	ZERO	-35 ppm	0 ppm	Air	21.0 %	Air
	SPAN	2265 ppm	2162 ppm	SO2	2161.7 ppm	5905E
4	ZERO	0.03 %	0.0 %	N2	99.99 %	132
	SPAN	20.59 %	20.95 %	O2	20.95 %	Air


**REPORT:** *Inspect all sample lines and rotameter. Calibrate analysers with zero and span gas, calibration was done according to cylinder standards, analysers were responding to all test gas.*


**Date of Calibration:** 28 Nov 2019

**Calibration Due Date:** Feb 2020


**Technician:** J Faber







**SERVOMEX**  
A MASSMANE ADVANTAGE  
Document Number: TH-PFC-002-F1 Rev 2





**TELEDYNE ANALYTICAL INSTRUMENTS**  
A Teledyne Technologies Company

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.

	<b>Medupi Power Station Monthly Emissions Report</b>	<b>Template Identifier</b>	<b>240-43921804</b>	<b>Rev</b>	<b>6</b>
		<b>Document Identifier</b>	<b>240-88543153</b>	<b>Rev</b>	<b>2</b>
		<b>Effective Date</b>	<b>January 2021</b>		
		<b>Review Date</b>	<b>January 2024</b>		



**Elemental Analytics**  
Analyser Specialists

12 Angeller Street, Bardene,  
BOKSBURG, SA, 1459  
PO Box 328, ISANDO, SA, 1600  
VAT REG #: 421 021 2249  
[www.e-analytics.co.za](http://www.e-analytics.co.za)

Tel: 0861 000 032  
Intl. Tel: +27 11 918 6994  
Fax: +27 11 894 1037  
CO REG #: 2004/007607/07  
[info@e-analytics.co.za](mailto:info@e-analytics.co.za)

---

### CALIBRATION CERTIFICATE

<b>CERTIFICATE NO:</b>			
3315			
<b>CUSTOMER:</b>	Medupi Power Station	<b>JOB NO:</b>	SC1593
<b>CONTACT NAME:</b>	Christo Vorster	<b>PHONE:</b>	014 762 2255
<b>MODEL:</b>	Dr Fodisch MGA 23	<b>SERIAL NO:</b>	15712
<b>AUXILIARY EQUIPMENT:</b>	Unit 3		


CHAN	PRIOR	FINAL	TEST GAS	TEST GAS VALUE	GAS CERTIFICATE NUMBER	EXPIRY DATE
1	ZERO	8 ppm	0 ppm	Air	21.0 %	Air
	SPAN	802 ppm	804 ppm	CO	803.9 ppm	80A
2	ZERO	16 ppm	0 ppm	Air	21.0 %	Air
	SPAN	849 ppm	851 ppm	NO	850.9 ppm	132
3	ZERO	23 ppm	0 ppm	Air	21.0 %	Air
	SPAN	2227 ppm	2162 ppm	SO2	2161.7 ppm	5905E
4	ZERO	0.05 %	0.0 %	N2	99.99 %	132
	SPAN	21.23 %	20.95 %	O2	20.95 %	Air


**REPORT:** *Inspect all sample lines and rotameter. Calibrate analysers with zero and span gas, calibration was done according to cylinder standards, analysers were responding to all test gas.*

**Date of Calibration:** 28 Nov 2019


**Calibration Due Date:** Feb 2020

**Technician:** J Faber





**SERVOMEX**  
A MASTEKING COMPANY  
Document Number: TH-PFC-002-F1 Rev 2



**TELEDYNE ANALYTICAL INSTRUMENTS**  
A Teledyne Technologies Company

### CONTROLLED DISCLOSURE

When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.