	<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>1</b>
		<b>Effective Date</b>	<b>February 2018</b>		
		<b>Review Date</b>	<b>February 2023</b>		

Stanley Koenaitse

Waterberg District Municipality  
Private Bag X1018  
Modimolle  
0510

[skoenaite@waterberg.gov.za](mailto:skoenaite@waterberg.gov.za)

Date: 2021/05/30

Enquiries: TR. Rammutla  
Tel: 014 762 6375

Ref: H16/1/13-AEL/M1/R1 – Apr 2021

Dear Mr Koenaitse

## MEDUPI POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF APRIL 2021

This document serves as the monthly emissions report required in terms of Section 7.7.1 of Medupi Power Station Provisional Atmospheric Emission License (AEL), H16/1/13-AEL/M1/R1.

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 April 2021 only.

### 1. Raw Materials and Products


Table 1: Quantity of raw materials and products for Unit 2, 3, 4, 5 and 6 in April 2021

Raw Materials and Products used	Raw Material Type	Unit	Maximum Permitted Consumption/ Rate (Quantity)	Unit 2, 3, 4, 5 and 6 consumption April 2021
	Coal	Tons/month	1 875 000	731 821
	Fuel Oil	Tons/month	20 000	1566
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Unit 2, 3, 4, 5 and 6 Production Rate in Month of April 2021
	Energy	MW	4 800	2294
	Ash Emitted	Tons/month	not specified	138.5

### 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>1</b>	
		<b>Effective Date</b>	<b>February 2018</b>			
		<b>Review Date</b>	<b>February 2023</b>			


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

Date	Reportable hours of Operation					Coal usage	Production rate (MW)				
	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6		U2	U3	U4	U5	U6
	01-April- 21	0.0	24.0	24.0	0.0		7.8	16782	0	703.5	467.5
02-April- 21	0.0	1.8	24.0	0.0	7.7	10884	0	466.8	467	Outage	450
03-April- 21	0.0	0.0	24.0	0.0	24.0	14195	418.3	0	462.8	Outage	450
04-April- 21	18.4	0.0	24.0	0.0	24.0	19126	762.8	0	468.9	Outage	450
05-April- 21	24.0	0.0	24.0	0.0	24.0	19797	726.4	367.9	463.6	Outage	450
06-April- 21	24.0	6.7	24.0	0.0	24.0	26082	724.7	734.3	479.4	Outage	450
07-April- 21	24.0	24.0	24.0	0.0	24.0	25894	700	712.6	471.6	Outage	445.6
08-April- 21	24.0	24.0	24.0	0.0	24.0	24900	679.8	641.6	474.6	Outage	450
09-April- 21	24.0	21.9	24.0	0.0	24.0	24138	680	591.1	471.3	Outage	450.7
10-April- 21	24.0	0.0	24.0	0.0	24.0	19349	736.6	0	423.6	Outage	597.6
11-April- 21	24.0	0.0	24.0	0.0	24.0	20010	774.9	0	459.5	Outage	584.1
12-April- 21	24.0	0.0	24.0	0.0	24.0	20282	780.2	0	459.1	Outage	600.1
13-April- 21	24.0	0.0	24.0	0.0	24.0	22936	777.4	481.0	383.8	Outage	599.9
14-April- 21	24.0	13.9	24.0	0.0	24.0	29095	780	780.3	471.7	Outage	581.4
15-April- 21	24.0	24.0	24.0	0.0	24.0	28718	765.1	790.2	472.5	Outage	590.3
16-April- 21	24.0	24.0	1.3	0.0	24.0	24292	774.6	794.0	472.8	Outage	600
17-April- 21	24.0	24.0	0.0	0.0	24.0	23436	755.4	770.6	0	Outage	599.3
18-April- 21	24.0	24.0	0.0	0.0	24.0	21299	711	664.6	0	Outage	538.3
19-April- 21	24.0	24.0	0.0	0.0	24.0	23930	741.4	718.1	238.7	Outage	530
21-April- 21	24.0	24.0	15.4	0.0	24.0	28833	716.3	726.1	561.4	Outage	583.5
21-April- 21	24.0	24.0	24.0	0.0	24.0	28873	737.7	772.2	557	Outage	585.1
22-April- 21	24.0	24.0	24.0	0.0	24.0	31365	751.9	791.9	683.7	Outage	600
23-April- 21	24.0	24.0	24.0	0.0	24.0	32617	774	790.3	785.9	Outage	600
24-April- 21	24.0	24.0	24.0	0.0	24.0	30977	779.5	762.9	748.5	Outage	600
25-April- 21	24.0	24.0	24.0	0.0	24.0	26419	612.5	626.7	607.7	Outage	600
26-April- 21	24.0	24.0	24.0	0.0	24.0	27582	623.3	625.5	613.4	Outage	600
27-April- 21	24.0	24.0	24.0	0.0	24.0	28305	641.1	710.1	639.5	Outage	569.2
28-April- 21	24.0	4.8	24.0	0.0	24.0	26255	752.9	451.4	756.6	Outage	599.6
29-April- 21	24.0	0.0	24.0	0.0	24.0	28851	668.8	697.1	756.2	Outage	534.6
30-April- 21	24.0	12.3	22.6	0.0	24.0	26600	519.9	735.2	586.1	Outage	594.1

### 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	1	
		Effective Date	February 2018			
		Review Date	February 2023			

## 2. Abatement Technology

Table 3: Abatement Equipment Control Technology efficiency for month of April 2021

Associated Unit/Stack	Technology Type	Efficiency
Unit 1	Fabric Filter Plant (FFP)	-
Unit 2	Fabric Filter Plant (FFP)	99.906%
Unit 3	Fabric Filter Plant (FFP)	99.911%
Unit 4	Fabric Filter Plant (FFP)	99.980%
Unit 5	Fabric Filter Plant (FFP)	-
Unit 6	Fabric Filter Plant (FFP)	99.955%

## 3. Energy Source Characteristics

Table 4: Energy Source Material Characteristics for the month of April 2021

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	1.48
Ash Content	35 - 39	33.62

Table 5: Energy Source Material Characteristics for the month of April 2021

Characteristic	Stipulated Range (%)	Monthly Average Content (%)
<b>Oil</b>		
Sulphur Content	0.5 - 3.5	2.1
Ash Content	0.02 - 0.1	0.01

## 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<sup>3</sup>

### 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	1
Effective Date	February 2018		
Review Date	February 2021		

Table 6: Daily averages emissions for the month of April 2021

Date	Final PM mg/Nm <sup>3</sup> (minus 24 hrs for tonnage calc.)						Velocity (m/s) to Gas Volume (Nm <sup>3</sup> /s)						Unit 2 Final CEM mg/Nm <sup>3</sup>				Unit 2 Other CEMS Data				Unit 3 Final CEM mg/Nm <sup>3</sup>			Unit 3 Other CEMS Data			
	U1	U2	U3	U4	U5	U6	U1	U2	U3	U4	U5	U6	SOx	NOx	CO	O <sub>2</sub>	°C	kPa	m/s	SOx	NOx	CO	O <sub>2</sub>	°C	kPa	m/s	
2021/04/01		off	32.3	11.3	outage	4.6		off	776.4	766.4	outage	764.6	off	off	off	off	off	off	off	3 077	311	65	7.9	142.2	83.6	20.4	
2021/04/02		off	21.1	11.1	outage	3.7		off	481.3	770.6	outage	768.6	off	off	off	off	off	off	off	3 455	327	58	10.8	139.2	83.6	16.8	
2021/04/03			off	11.4	outage	6.3		889.1	off	769.8	outage	770.8	3 023	407	20	9.1	122.7	89.5	23.5	off	off	off	off	off	off	off	
2021/04/04		12.7	off	9.4	outage	8.5		1330.2	off	816.4	outage	775.9	3 204	339	46	6.9	130.5	89.6	29.2	off	off	off	off	off	off	off	
2021/04/05		11.9		11.0	outage	7.8		1269.1	426.7	781.3	outage	776.1	3 266	337	41	7.2	130.5	89.4	28.6	3 676	436	3	11.2	139.1	83.4	15.9	
2021/04/06		9.6	32.7	10.1	outage	7.8		1270.6	825.2	779.8	outage	773.8	3 381	327	44	7.2	128.7	89.6	28.3	3 428	361	25	7.5	144.6	83.5	21.1	
2021/04/07		8.7	33.3	10.9	outage	11.5		1237.5	791.7	773.1	outage	764.5	3 297	334	89	7.2	131.1	89.9	27.8	3 321	368	35	7.7	144.8	83.7	20.6	
2021/04/08		7.0	30.3	11.3	outage	9.1		1236.1	709.3	783.5	outage	769.4	3 425	318	39	6.9	130.5	89.8	26.9	3 451	347	16	8.3	140.8	83.7	19.2	
2021/04/09		7.4	29.5	10.3	outage	12.7		1248.4	653.3	778.9	outage	772.3	3 271	328	57	6.6	131.4	89.6	26.6	3 488	345	18	8.9	140.2	83.6	18.7	
2021/04/10		10.8	off	9.8	outage	6.2		1326.3	off	718.3	outage	993.2	3 356	336	139	6.2	134.5	89.6	27.7	off	off	off	off	off	off	off	
2021/04/11		14.8	off	10.5	outage	7.6		1393.9	off	795.2	outage	973.5	3 441	334	252	5.9	135.6	89.7	28.5	off	off	off	off	off	off	off	
2021/04/12		17.5	off	10.0	outage	9.3		1389.9	off	786.3	outage	995.8	3 455	341	128	6.1	135.3	89.9	28.8	off	off	off	off	off	off	off	
2021/04/13		18.2		8.7	outage	10.4		1388.1	501.8	650.0	outage	1004.3	3 416	360	91	6.3	135.7	90.0	29.1	3 665	340	36	10.9	136.3	83.8	17.5	
2021/04/14		20.0	35.5	9.7	outage	8.5		1391.9	857.7	777.8	outage	954.4	3 343	359	44	6.3	137.0	89.9	29.2	3 419	287	66	7.7	143.9	83.7	22.2	
2021/04/15		16.6	39.8	9.9	outage	9.7		1359.9	911.5	769.5	outage	963.5	3 405	333	35	6.3	135.2	89.6	28.9	3 535	278	19	7.5	145.3	86.3	22.7	
2021/04/16		14.9	24.1	8.9	outage	11.0		1371.1	895.2	753.4	outage	974.0	3 375	345	77	6.3	135.3	89.6	29.1	3 746	290	11	7.7	145.9	85.9	22.7	
2021/04/17		19.2	44.7	off	outage	7.0		1338.4	834.1	off	outage	969.1	3 436	332	80	6.3	131.7	88.7	28.3	3 736	280	9	7.8	143.7	83.9	21.8	
2021/04/18		19.0	29.5	off	outage	3.9		1287.7	733.6	off	outage	892.1	3 497	327	49	6.6	130.2	90.0	27.3	3 876	270	16	8.5	140.3	83.9	20.3	
2021/04/19		20.3	36.9		outage	4.7		1310.7	829.0	724.7	outage	811.9	3 514	340	45	6.6	130.7	89.8	28.2	3 844	346	8	8.1	141.4	86.4	21.5	
2021/04/20		18.3	37.0	9.8	outage	12.0		1265.2	859.9	901.3	outage	946.1	3 539	352	27	6.8	131.5	89.9	27.8	3 906	353	8	8.2	142.4	89.2	21.8	
2021/04/21		15.0	77.5	8.6	outage	13.5		1316.1	917.7	900.7	outage	948.5	3 501	331	72	6.3	130.2	89.9	27.8	3 855	346	13	7.6	141.5	89.2	22.2	
2021/04/22		16.6	39.6	17.8	outage	12.5		1331.4	927.2	1101.3	outage	956.8	3 466	340	56	6.3	131.1	89.8	28.1	3 706	339	26	7.6	139.4	89.0	22.3	
2021/04/23		22.5	44.9	39.4	outage	16.1		1350.1	920.5	1259.0	outage	864.6	3 499	350	51	6.5	133.2	89.5	29.1	3 532	344	18	7.3	138.7	87.2	22.0	
2021/04/24		23.4	37.3	34.2	outage	14.5		1377.3	832.1	1213.1	outage	961.9	3 469	347	31	6.4	134.0	89.3	29.2	3 530	337	36	7.3	138.3	83.4	20.7	
2021/04/25		13.0	35.2	17.9	outage	14.7		1133.5	676.9	992.3	outage	969.5	3 521	338	26	7.5	127.5	89.4	25.9	3 568	346	37	8.4	136.9	83.4	18.4	
2021/04/26		10.9	33.7	17.5	outage	19.9		1157.7	673.2	1000.0	outage	946.5	3 577	354	25	7.2	128.0	89.2	26.0	3 738	342	15	8.7	135.4	84.0	18.7	
2021/04/27		9.6	31.5	17.3	outage	11.0		1162.9	809.7	1031.0	outage	871.1	3 588	350	22	7.2	129.0	89.4	26.4	3 834	363	28	8.2	139.0	88.6	20.6	
2021/04/28		14.7	30.9	24.8	outage	16.0		1355.0	540.3	1228.8	outage	924.2	3 465	347	33	6.3	133.4	89.4	28.7	3 520	321	63	9.6	131.9	85.1	16.4	
2021/04/29		12.2		26.5	outage	10.9		1232.4	750.9	1220.4	outage	877.2	3 203	345	72	6.8	128.9	89.4	26.6	3 485	255	114	8.0	134.6	83.4	19.6	
2021/04/30		11.4	52.9	15.2	outage	23.8		1005.0	787.4	949.6	outage	935.6	3 307	330	18	8.2	124.5	89.3	24.4	3 605	266	18	8.0	135.7	83.3	20.5	

Unit 1 is not yet in commercial operation. There is no reportable for the area shaded red due to the grace period on reporting for PM

**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	1
Effective Date	February 2018		
Review Date	February 2021		

Date	Unit 4 Final CEM mg/Nm <sup>3</sup>			Unit 4 Other CEMS Data				Unit 5 Final CEM mg/Nm <sup>3</sup>			Unit 5 Other CEMS Data				Unit 6 Final CEM mg/Nm <sup>3</sup>			Unit 6 Other CEMS Data			
	SOx	NOx	CO	O <sub>2</sub>	°C	kPa	m/s	SOx	NOx	CO	O <sub>2</sub>	°C	kPa	m/s	SOx	NOx	CO	O <sub>2</sub>	°C	kPa	m/s
2021/04/01	3 093	520	21	8.4	127.6	90.0	17.9							2 975	353	13	9.2	131.6	89.9	19.3	
2021/04/02	3 107	500	21	8.3	127.8	90.0	17.8							2 959	313	11	8.6	137.3	90.0	18.7	
2021/04/03	3 050	448	21	8.4	126.0	89.9	17.9							2 991	305	10	8.7	134.7	89.8	18.8	
2021/04/04	2 966	416	21	8.4	121.8	90.1	17.9							2 873	300	9	8.8	130.5	90.0	18.7	
2021/04/05	3 056	435	21	8.3	124.3	89.9	17.8							2 945	305	9	8.7	133.7	89.8	18.7	
2021/04/06	3 234	400	24	8.0	120.9	90.0	17.3							3 135	305	9	8.8	131.5	90.0	18.8	
2021/04/07	3 125	421	22	8.3	122.7	90.2	17.6							2 940	345	9	8.7	130.9	90.2	18.4	
2021/04/08	3 231	429	20	8.3	125.0	90.2	18.0							3 040	333	9	8.5	130.3	90.1	18.2	
2021/04/09	3 224	440	20	8.3	127.0	90.0	18.0							3 027	335	10	8.4	132.3	90.0	18.3	
2021/04/10	3 195	510	21	8.7	128.9	90.1	17.3							3 030	315	28	7.0	143.2	89.9	21.7	
2021/04/11	3 244	447	20	8.3	126.2	90.1	18.2							3 104	323	25	7.3	142.1	90.1	21.5	
2021/04/12	3 321	454	20	8.5	123.5	90.3	18.1							3 161	326	28	7.1	139.6	90.2	21.7	
2021/04/13	3 201	448	23	9.7	121.1	90.4	16.6							3 119	333	25	7.3	137.3	90.3	22.0	
2021/04/14	3 188	444	20	8.4	124.1	90.2	17.8							3 081	332	23	7.5	136.6	90.2	21.2	
2021/04/15	3 243	430	21	8.2	123.8	90.0	17.6							3 104	329	20	7.5	134.3	89.9	21.4	
2021/04/16	3 260	398	21	8.2	124.8	90.0	16.8							3 081	318	20	7.5	134.6	89.9	21.6	
2021/04/17	off	off	off	off	off	off	off							3 135	336	18	7.7	131.4	90.3	21.4	
2021/04/18	off	off	off	off	off	off	off							3 190	340	45	8.0	122.6	90.3	19.8	
2021/04/19	2 126	291	26	8.7	120.4	90.1	17.2							3 564	374	31	9.2	125.8	90.1	20.1	
2021/04/20	3 354	386	27	7.5	121.8	90.3	19.3							3 218	347	23	7.9	136.0	90.2	21.7	
2021/04/21	3 344	378	28	7.6	116.5	90.3	18.9							3 135	352	14	8.0	138.1	90.2	21.9	
2021/04/22	3 337	372	341	6.2	123.7	90.1	22.3							3 220	361	12	7.9	139.1	90.1	22.0	
2021/04/23	3 356	361	57	6.1	133.1	89.8	25.2							3 679	409	14	9.0	141.3	89.8	21.9	
2021/04/24	3 377	362	38	6.3	132.4	89.7	24.4							3 227	341	9	7.5	141.2	89.6	21.8	
2021/04/25	3 408	379	19	7.6	129.6	89.7	21.8							3 259	323	12	7.5	141.0	89.7	21.8	
2021/04/26	3 324	375	22	8.0	127.3	89.7	22.8							2 809	282	16	7.9	141.4	89.7	22.0	
2021/04/27	3 234	397	21	7.6	129.5	89.7	23.0							2 572	226	16	8.7	138.1	89.6	21.3	
2021/04/28	3 126	370	23	6.5	134.9	89.7	25.5							814	328	2	8.1	138.6	89.7	21.8	
2021/04/29	2 892	366	22	6.6	133.9	89.7	25.4							1 267	328	1	8.1	133.7	89.7	20.5	
2021/04/30	3 102	368	21	8.6	122.7	89.6	22.0							2 954	328	1	8.1	135.5	89.6	21.9	

**CONTROLLED DISCLOSURE**

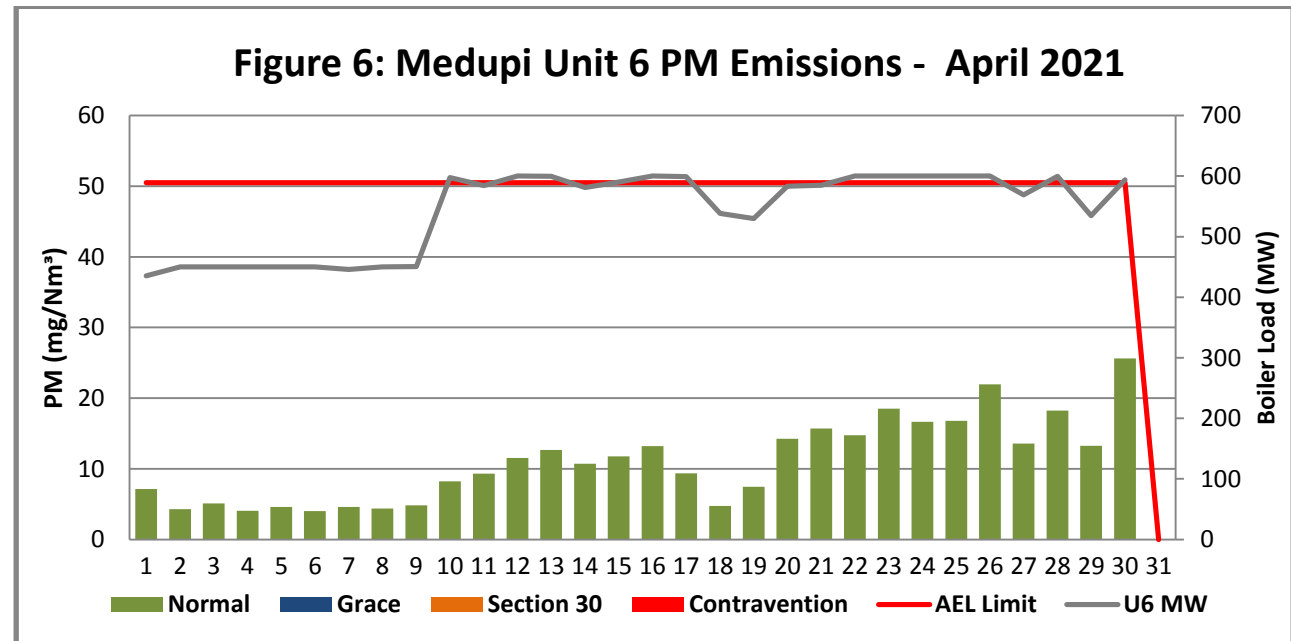
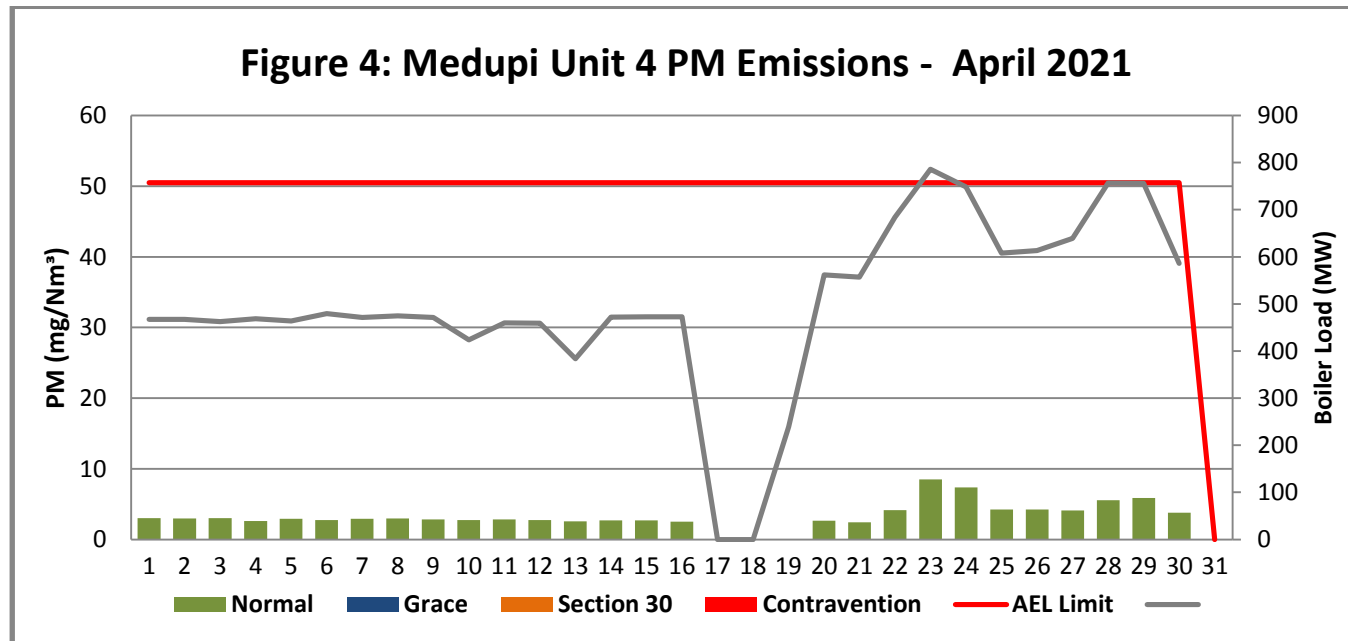
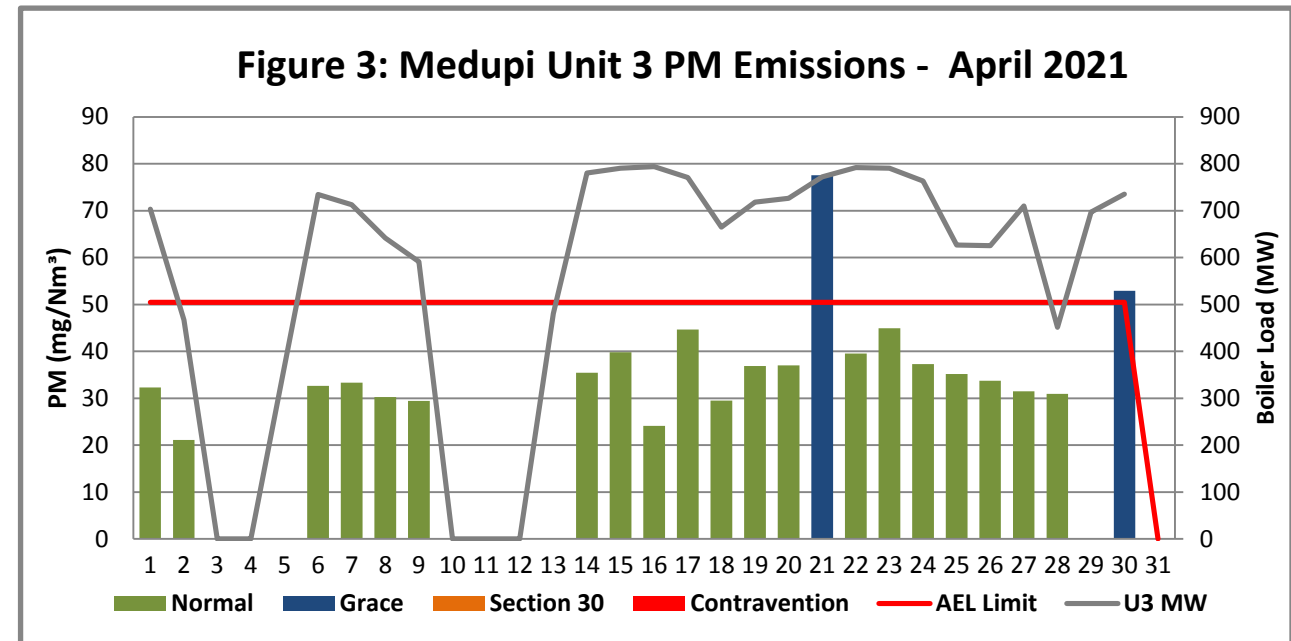
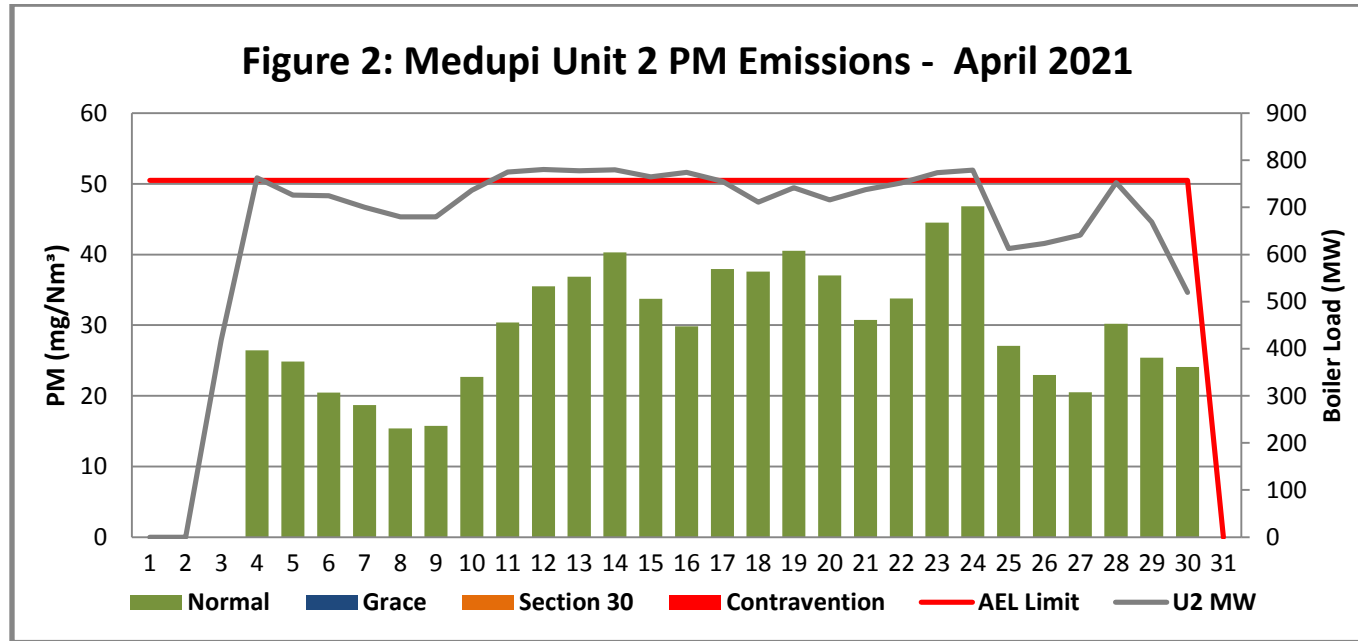
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

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	1
Effective Date	February 2018		
Review Date	February 2021		



Note: exceedances of PM limit are due incident of bag damages in the PJFF plant, cell are isolated and inspected online to identify those influencing emissions. Online bag replacement is done on those cells with high dust emissions.

**CONTROLLED DISCLOSURE**

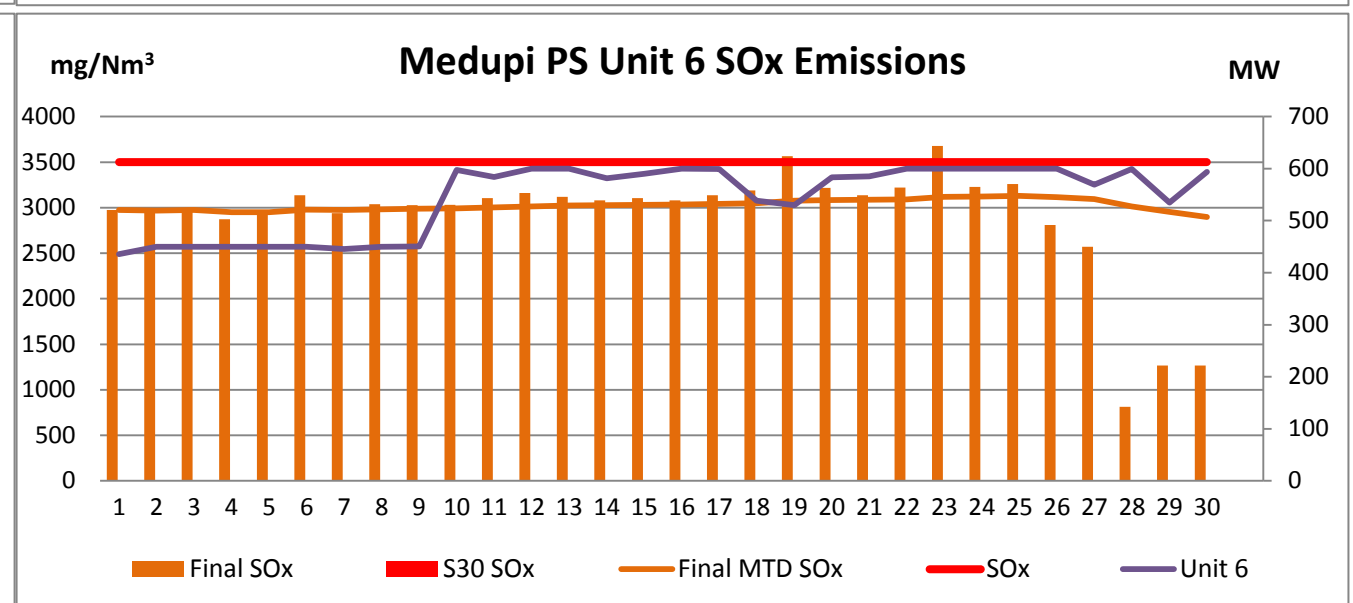
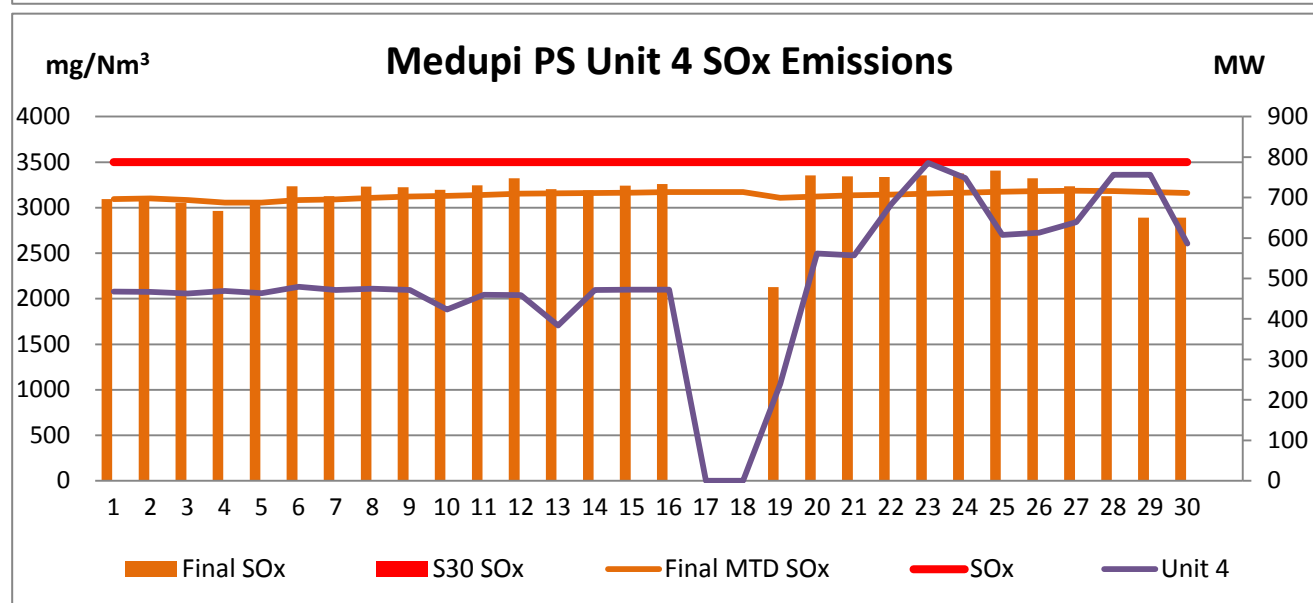
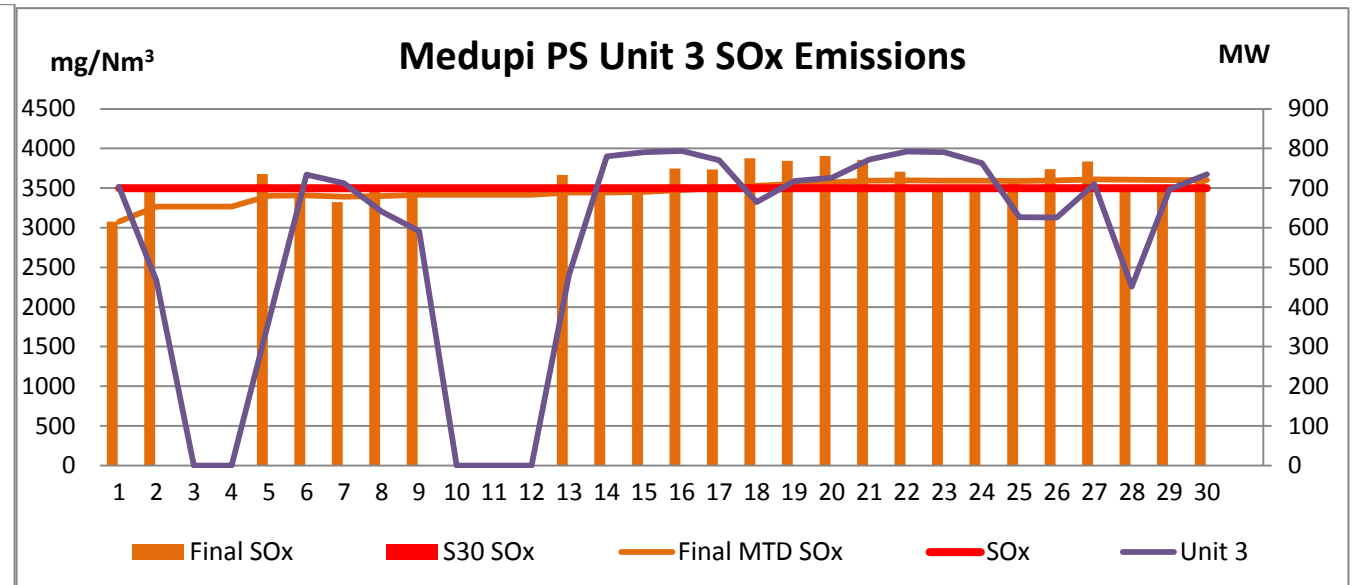
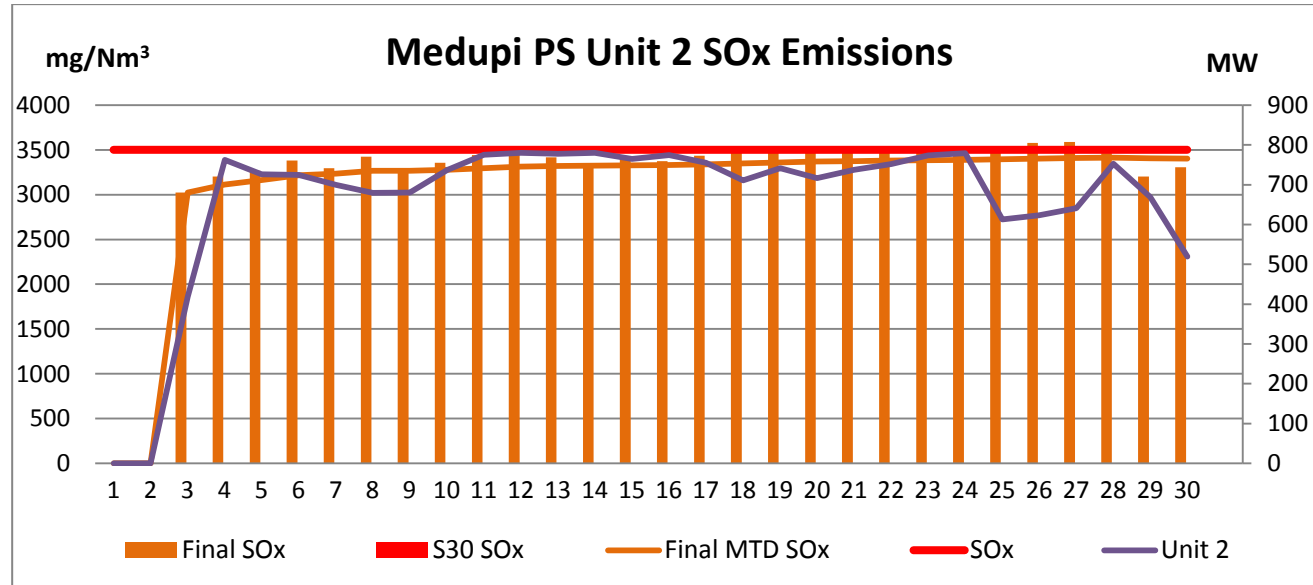
When downloaded from the document management system, this document is uncontrolled and the responsibility rests with the user to ensure it is in line with the authorized version on the database.

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	1
Effective Date	February 2018		
Review Date	February 2021		



Note: SO<sub>2</sub> emissions intermittent exceedances of daily limit of 3500mg/Nm<sup>3</sup> (station internal limit) is evident in the SO<sub>2</sub> figures, Unit 3 exceeded the monthly limit of 3500mg/Nm<sup>3</sup> (AEL limit).

## 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.

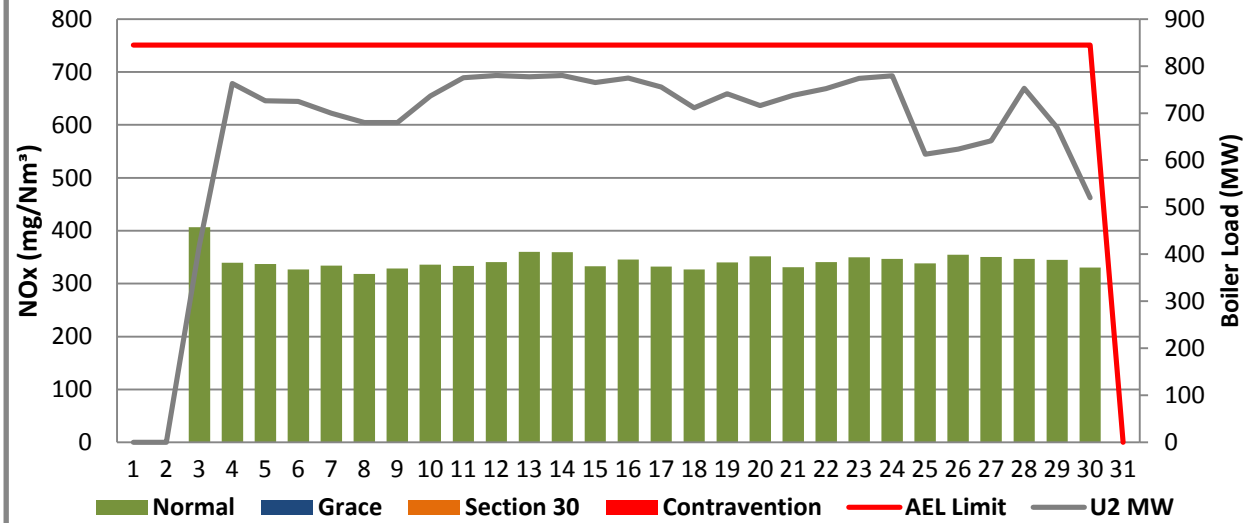
No part of this document may be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.



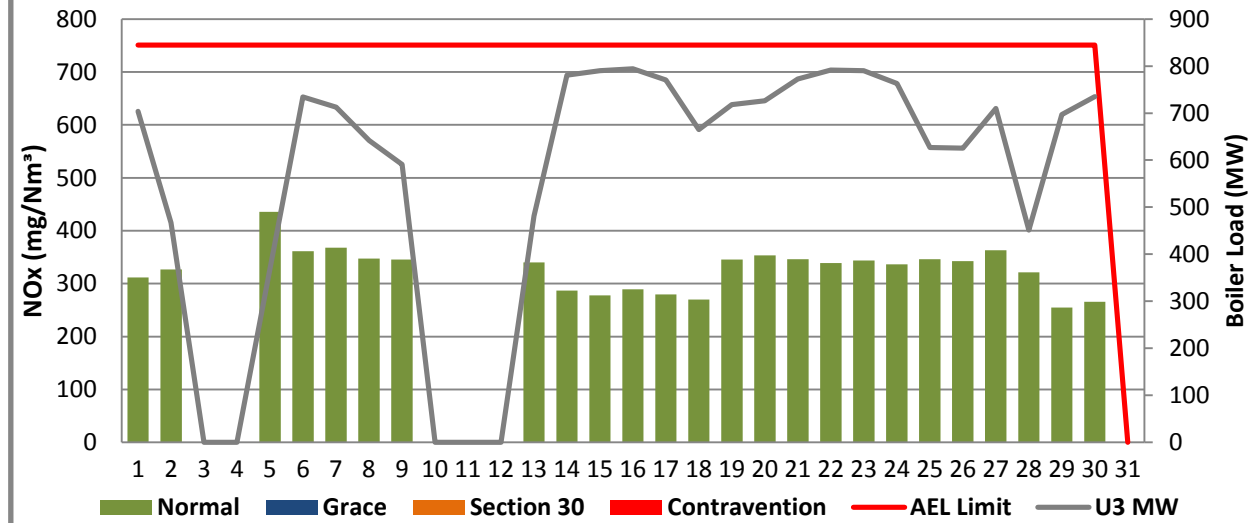
### Medupi Power Station Monthly Emissions Report

Template Identifier	240-43921804	Rev	6
Document Identifier	240-88543153	Rev	1
Effective Date	February 2018		
Review Date	February 2021		

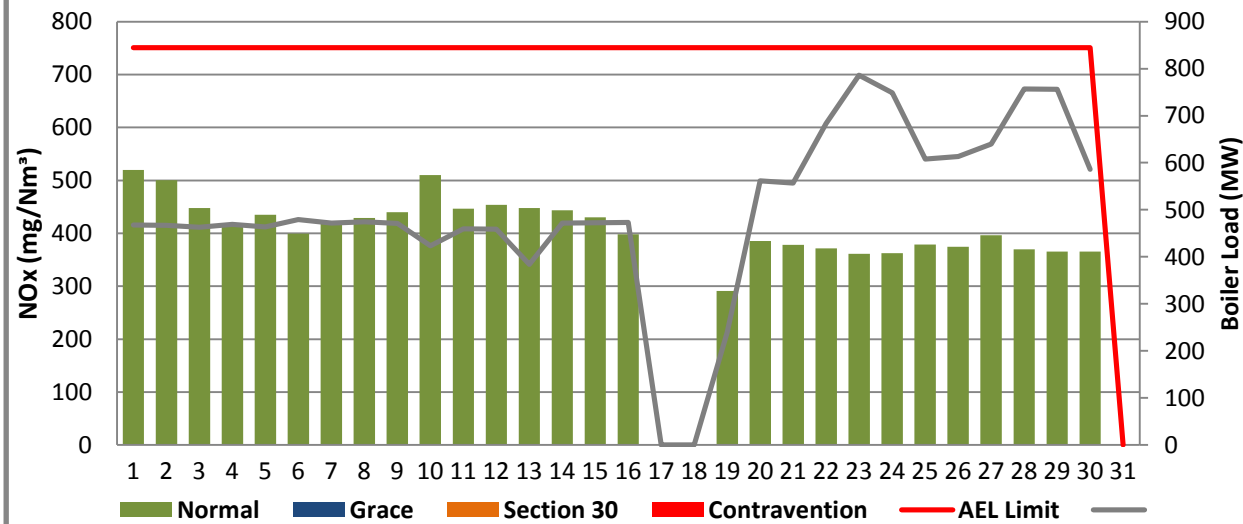
#### Figure 14: Medupi Unit 2 NOx Emissions - April 2021



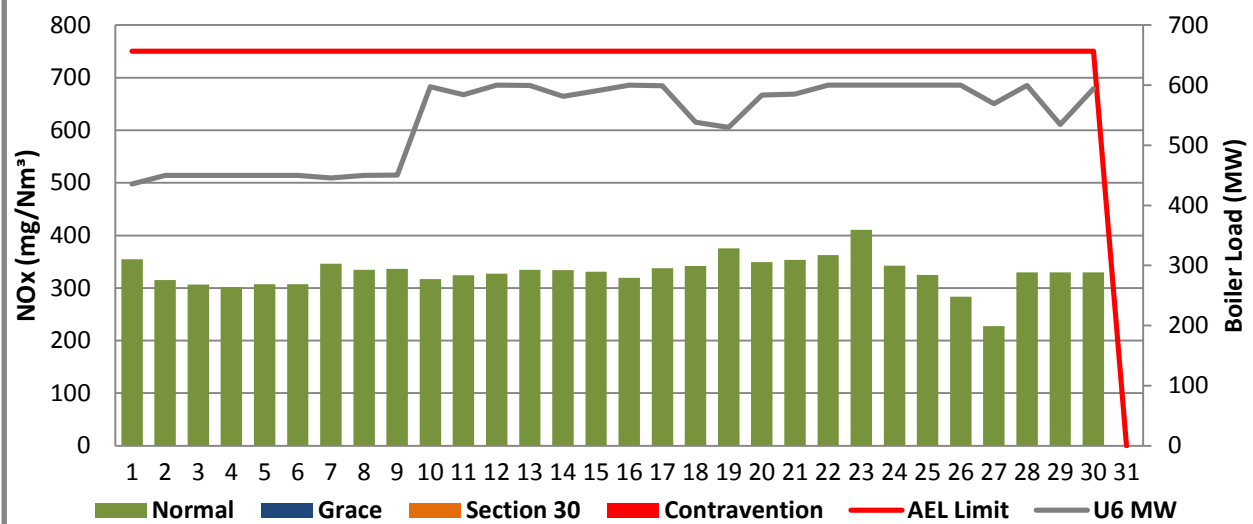
#### Figure 15: Medupi Unit 3 NOx Emissions - April 2021



#### Figure 16: Medupi Unit 4 NOx Emissions - April 2021



#### Figure 18: Medupi Unit 6 NOx Emissions - April 2021




**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>1</b>
		<b>Effective Date</b>	<b>February 2018</b>		
		<b>Review Date</b>	<b>February 2021</b>		

**Table 7: Monthly tonnages for the month of April 2021**

Unit	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>2</sub> (tons)	CO (tons)
1	-	-	-	-
2	61.9	7 003	697	132
3	47.0	4 934	445	35
4	9.3	7 737	991	95
5	0.0	0	0	0
6	24.4	6 405	715	35
<b>SUM</b>	142.6	26 079	2 847	297

## 5. Shutdown/start-up information


**Table 8: PM Start-up information for the month of April 2021**

Unit No.	3		3		4		6	
<b>Breaker Open (BO)</b>	01:50 AM	2021/04/02	09:55 PM	2021/04/09	02:20 AM	2021/04/16	08:50 AM	2021/04/01
<b>Draught Group (DG) Shut Down (SD)</b>	11:50 AM	2021/04/02	10:35 PM	2021/04/09	08:45 PM	2021/04/16	DG did not trip or SD	DG did not trip or SD
<b>BO to DG SD (duration)</b>	00:10:00	DD:HH:MM	00:00:40	DD:HH:MM	00:18:25	DD:HH:MM	n/a	DD:HH:MM
<b>Fires in time</b>	12:30 PM	2021/04/05	03:30 AM	2021/04/13	08:35 PM	2021/04/18	-	-
<b>Synch. to Grid (or BC)</b>	05:15 PM	2021/04/05	10:00 AM	2021/04/13	09:30 AM	2021/04/19	-	-
<b>Fires in to BC (duration)</b>	00:04:45	DD:HH:MM	00:06:30	DD:HH:MM	00:12:55	DD:HH:MM	-	DD:HH:MM
<b>Emissions below limit from BC (end date)</b>	not > limit	not > limit	not > limit	not > limit	not > limit	not > limit	-	-
<b>Emissions below limit from BC (duration)</b>	n/a	DD:HH:MM	n/a	DD:HH:MM	n/a	DD:HH:MM	-	DD:HH:MM

### 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 February 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	1	
		Effective Date	February 2018			
		Review Date	February 2021			

## 6. Continuous Emission Monitoring Systems (CEMS)

Unit 2, 3, 4, 5 and 6 Continuous Emission Monitoring Systems were in operation at all times when the unit was on load.

**Table 7: Periods during which CEMS was inoperative**

Date	Time	CEMS status	Comments
20-30 April 2021	N/A	malfunction	Unit 6 gaseous CEMS monitors faulty due to pump and compressor unit breakdown (reliability was compromised)

**Table 8: CEMS Monitor Reliability**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	O <sub>2</sub>
Unit 1	-	-	-	-
Unit 2	99.8	100.0	100.0	99.7
Unit 3	97.0	100.0	100.0	99.2
Unit 4	99.5	99.6.0	99.4	97.3
Unit 5	-	-	-	-
Unit 6	99.6	90.0	87.6	89.9

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

CEMS calibration certificates shall be made available for all units upon request.


## 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.

### 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 February 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	1	
		Effective Date	February 2018			
		Review Date	February 2021			

## 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.

Table 9: Total Volatile Organic Compound (TVOC) for April 2021

FINAL OUTPUT:	Result	Unit
Breathing losses:	0.61	kg/month
Working losses:	0.04	kg/month
<b>TOTAL LOSSES (Total TVOC Emissions for the month):</b>	<b>0.66</b>	<b>kg/month</b>

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

No awareness campaign.

## 11. Complaints Register


Table 10: Complaints for the month of April 2021

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 February 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>1</b>
		<b>Effective Date</b>	<b>February 2018</b>		
		<b>Review Date</b>	<b>February 2021</b>		

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

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

**Verified by:** Petri De Kock   
**System Engineer C&I**

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

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

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

I Wikus Janse Van Rensburg, declares that the information provided in this report is accurate and correct.

Yours sincerely



Wikus Janse Van Rensburg  
**GENERAL MANAGER: MEDUPI POWER STATION**

### 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 February be reproduced without the expressed consent of the copyright holder, Eskom Holdings SOC Limited, Reg No 2002/015527/30.