



**Ms Mpho Nembilwi**  
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1050

Date

*May 2022*

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Ref *Kusile Power Station AEL (17/4/AEL/MP311/12/01)*

Dear Ms Nembilwi

**KUSILE POWER STATION'S MONTHLY EMISSIONS REPORT FOR APRIL 2022**

This serves as the monthly report required in terms of Section 7.6 in Kusile Power Station's Atmospheric Emission License 17/4/AEL/MP311/12/01. The emissions are for the month of April 2022. Please take note that Unit 01 and 03 was on outage during this reporting period.

Hoping the above will meet your satisfaction

Yours sincerely

Bongumusa A. Mashazi  
**GENERAL MANAGER**  
**DATE:** 2022/05/31

**1. KUSILE POWER STATION MONTHLY EMISSIONS REPORT: Atmospheric Emission License 17/4/AEL/MP311/12/01**



**2 Raw Materials and Products**

Raw Materials and Products	Raw Material Type	Units	Maximum Permitted Consumption Rate	Consumption Rate Apr-2022
	Coal	Tons	1 818 083	287 594
	Fuel Oil	Tons	5 533	513,122
	Limestone	Tons	72 917	19253

Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Production Rate Apr-2022
	Energy	GWh	3214,08	380,25
	Ash	Tons	663 583	84 753,9
	Gypsum	Tons	129 250	10 783,4
	RE PM	kg/MWh	not specified	0,052
	RE SOx	kg/MWh	not specified	1,918

**3 Energy source characteristics**

Fuel Characteristic	Units	Stipulated Range	Monthly Average Content
Coal CV	MJ/kg	not specified	21,100
Coal Sulphur	%	1,3	1,050
Ash in Coal	%	38	29,470

**4 Emissions Limits (mg/Nm<sup>3</sup>)**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>
North	50	500	750
South	50	500	750

**5 Abatement Technology (%)**

Associated Unit/Stack	Technology Type	Efficiency Apr-2022	Technology Type	Efficiency Apr-2022
Unit 1	FFP			
Unit 2	FFP	99,974%	FGD	91,305%
Unit 3	FFP			
Unit 4	FFP		FGD	
Unit 5	FFP		FGD	
Unit 6	FFP		FGD	

Note Both the FFP and FGD does not have bypass mode operation, hence plant 100% Utilised

**6. Monitoring reliability (%)**

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	CO <sub>2</sub>	O <sub>2</sub>
Unit 1	<i>Unit on outage</i>				
Unit 2	51,4	99,2	94,0	97,8	94,9
Unit 3	<i>Unit on outage</i>				
Unit 4					
Unit 5					
Unit 6					

**7. Emissions Performance**

Table 7 1 Monthly tonnages for the month of April-2022

Associated Unit/Stack	PM	SO <sub>2</sub>	NO <sub>x</sub>	CO <sub>2</sub>
Unit 1	<i>Unit on outage</i>			
Unit 2	19,9	729	976	486 138
Unit 3	<i>Unit on outage</i>			
Unit 4				
Unit 5				
Unit 6				
SUM	19,9	729	976	486 138

Table 7.2: Operating days in compliance to SO<sub>2</sub> AEL Limit - April 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO <sub>x</sub> (mg/Nm <sup>3</sup> )
Unit 1	<i>Unit on outage</i>					
Unit 2	29	1	0	0	1	281,3
Unit 3	<i>Unit on outage</i>					
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	

Table 7.3: Operating days in compliance to NO<sub>x</sub> AEL Limit - April 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO <sub>x</sub> (mg/Nm <sup>3</sup> )
Unit 1	0	0	0	0	0	
Unit 2	30	0	0	0	0	384,9
Unit 3	0	0	0	0	0	
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

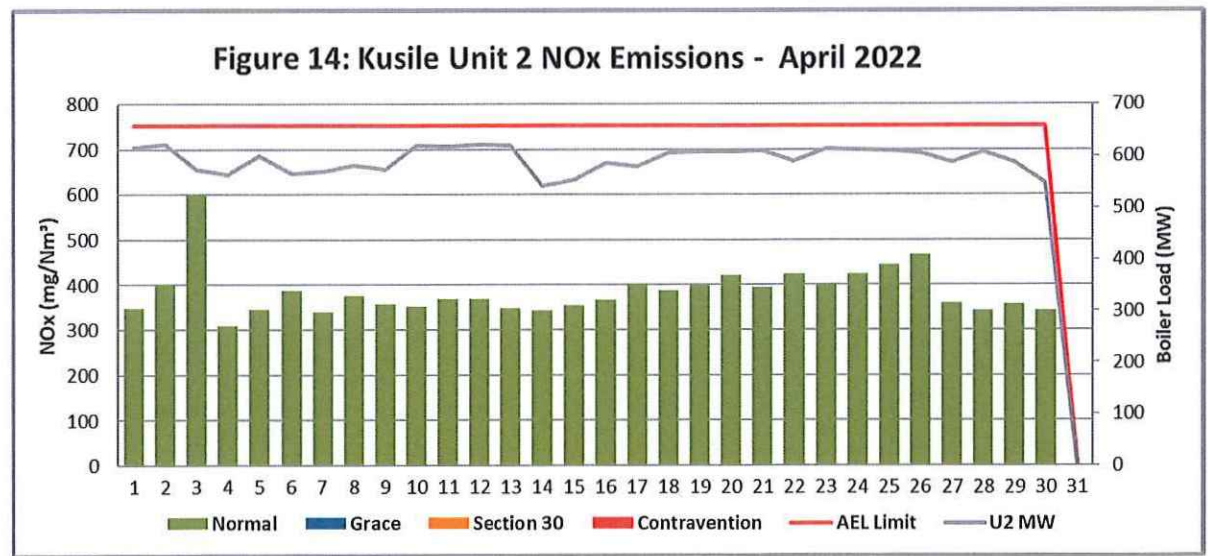
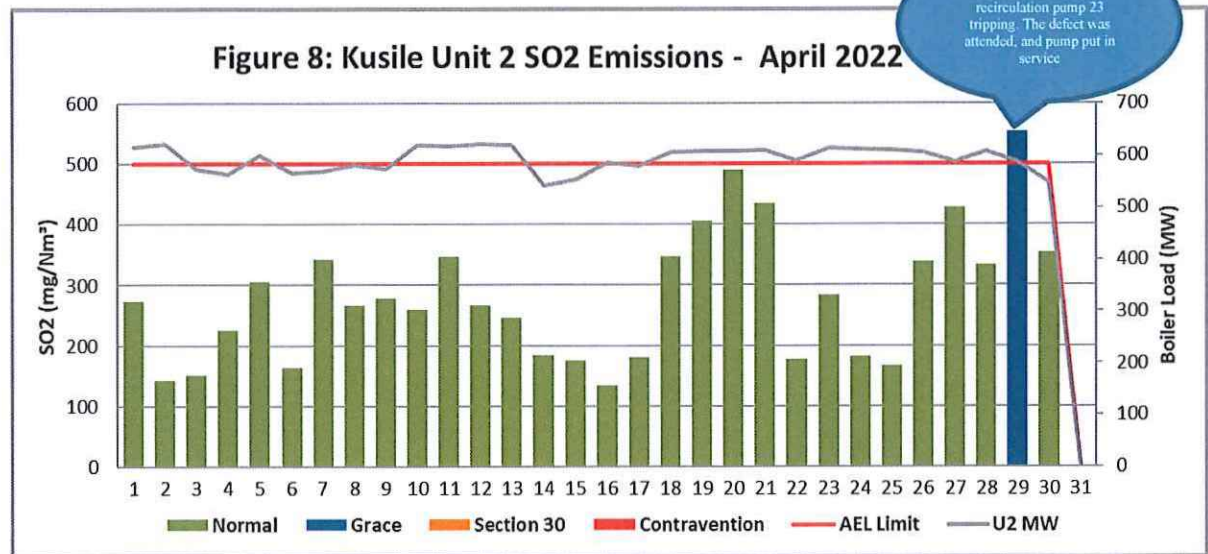
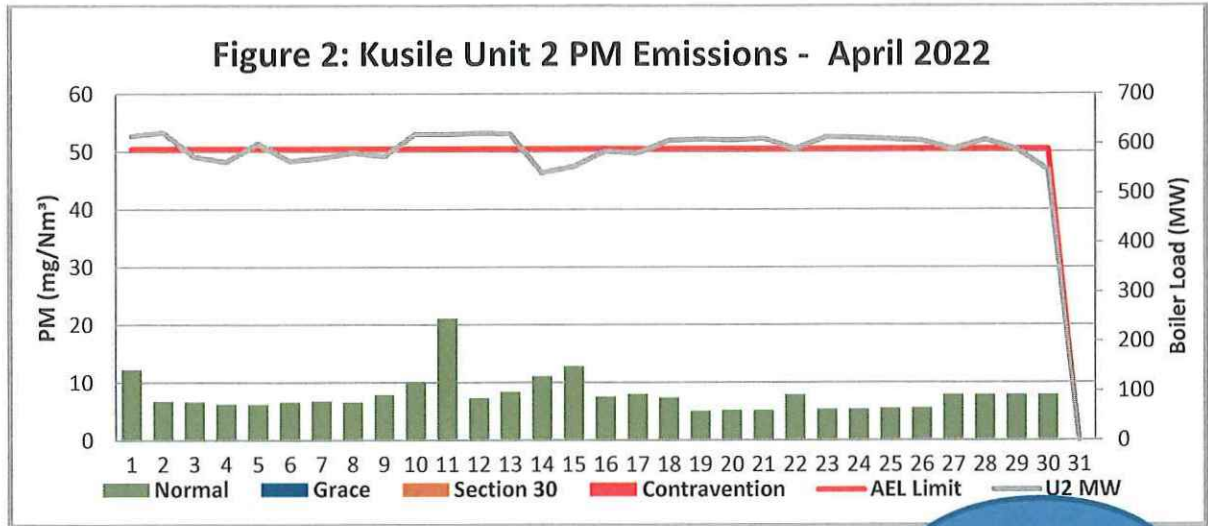
Table 7.4: Operating days in compliance to PM AEL Limit - April 2022

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm <sup>3</sup> )
Unit 1	<i>Unit on outage</i>					
Unit 2	30	0	0	0	0	7,9
Unit 3	<i>Unit on outage</i>					
Unit 4	0	0	0	0	0	
Unit 5	0	0	0	0	0	
Unit 6	0	0	0	0	0	
<b>SUM</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 7.5: Legend Description

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





**8. Shut down and Light up information**

Unit No 2	<i>No events recorded during this period</i>
Breaker Open (BO)	
Draught Group (DG) Shut Down (SD)	
BO to DG SD (duration)	
Fires in time	
Synch. to Grid (or BC)	
Fires in to BC (duration)	
Emissions below limit from BC (end date)	
Emissions below limit from BC (duration)	

**9. Complaints**

No complaints received during the month of April - 2022