

The Municipal Manager
Gert Sibande District Municipality
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Date: 15 October 2025

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Dear Ms Mthembu

TUTUKA POWER STATION MONTHLY REPORT FOR SEPTEMBER 2025

This serves as the monthly report required in terms of Section 7.4 of Tutuka Power Station's Atmospheric Emission License (13/19/1/Lekwa/Eskom H SOC Ltd TPS/0013/2025/f04). The report includes verified emissions for Particulate Matters, Sulphur, and Nitrogen dioxides for the month of September 2025.

The report presents monthly trends for each monitored pollutant. The Station had 5-units onload for the month of September 2025, units 1, 2, 3, 4 and 5. Unit 1 was available for 10 days, Unit 2 was available for 17 days, Unit 3 was available for 11 days then went to outage from the 12th, unit 4 was available for 22 days, Unit 5 was available for 28 days and unit 6 was offload. The station exceeded the monthly PM limit on unit 2 and unit 3.

On the 14th of September 2025, the station experienced a section 30 emission incident on unit 2. The incident was caused by overheating of the isolator contactor terminals, which subsequently resulted in a short circuit between phases. The station is currently conducting an investigation to determine the root cause. The investigation report will be submitted upon conclusion

1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Max. Permitted	Actual Consumption Sep-2025
	Coal	Tons	1 200 000	422 749.07
	Fuel Oil	Tons	10 000	4 551.880
Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Indicative Production Rate Sep-2025
	Energy	GWh	2 611	847.521
	Ash	Tons	770 000	101 037.028
	RE Ash	kg/MWh	not specified	0.999

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Note: Maximum energy rate is as per the maximum capacity stated in the AEL: [3 510 MW] x 24 hrs x days in Month/1000 to convert to GWh

2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristics	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	16-24	22.07
Sulphur Content	%	0.6 TO 2.6	1.000
Ash Content	%	21 TO 33	23.90

3 EMISSION LIMITS (mg/Nm³)

Associated Unit/Stack	PM Daily	SO ₂	NO _x	PM Monthly
Unit 1	300	3000	1100	200
Unit 2	300	3000	1100	200
Unit 3	300	3000	1100	200
Unit 4	300	3000	1100	200
Unit 5	300	3000	1100	200
Unit 6	300	3000	1100	200

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency Sep-2025
Unit 1	Electrostatic Precipitators (ESP)	99.518%
Unit 2	Electrostatic Precipitators (ESP)	99.432%
Unit 3	Electrostatic Precipitators (ESP)	97.997%
Unit 4	Electrostatic Precipitators (ESP)	99.396%
Unit 5	Electrostatic Precipitators (ESP)	98.772%
Unit 6	Electrostatic Precipitators (ESP)	Off-line

Note: The ESP does not have bypass mode operation, hence plant considered 100% Utilised.

5 MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO	O ₂
Unit 1	100.0	85.7	91.4	93.2
Unit 2	95.8	85.7	85.7	85.7
Unit 3	100.0	98.7	98.7	98.7
Unit 4	99.7	99.5	99.5	96.1
Unit 5	100.0	99.1	99.1	99.1
Unit 6	Off	Off	Off	Off

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6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for the month of September-2025

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	56.2	996	444
Unit 2	109.4	713	435
Unit 3	220.2	1 530	757
Unit 4	136.5	2 388	1 179
Unit 5	324.7	3 771	2 030
Unit 6	Off	Off	Off
SUM	846.90	9 399	4 846

Table 6.2: Operating days in compliance to PM AEL Limit - September 2025

Associate d Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Limit Value	Mnth Avg (mg/N m³)
Unit 1	10	0	0	0	0	200	128.5
Unit 2	17	1	0	0	1	200	273.1
Unit 3	11	0	0	0	0	200	258.1
Unit 4	22	0	0	0	0	200	117.4
Unit 5	28	0	0	0	0	200	155.3
Unit 6	Off	Off	Off	Off	Off	200	Off
SUM	88	1	0	0	1		

Table 6.3: Operating days in compliance to SO₂ AEL Limit - September 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm³)
Unit 1	11	0	0	0	0	1 843.0
Unit 2	21	0	0	0	0	1 254.2
Unit 3	12	0	0	0	0	1 648.2
Unit 4	23	0	0	0	0	1 860.4
Unit 5	29	0	0	0	0	1 768.0
Unit 6	Off	Off	Off	Off	Off	Off
SUM	96	0	0	0	0	

Table 6.4: Operating days in compliance to NO_x AEL Limit - September 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contraven tion	Total Exceedance	Average NO _x (mg/Nm³)
Unit 1	11	0	0	0	0	798.5
Unit 2	21	0	0	0	0	755.3
Unit 3	12	0	0	0	0	810.7
Unit 4	23	0	0	0	0	929.1

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Unit 5	29	0	0	0	0	943.9
Unit 6	Off	Off	Off	Off	Off	Off
SUM	96	0	0	0	0	

Note: NOx emission is measured as NO in PPM. Final NOx value is expressed as total NO₂

Table 6.5: Legend Description

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

Figure 1: Tutuka Unit 1 PM Emissions - September 2025

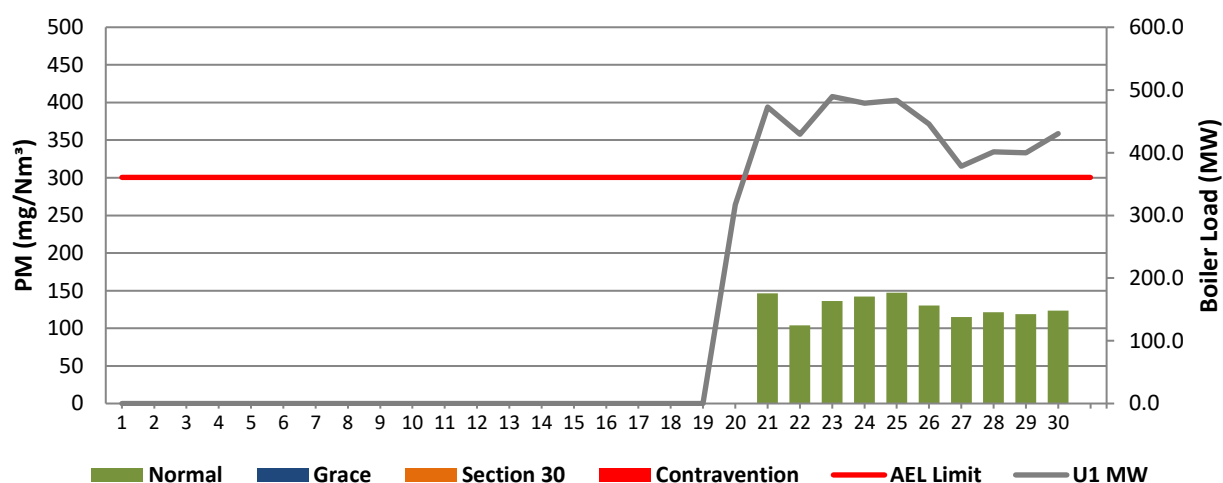
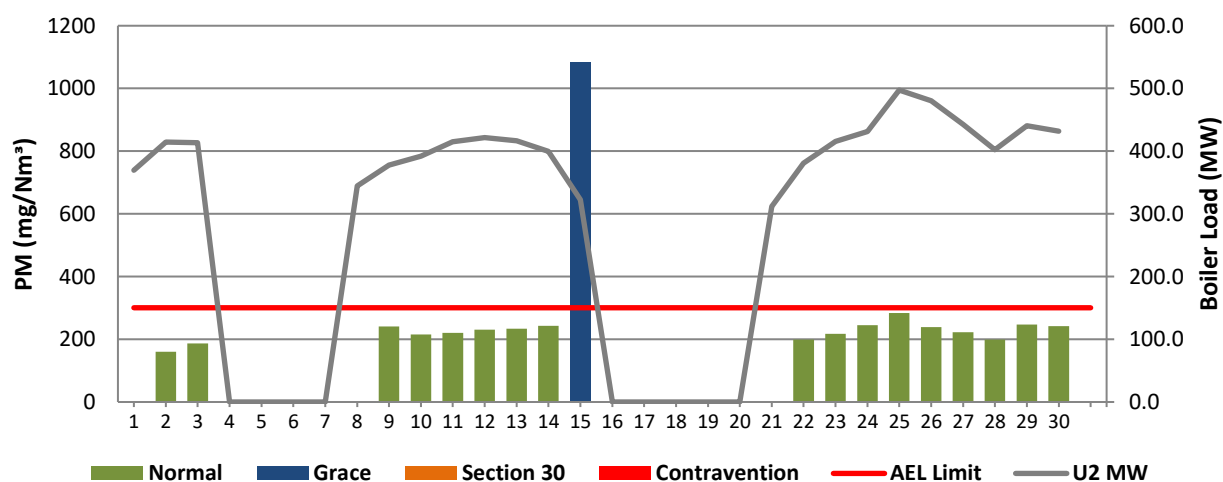


Figure 2: Tutuka Unit 2 PM Emissions - September 2025



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Figure 3: Tutuka Unit 3 PM Emissions - September 2025

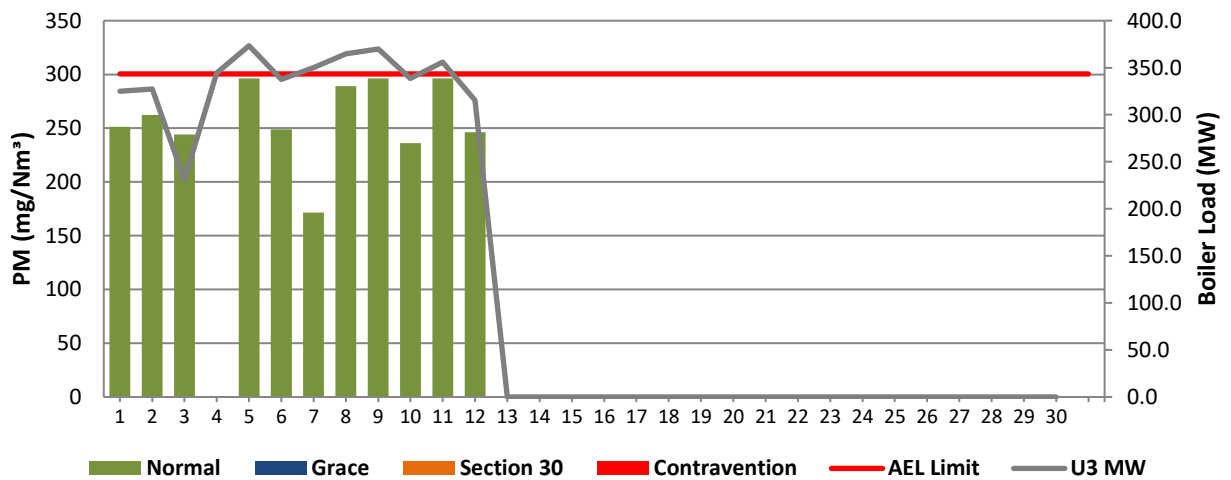
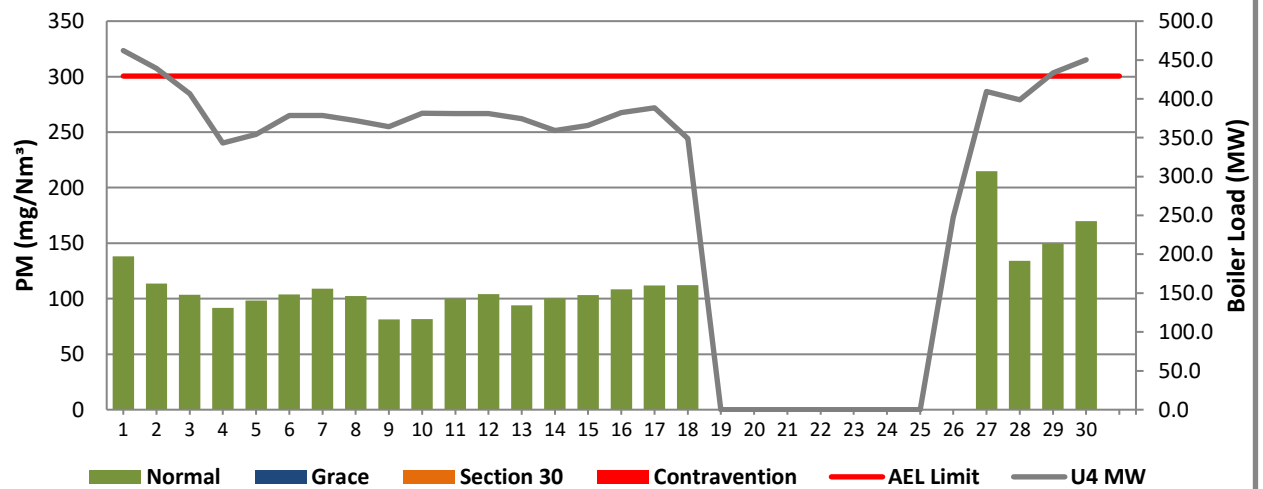


Figure 4: Tutuka Unit 4 PM Emissions - September 2025



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Figure 5: Tutuka Unit 5 PM Emissions - September 2025

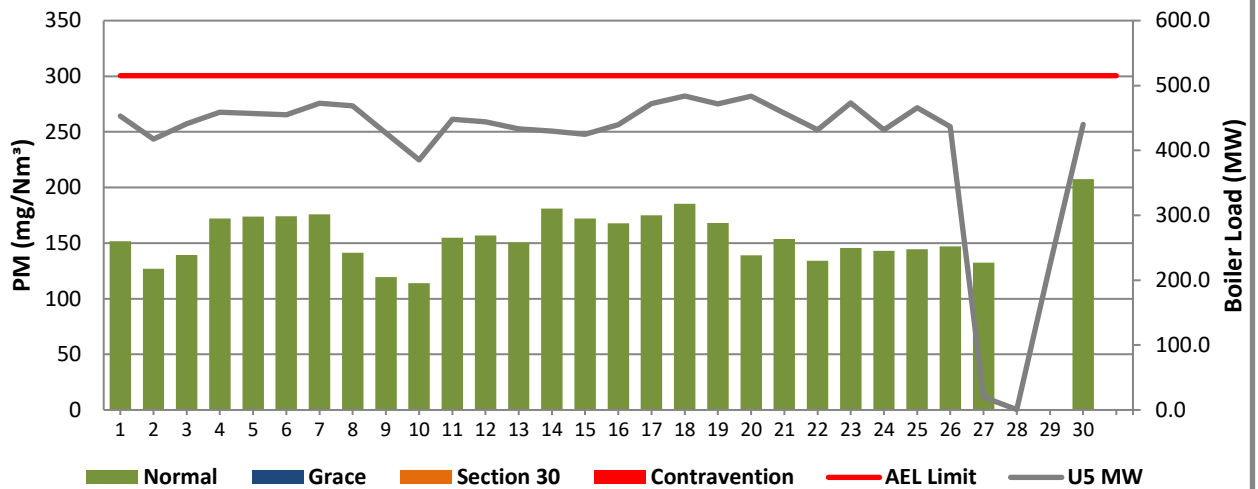


Figure 6: Tutuka Unit 6 PM Emissions - September 2025

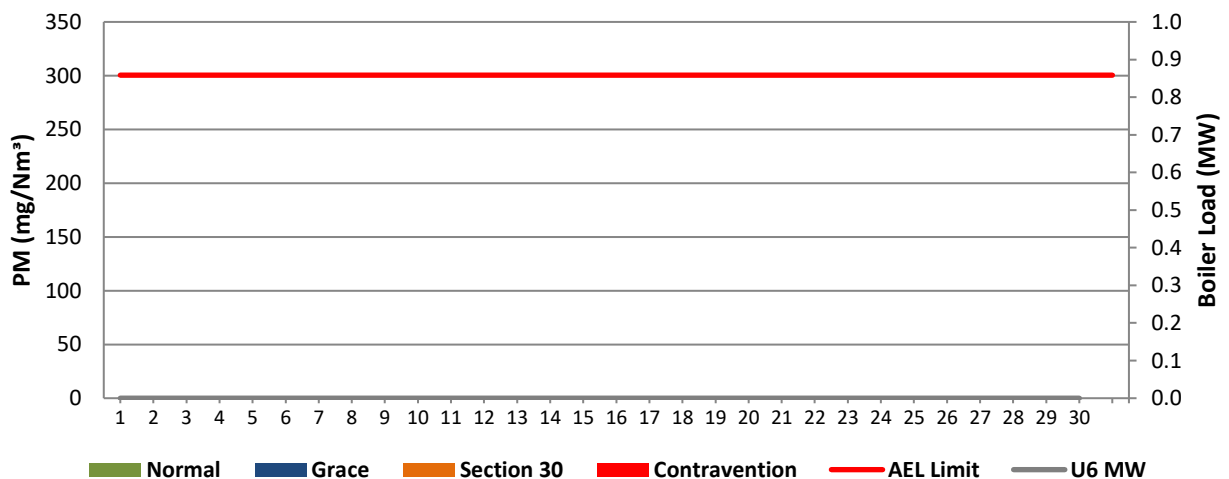
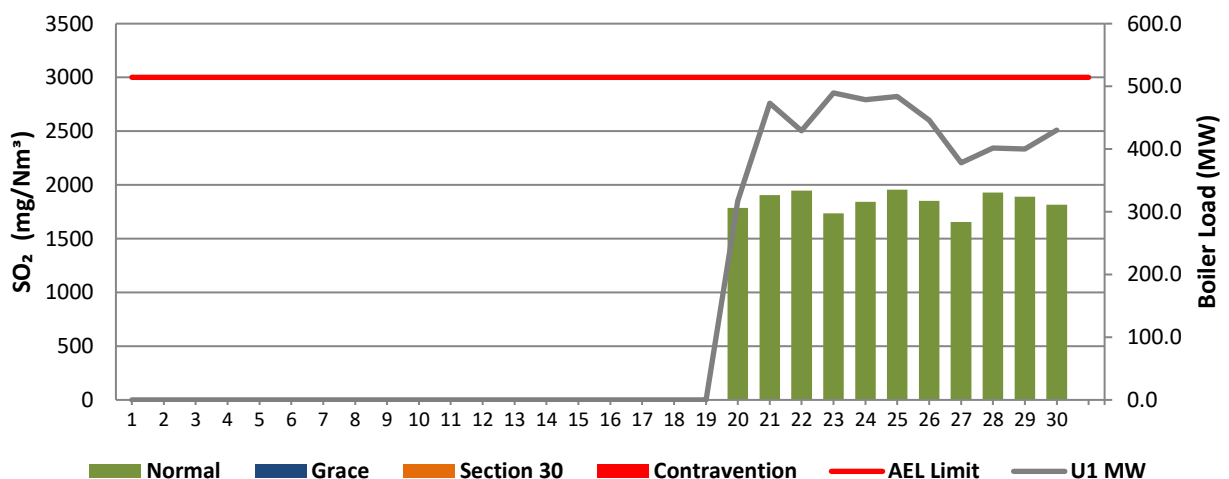


Figure 7: Tutuka Unit 1 SO₂ Emissions - September 2025



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Figure 8: Tutuka Unit 2 SO₂ Emissions - September 2025

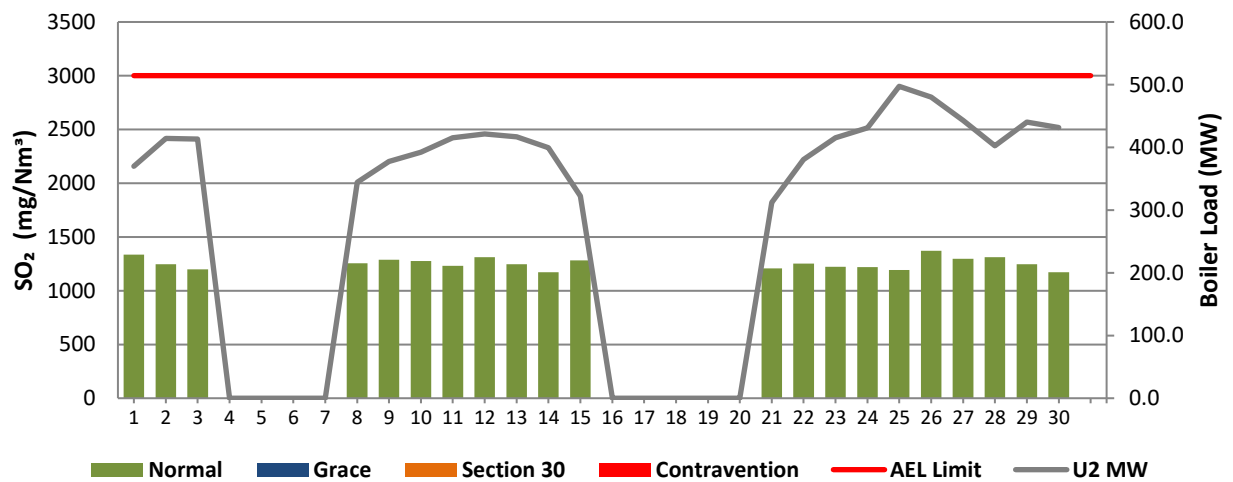


Figure 9: Tutuka Unit 3 SO₂ Emissions - September 2025

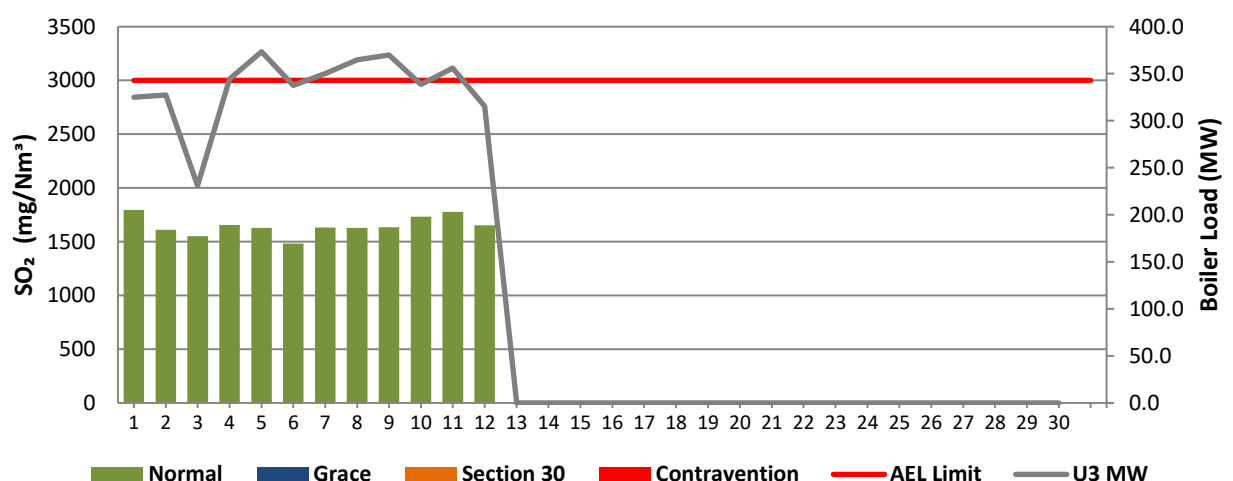
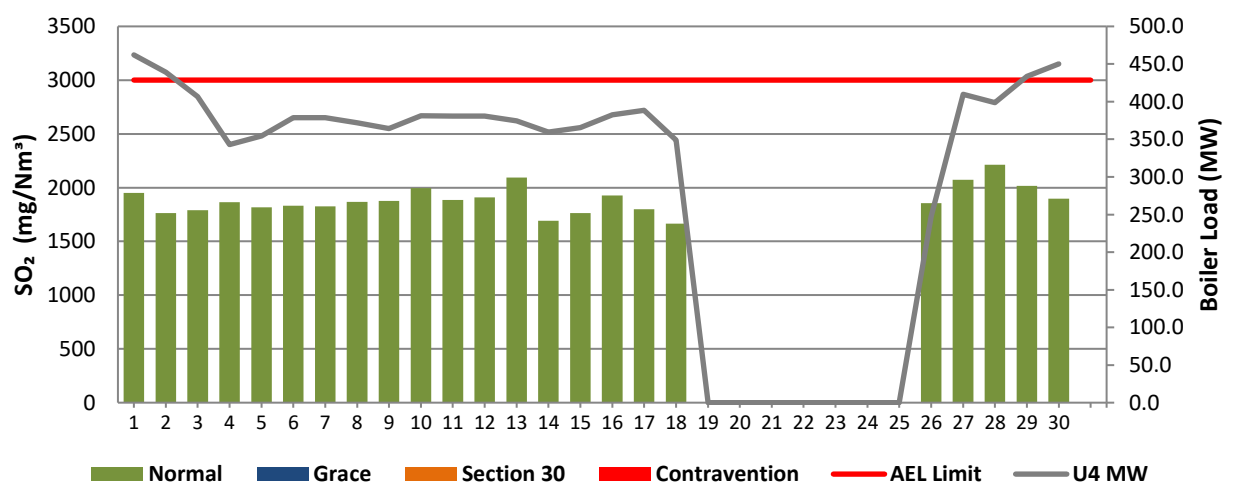


Figure 10: Tutuka Unit 4 SO₂ Emissions - September 2025



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Figure 11: Tutuka Unit 5 SO₂ Emissions - September 2025

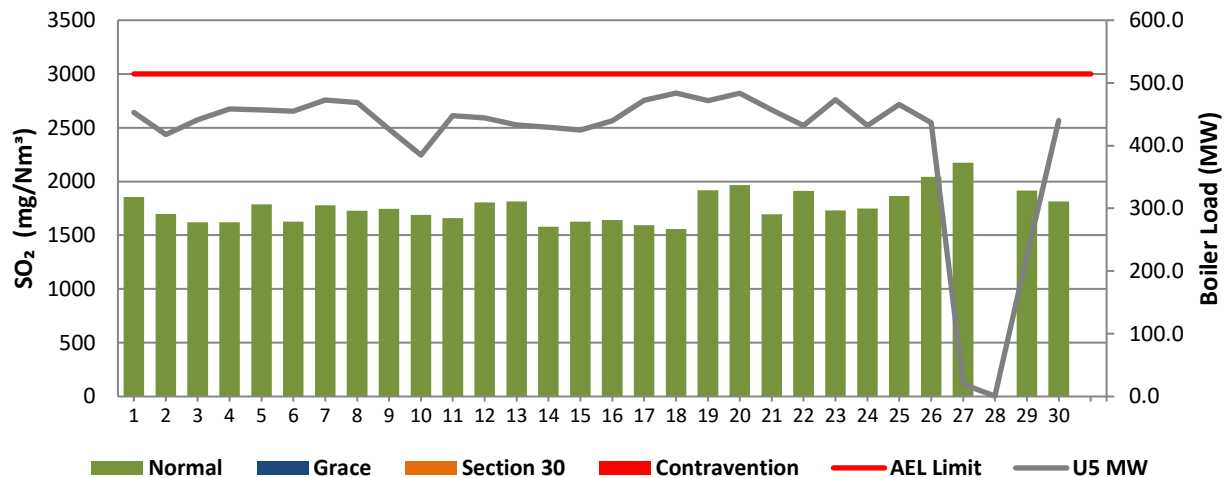


Figure 12: Tutuka Unit 6 SO₂ Emissions - September 2025

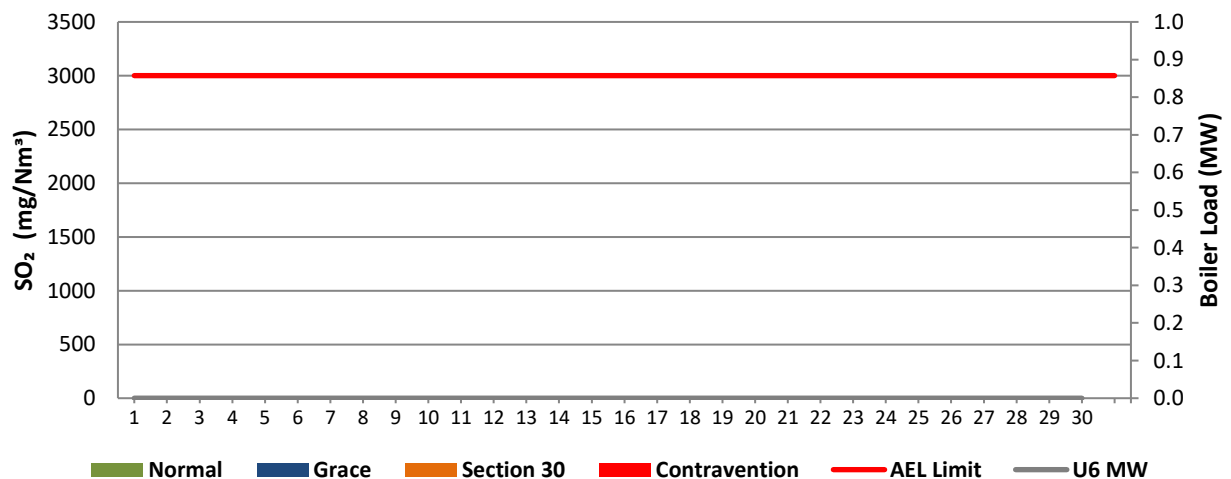
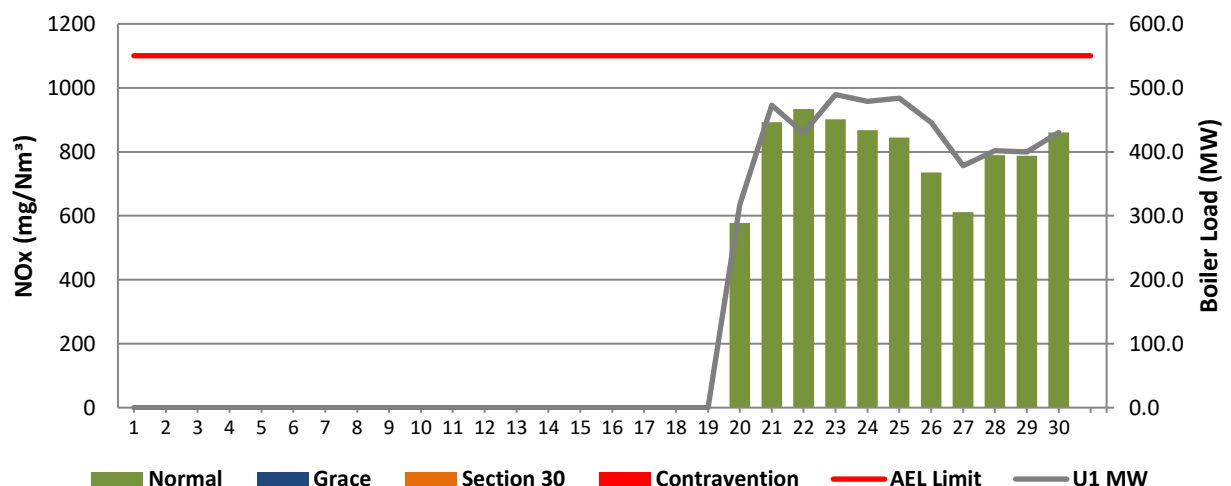


Figure 13: Tutuka Unit 1 NO_x Emissions - September 2025



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Figure 14: Tutuka Unit 2 NO_x Emissions - September 2025

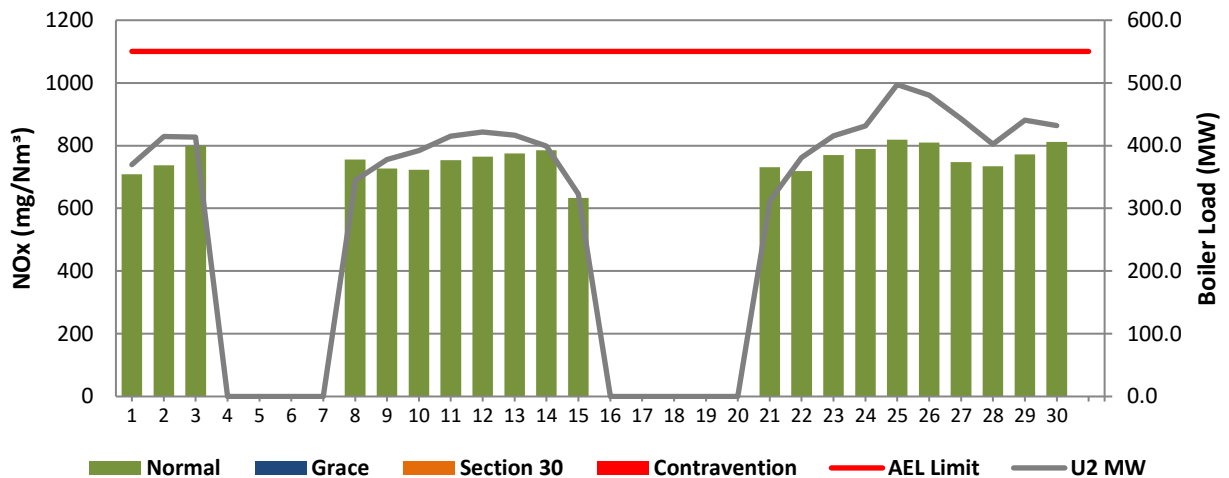


Figure 15: Tutuka Unit 3 NO_x Emissions - September 2025

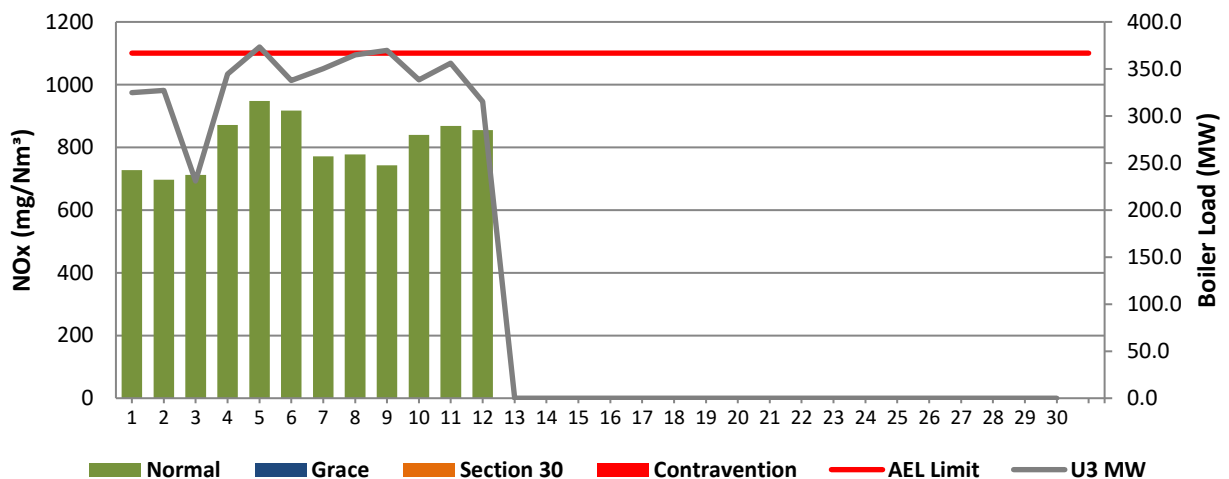
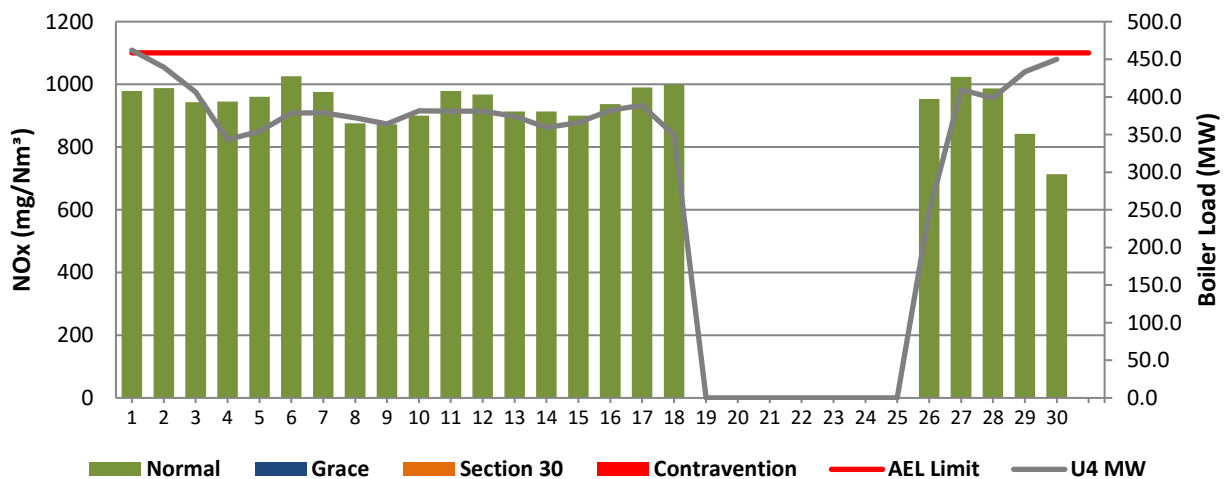


Figure 16: Tutuka Unit 4 NO_x Emissions - September 2025



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Figure 17: Tutuka Unit 5 NO_x Emissions - September 2025

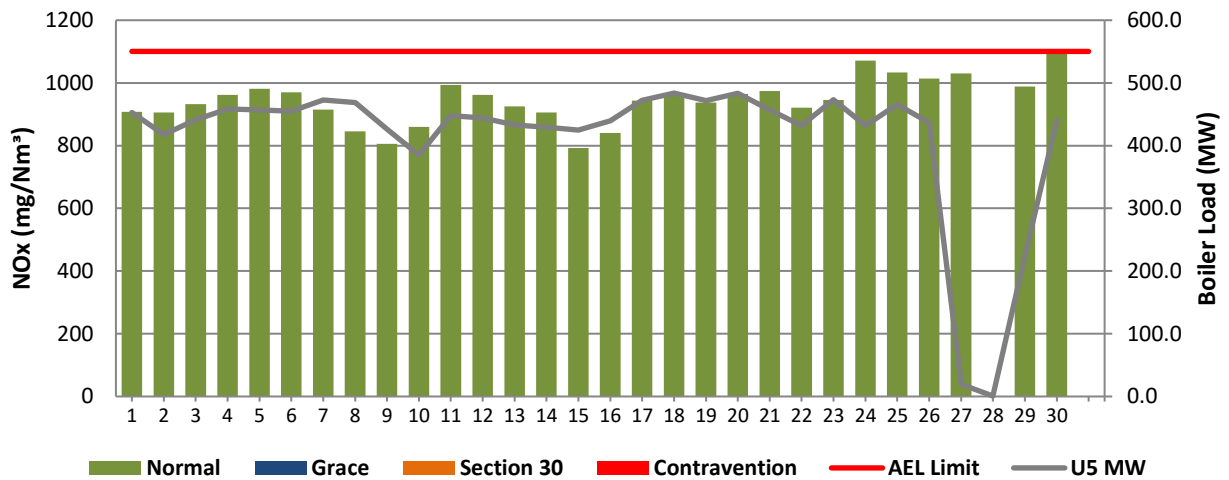
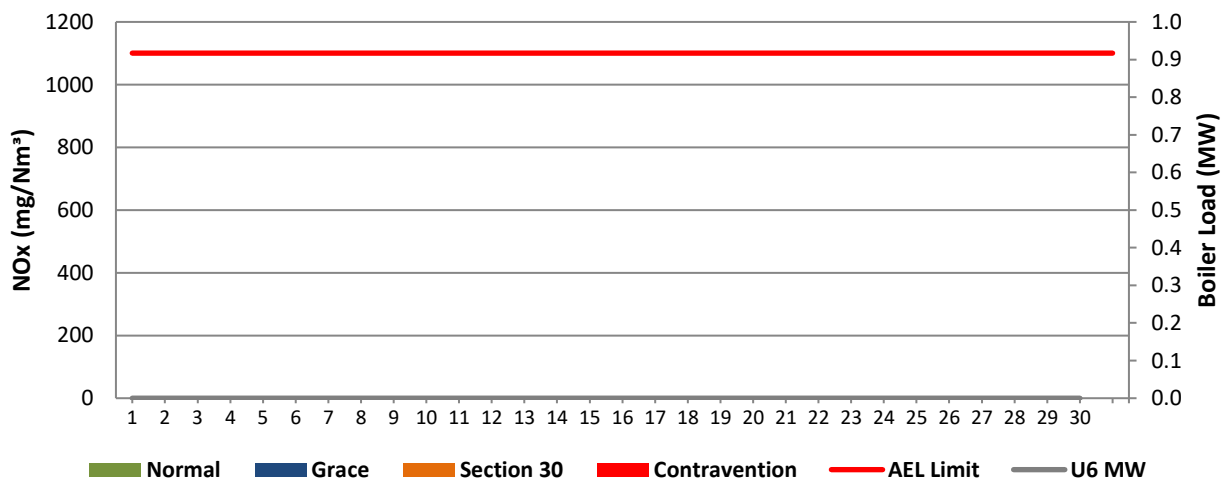


Figure 18: Tutuka Unit 6 NO_x Emissions - September 2025



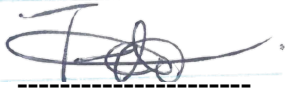
7. COMPLAINTS REGISTER

Source Code/Name	Root Cause Analysis	Calculation of Impacts/emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent recurrence	Date by which measure will be implemented
No complaints were received for the month of September 2025.					

Yours Sincerely

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Compiled by:



Rotondwa Mukhwa

SENIOR ENVIRONMENTAL ADVISOR

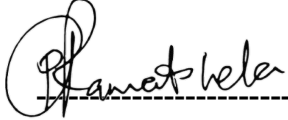
Verified by:



Lameck Nyakane

RISK & ASSURANCE MANAGER

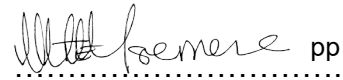
Supported by:



Mmakwena Ramatshela

BOILER ENGINEER

Approved by:

 pp

Bruce Moyo 18/10/2025

GENERAL MANAGER