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Date: 14 August 2025

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Dear Ms Mthembu

TUTUKA POWER STATION MONTHLY REPORT FOR JULY 2025

This serves as the monthly report required in terms of Section 7.4 of Tutuka Power Station's Atmospheric Emission License (16/4/Lekwa/Eskom H SOC Ltd TPS/0013/2019/f03). The report includes verified emissions for Particulate Matters, Sulphur, and Nitrogen dioxides for the month of July 2025.

The report presents monthly trends for each monitored pollutant. The Station had 3-units onload for the month of July 2025, units 1, 2 and 5. Unit 3 and 4 were available for 7 and 5days, respectively. Unit 6 was offload. The Station had one PM exceedance beyond the 48 - hour grace period, incurred on the 7th of July 2025.

1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Max. Permitted	Actual Consumption July-2025
	Coal	Tons	1 200 000	416 729
	Fuel Oil	Tons	10 000	5727.89
Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Indicative Production Rate July-2025
	Energy	GWh	2 611	778.4
	Ash	Tons	350 000	95 889
	RE Ash	kg/MWh	not specified	1.00

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



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2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristics	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	16-24	21.800
Sulphur Content	%	0.6 TO 2.6	1.140
Ash Content	%	21 TO 33	23.010

3 EMISSION LIMITS (mg/Nm³)

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

4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	Efficiency July-2025
Unit 1	Electrostatic Precipitators (ESP)	99.6%
Unit 2	Electrostatic Precipitators (ESP)	99.4%
Unit 3	Electrostatic Precipitators (ESP)	98.1%
Unit 4	Electrostatic Precipitators (ESP)	Unit Off
Unit 5	Electrostatic Precipitators (ESP)	98.5%
Unit 6	Electrostatic Precipitators (ESP)	Unit Off

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

5 MONITOR RELIABILITY (%)

Associated Unit/Stack	PM	SO ₂	NO
Unit 1	100.0	99.4	99.1
Unit 2	100.0	99.2	96.6
Unit 3	100.0	85.9	98.1
Unit 4	Off	100.0	97.0
Unit 5	100.0	99.0	98.8
Unit 6	Off	Off	Off

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6 EMISSION PERFORMANCE

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

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	123.4	2 516	589
Unit 2	128.9	793	441
Unit 3	154.7	1 136	496
Unit 4	Off	0	0
Unit 5	357.5	3 421	1 769
Unit 6	Off	Off	Off
SUM	764.5	7 866	3 296

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
Unit 1	26	0	0	0	0	98.3
Unit 2	21	1	0	0	1	222.4
Unit 3	3	3	0	1	4	298.5
Unit 4	Off	Off	Off	Off	Off	Exempt
Unit 5	24	0	0	0	0	195.0
Unit 6	Off	Off	Off	Off	Off	Off
SUM	74	4	0	1	5	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm ³)
Unit 1	28	0	0	0	0	2 002.5
Unit 2	28	0	0	0	0	1 283.7
Unit 3	8	0	0	0	0	2 122.6
Unit 4	5	0	0	0	0	2 373.9
Unit 5	25	0	0	0	0	1 889.4
Unit 6	Off	Off	Off	Off	Off	Off
SUM	94	0	0	0	0	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm ³)
Unit 1	28	0	0	0	0	474.9
Unit 2	28	0	0	0	0	715.2
Unit 3	7	0	0	1	1	923.1
Unit 4	4	0	0	1	1	882.3
Unit 5	17	0	0	8	8	971.7
Unit 6	Off	Off	Off	Off	Off	Off
SUM	84	0	0	10	10	

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

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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 - July 2025

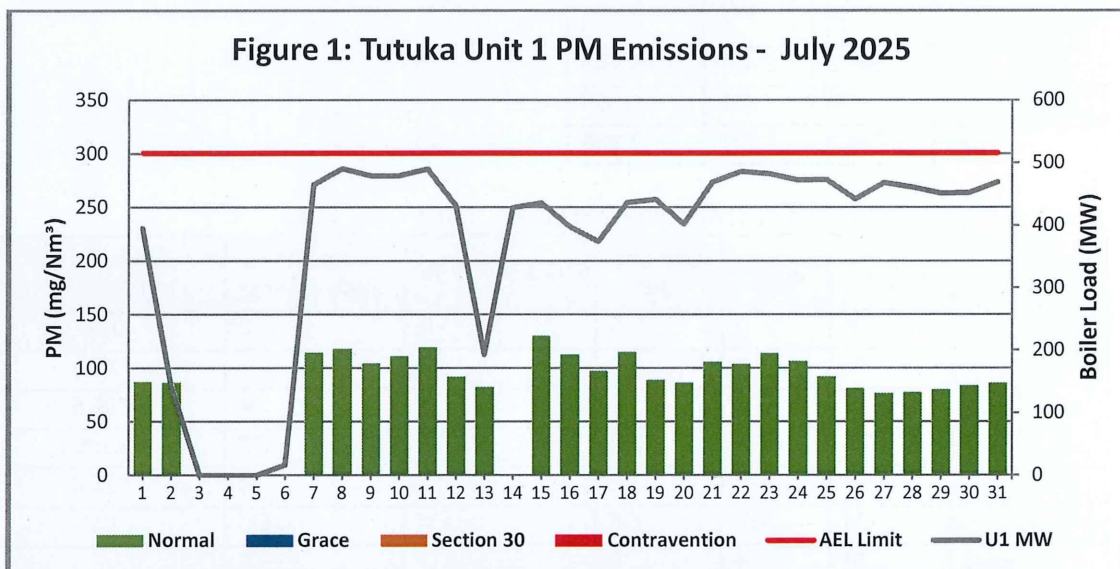
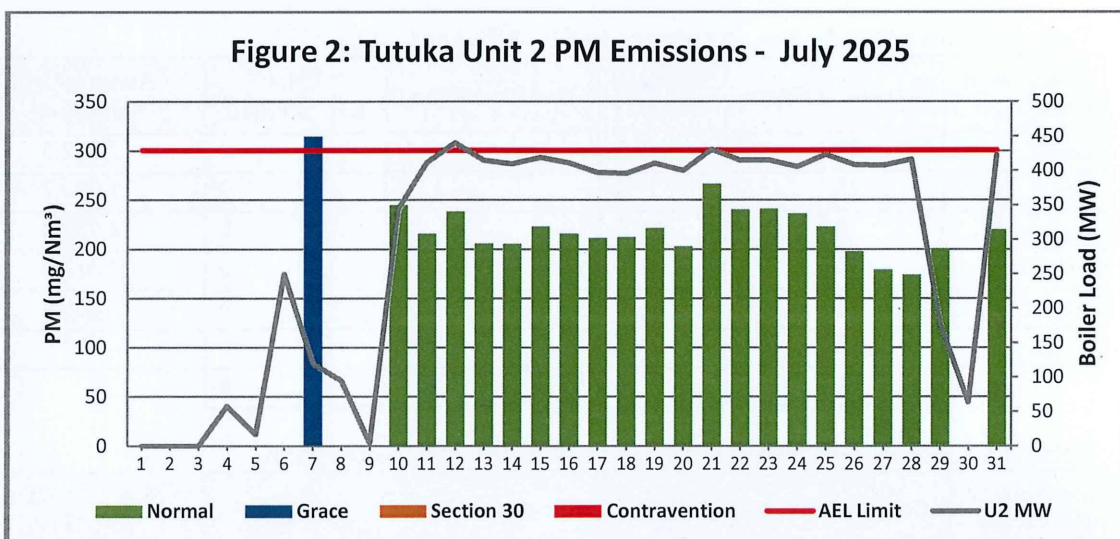


Figure 2: Tutuka Unit 2 PM Emissions - July 2025



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Figure 3: Tutuka Unit 3 PM Emissions - July 2025

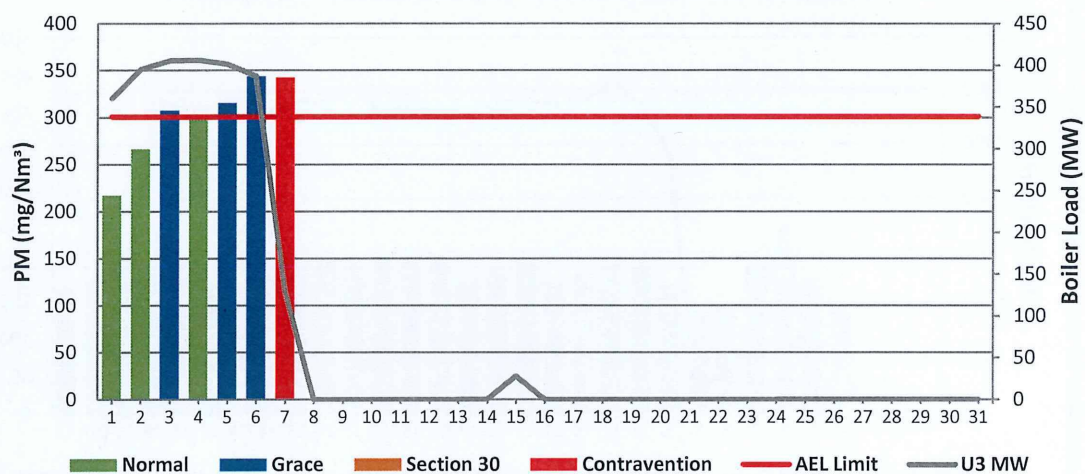


Figure 5: Tutuka Unit 5 PM Emissions - July 2025

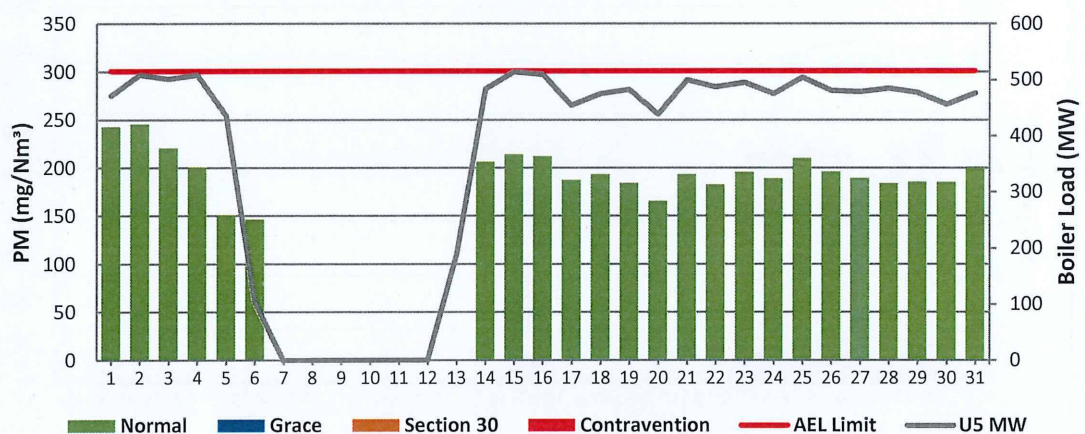
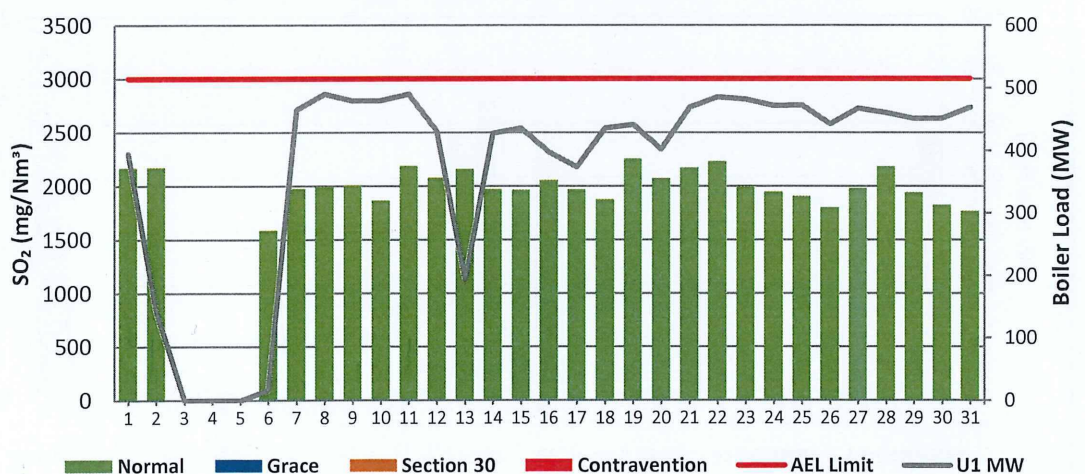


Figure 7: Tutuka Unit 1 SO₂ Emissions - July 2025



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Figure 8: Tutuka Unit 2 SO₂ Emissions - July 2025

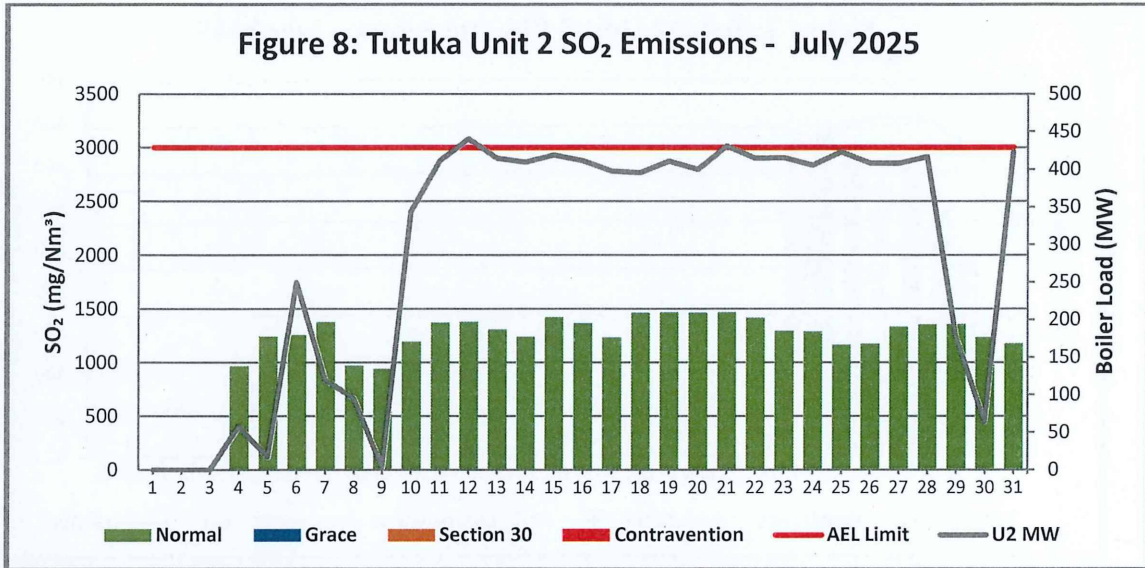


Figure 9: Tutuka Unit 3 SO₂ Emissions - July 2025

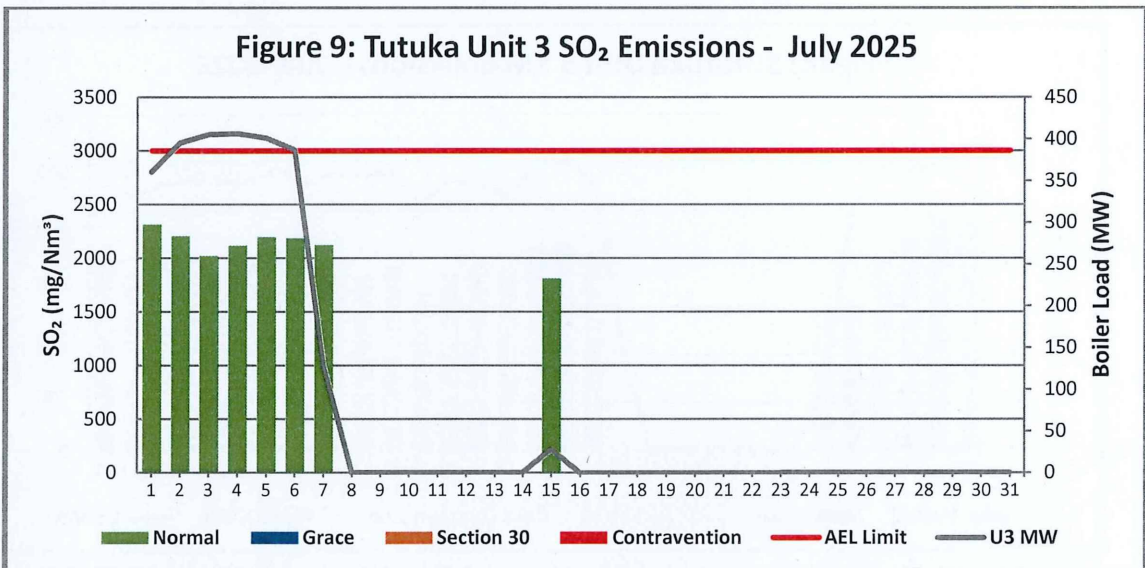
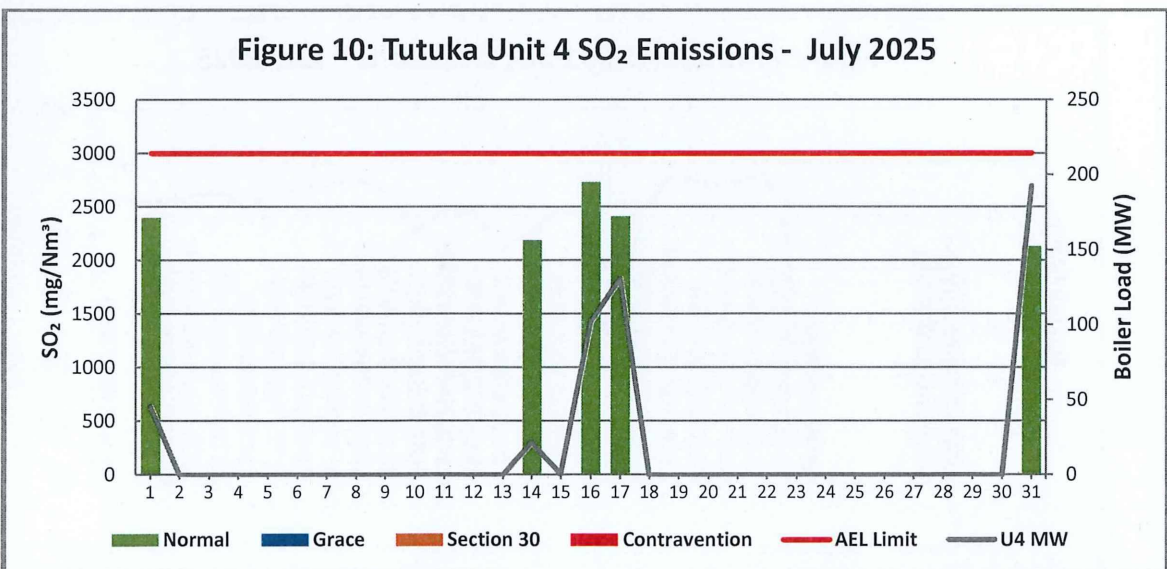


Figure 10: Tutuka Unit 4 SO₂ Emissions - July 2025



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Figure 11: Tutuka Unit 5 SO₂ Emissions - July 2025

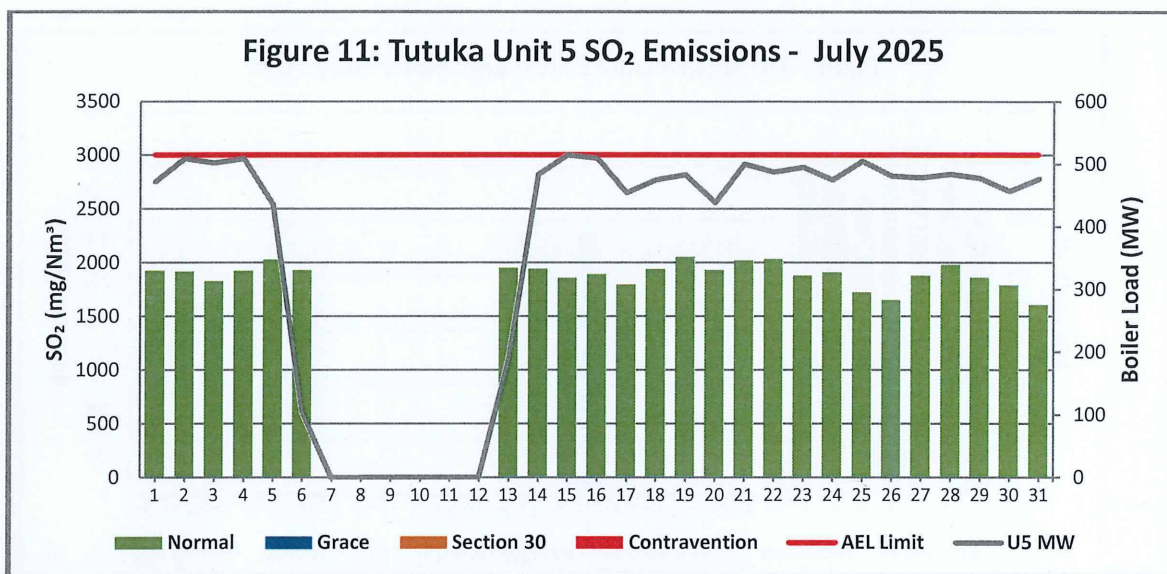


Figure 13: Tutuka Unit 1 NO_x Emissions - July 2025

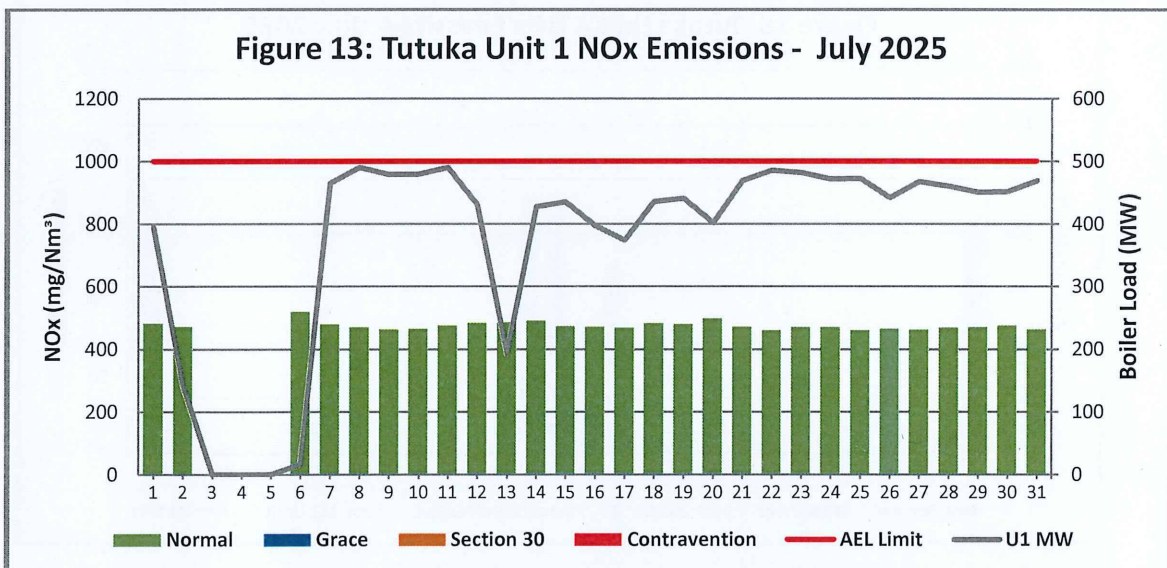
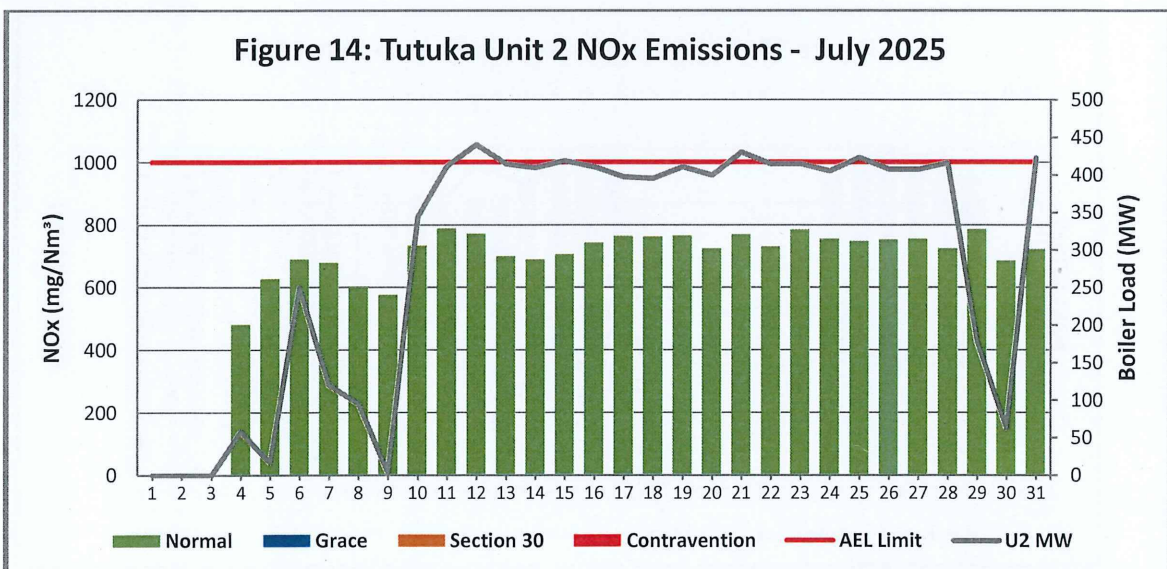


Figure 14: Tutuka Unit 2 NO_x Emissions - July 2025



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Figure 15: Tutuka Unit 3 NOx Emissions- July 2025

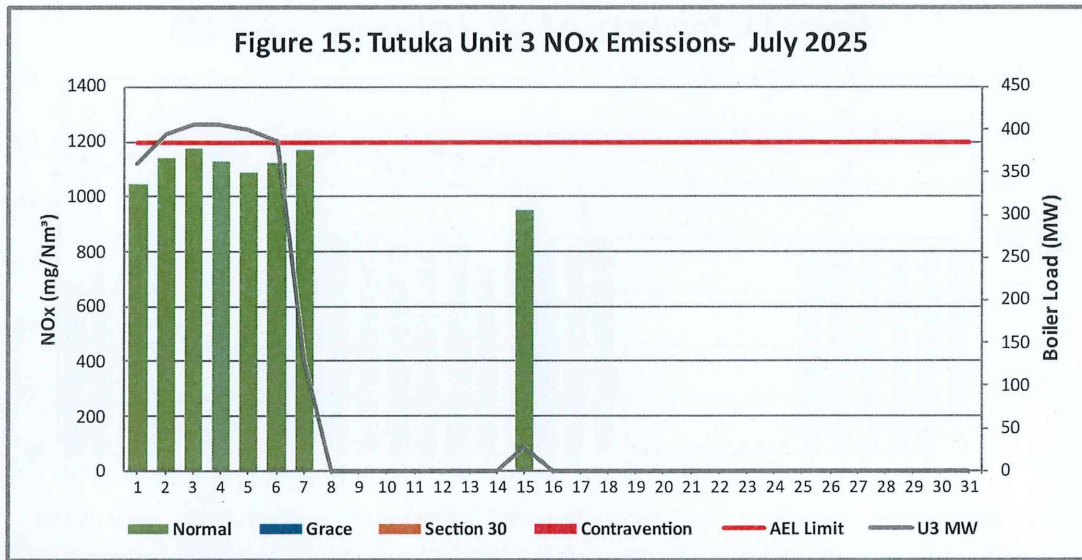


Figure 16: Tutuka Unit 4 NOx Emissions- July 2025

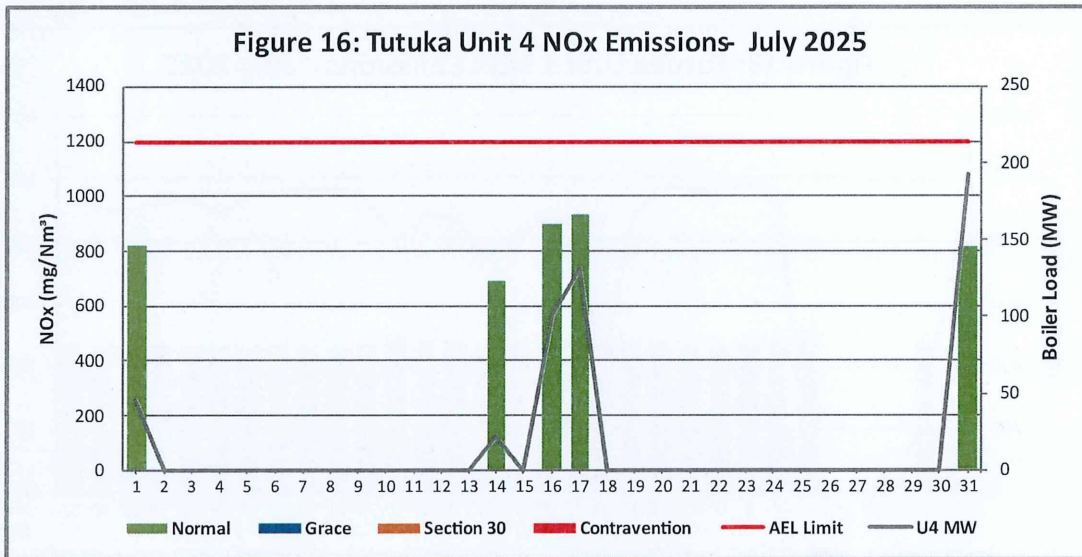
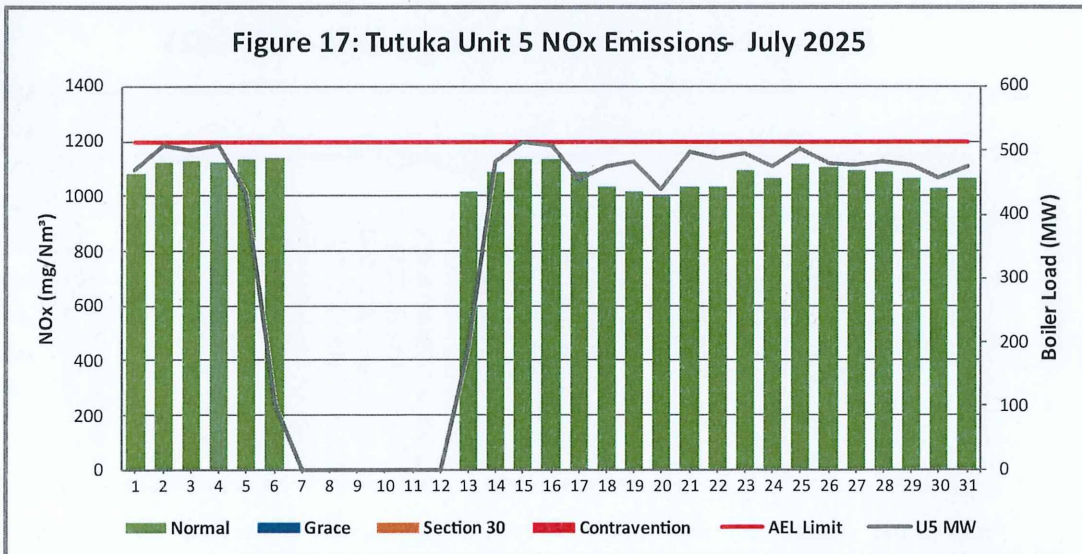


Figure 17: Tutuka Unit 5 NOx Emissions- July 2025



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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 July 2025.					

Yours Sincerely

Compiled by:

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Tshifhiwa Muswubi

ENVIRONMENTAL OFFICER

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