



The Municipal Manager
Gert Sibande District Municipality
PO Box 1748
ERMELO
2350

E-mail: records@gsibande.gov.za
Email: BulelwaS@gsibande.gov.za

Date: 16 July 2025

Enquiries: X. Jila

Tel +27 17 749 5100

Dear Ms Mthembu

TUTUKA POWER STATION MONTHLY REPORT FOR JUNE 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 June 2025

The report presents monthly trends for each monitored pollutant. The Station had 3-units onload for the month of June 2025, units 3, 4 and 5. Unit 1 was available for 4 days, Unit 2 and 6 were offload.

The Station exceeded the PM limit beyond 48-hour grace period allowed for start-up, upset conditions and shut down on the 14th of June. The exceedance was due the ESP inefficiency caused by the internal structural damages discovered in the ESP internals

1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Max. Permitted	Actual Consumption June-2025
	Coal	Tons	1 200 000	435 464
	Fuel Oil	Tons	10 000	4652.56
Production Rates	Product / By-Product Name	Units	Max. Production Capacity Permitted	Indicative Production Rate May-2025
	Energy	GWh	2 611	729.1
	Ash	Tons	350 000	110 303
	RE Ash	kg/MWh	not specified	1.55

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

Generation
Tutuka Power Station
Standerton/Bethal Road
Private Bag X2016 Standerton 2430 SA
Tel +27 17 749 9237 www.eskom.co.za
Eskom Holdings SOC Ltd Reg No 2002/015527/30

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2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristics	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	16-24	22.280
Sulphur Content	%	0.6 - 2.6	1.100
Ash Content	%	21 - 33	25.330

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 June-2025
Unit 1	Electrostatic Precipitators (ESP)	99.5%
Unit 2	Electrostatic Precipitators (ESP)	Unit Off
Unit 3	Electrostatic Precipitators (ESP)	#REF!
Unit 4	Electrostatic Precipitators (ESP)	99.4%
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	100.0	100.0
Unit 2	Off	Off	Off
Unit 3	99.4	94.7	79.6
Unit 4	100.0	99.4	99.4
Unit 5	92.1	98.8	98.6
Unit 6	Off	Off	Off

PM, Sox and Nox (units 2 and 6 monitor reliability was off)

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6 EMISSION PERFORMANCE

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

Associated Unit/Stack	PM (tons)	SO ₂ (tons)	NO _x (tons)
Unit 1	25.6	324	102
Unit 2	Off	Off	Off
Unit 3	615.5	4 953	1 932
Unit 4	210.4	3 284	1 429
Unit 5	300.3	2 589	1 248
Unit 6	Off	Off	Off
SUM	1 151.9	11 151	4 711

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average PM (mg/Nm ³)
Unit 1	4	0	0	0	0	224.7
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	22	5	1	1	6	295.3
Unit 4	29	0	0	0	0	135.5
Unit 5	18	1	0	0	1	190.6
Unit 6	Off	Off	Off	Off	Off	Off
SUM	73	6	1	1	7	

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SO ₂ (mg/Nm ³)
Unit 1	6	0	0	0	0	1 610.0
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	29	0	0	0	0	2 164.8
Unit 4	30	0	0	0	0	2 085.6
Unit 5	22	0	0	0	0	1 912.7
Unit 6	Off	Off	Off	Off	Off	Off
SUM	87	0	0	0	0	

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

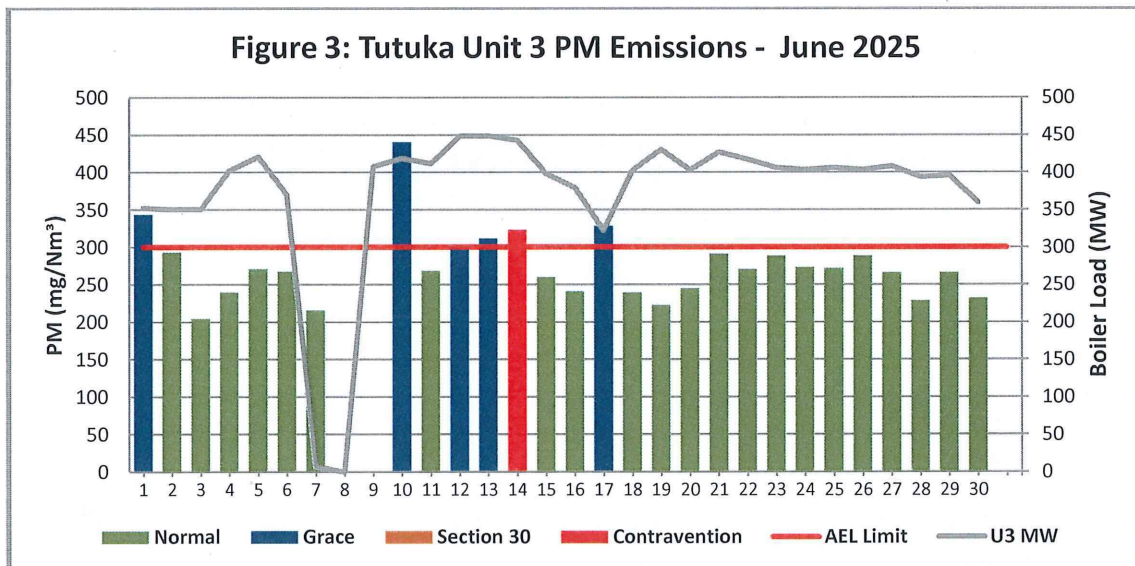
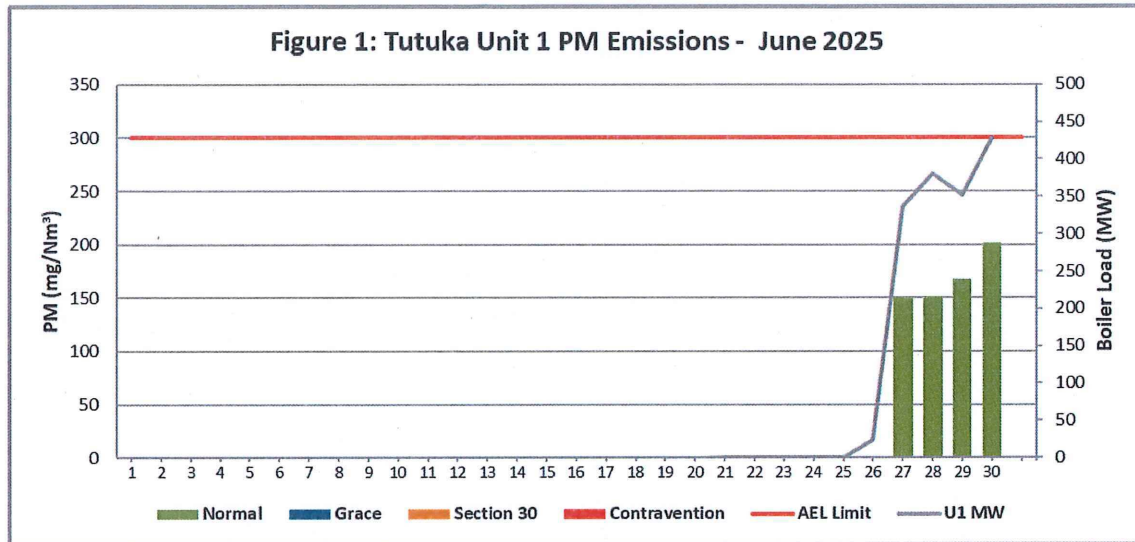
Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NO _x (mg/Nm ³)
Unit 1	6	0	0	0	0	636.1
Unit 2	Off	Off	Off	Off	Off	Off
Unit 3	29	0	0	0	0	856.9
Unit 4	30	0	0	0	0	903.3
Unit 5	22	0	0	0	0	905.7
Unit 6	Off	Off	Off	Off	Off	Off
SUM	87	0	0	0	0	

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

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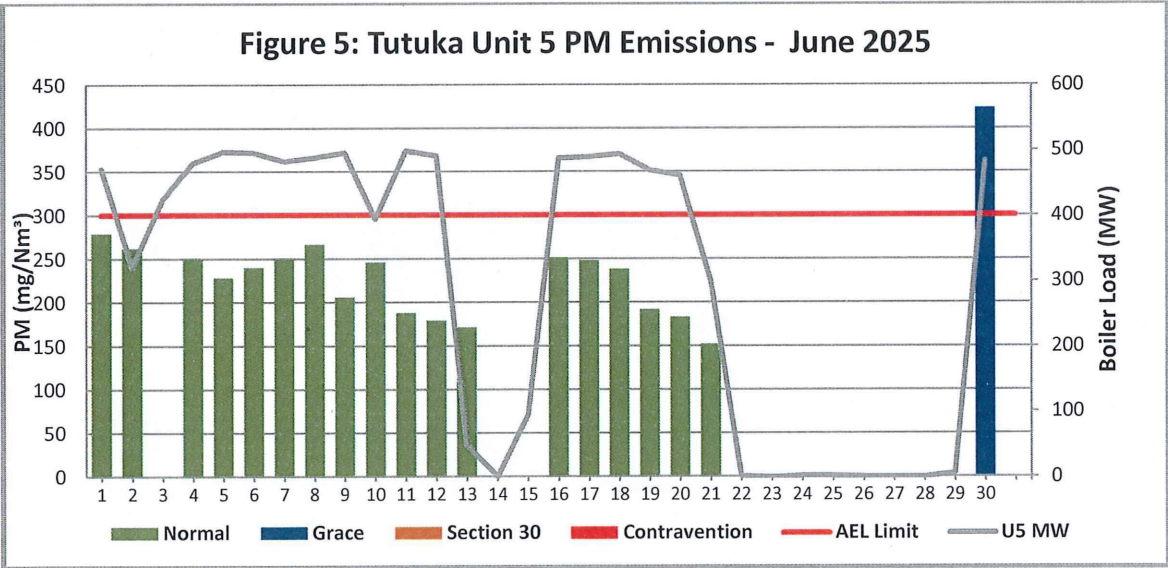
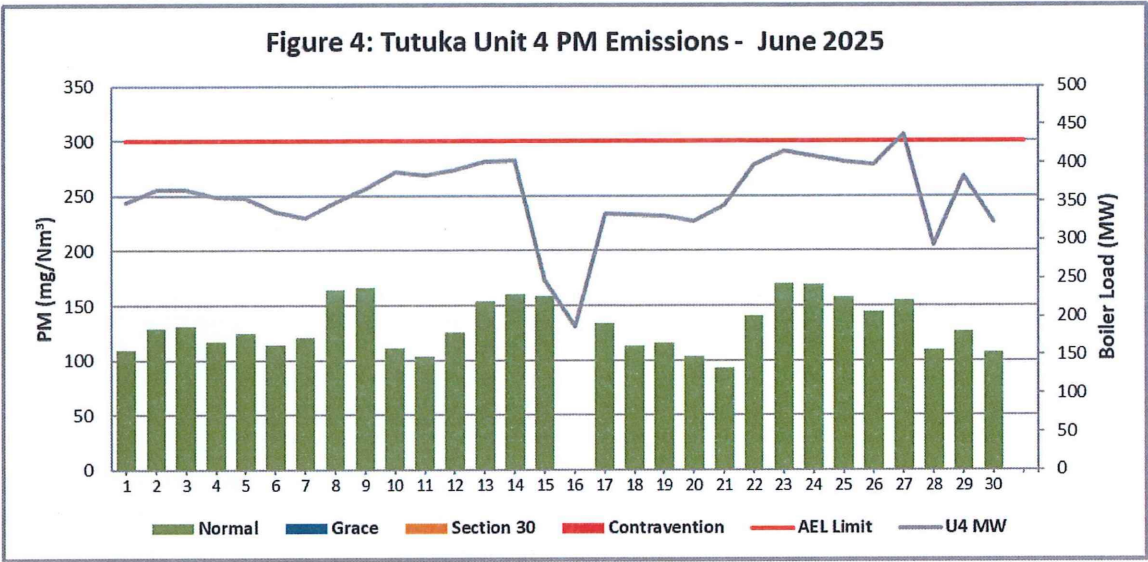
Table 6.5: Legend
Description

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



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Figure 7: Tutuka Unit 1 SO₂ Emissions - June 2025

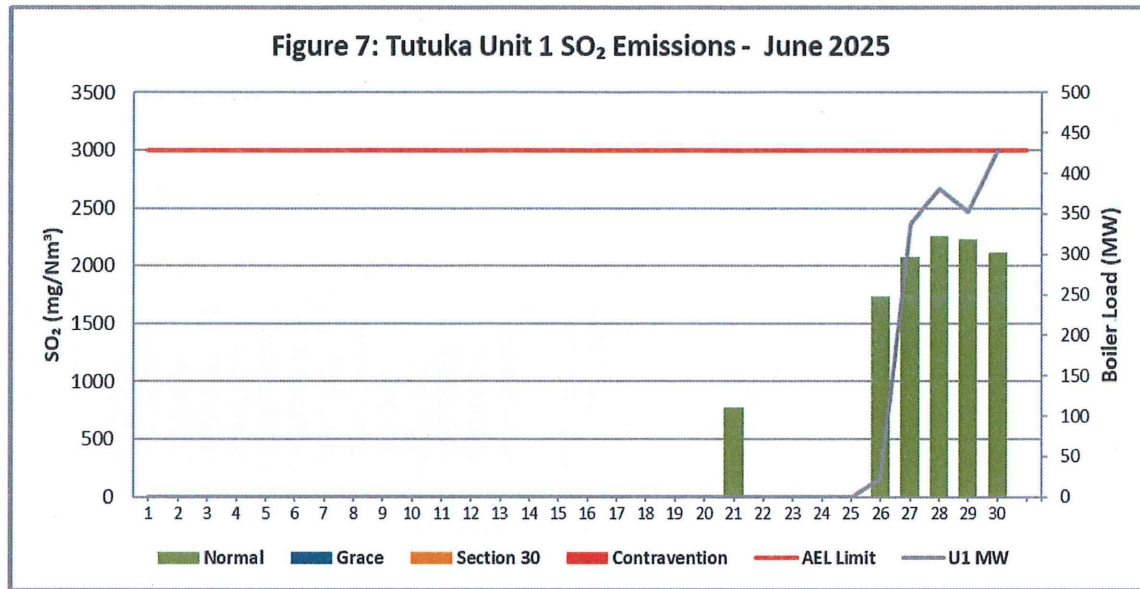
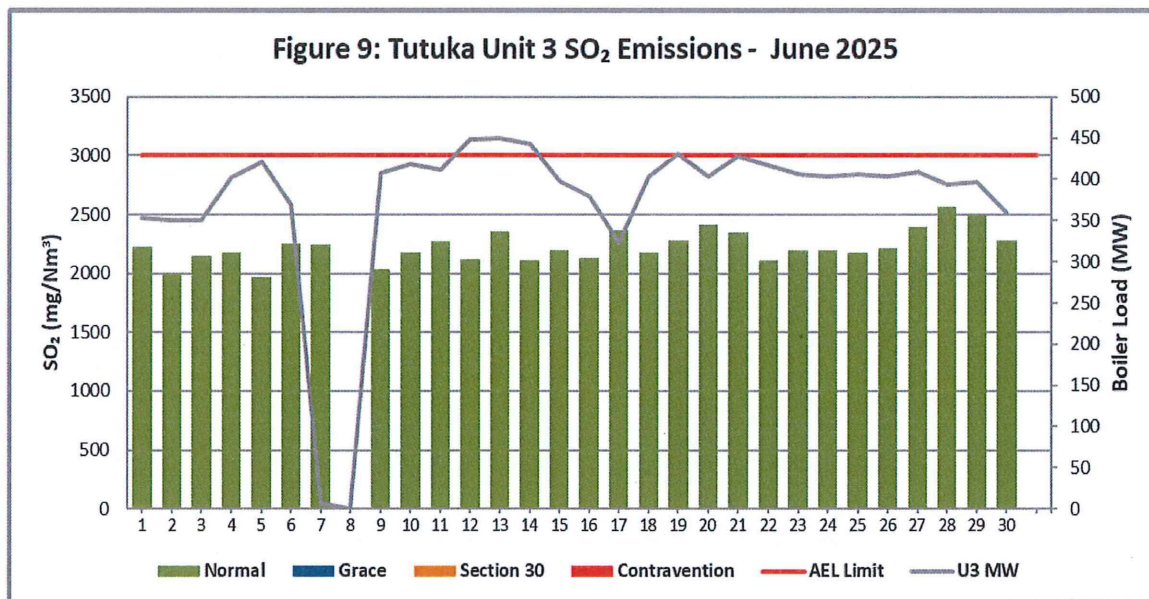


Figure 9: Tutuka Unit 3 SO₂ Emissions - June 2025



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Figure 10: Tutuka Unit 4 SO₂ Emissions - June 2025

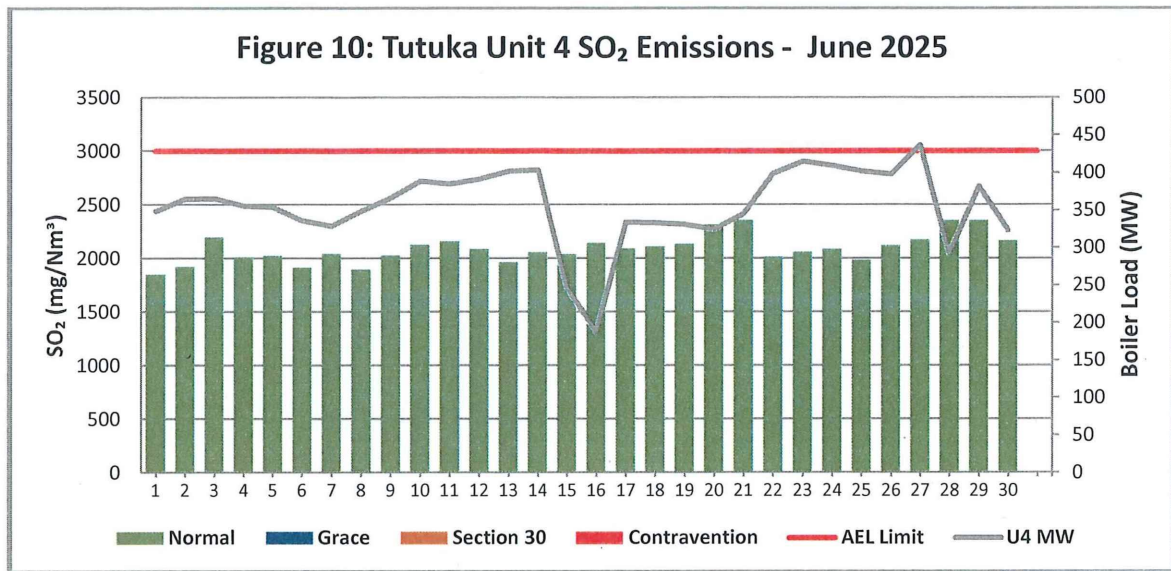


Figure 11: Tutuka Unit 5 SO₂ Emissions - June 2025

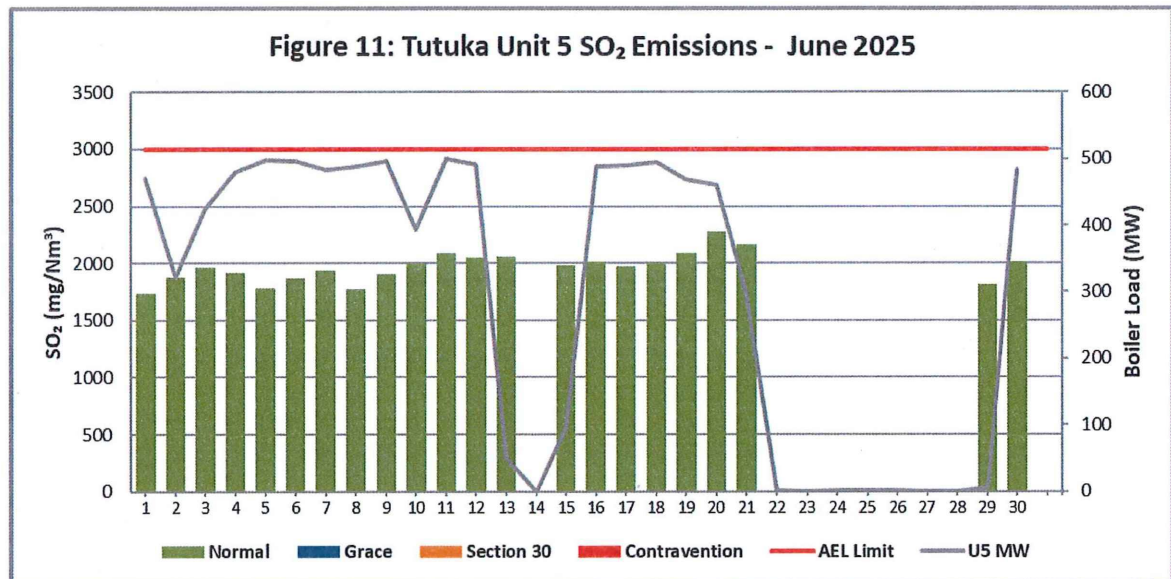
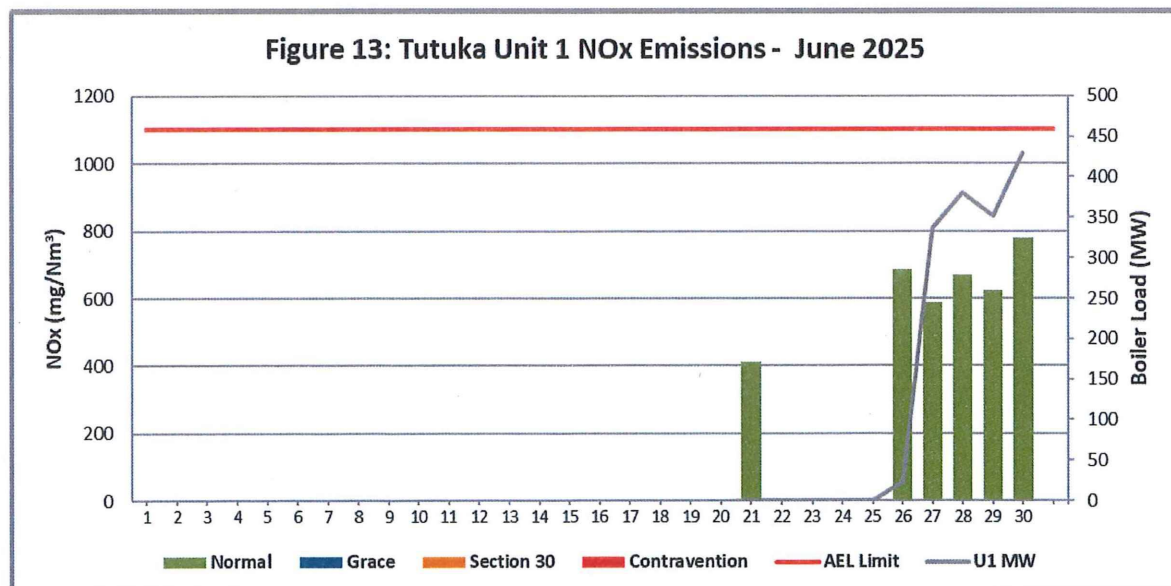


Figure 13: Tutuka Unit 1 NO_x Emissions - June 2025



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Figure 15: Tutuka Unit 3 NOx Emissions - June 2025

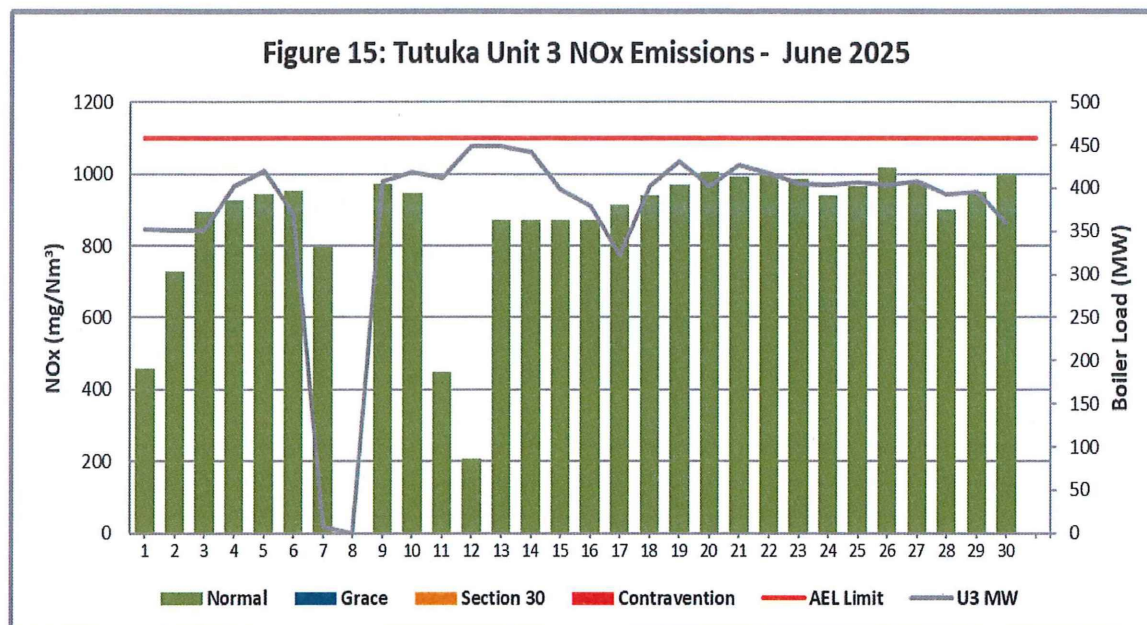
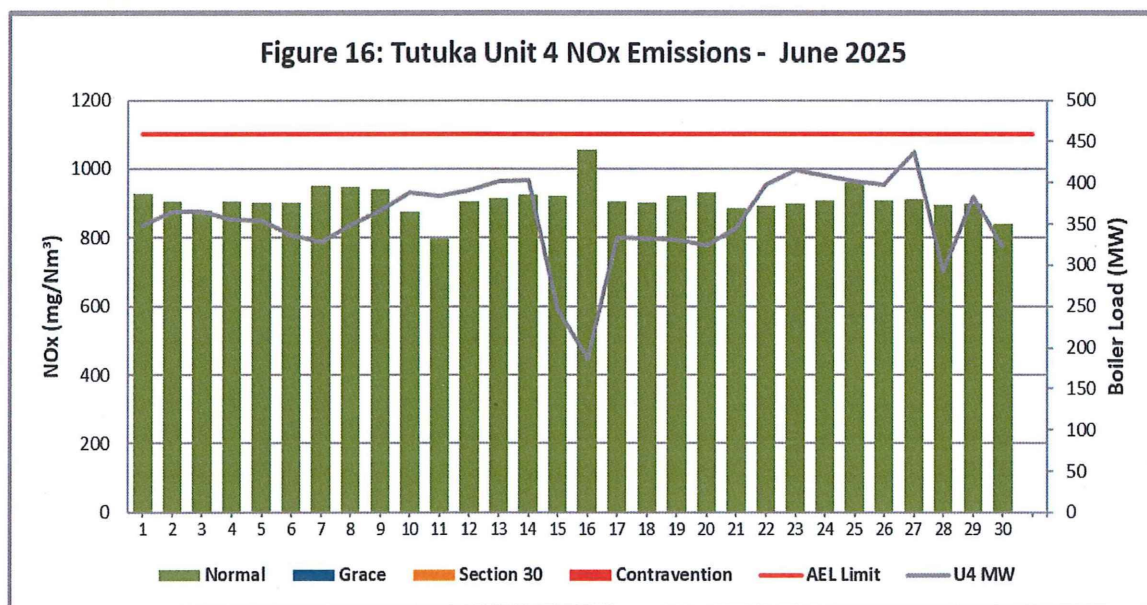
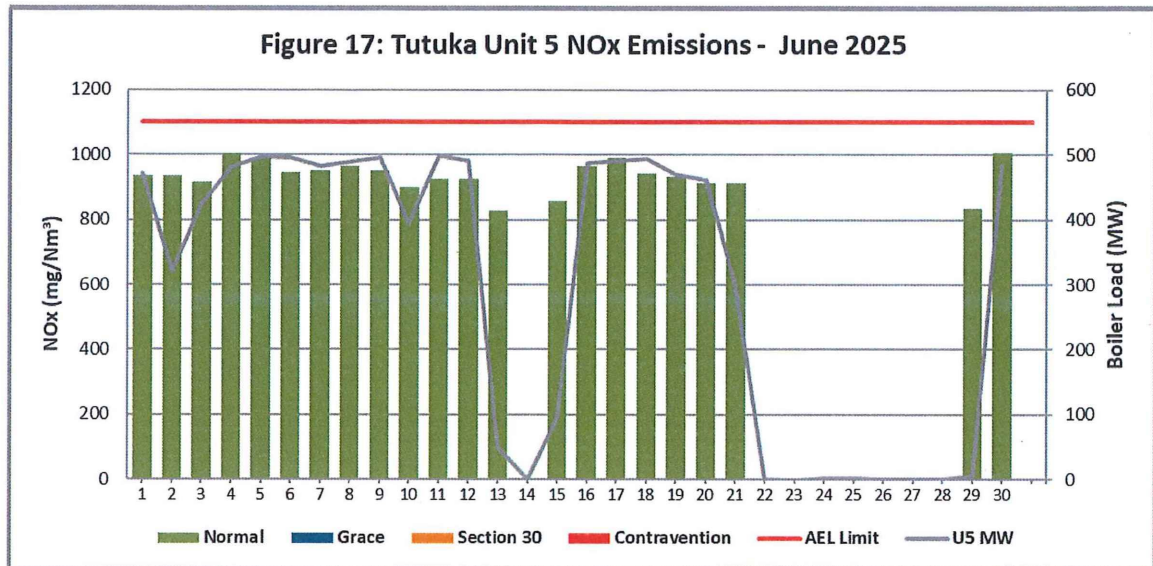


Figure 16: Tutuka Unit 4 NOx Emissions - June 2025



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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 June 2025.					

Yours Sincerely

Compiled by:

Muswubi

Tshifhiwa Muswubi

ENVIRONMENTAL OFFICER

Verified by:

Xoli Jila

Xoli Jila

ACTING ENVIRONMENTAL MANAGER

Supported by:

Mike Molepo

Mike Molepo

SENIOR CHEMIST

Approved by:

Bruce Moyo

Bruce Moyo

GENERAL MANAGER

2025/07/24