

## HENDRINA POWER STATION MONTHLY EMISSIONS REPORT

Atmospheric Emission License: 17/4/AEL/MP312/11/16



### 1 RAW MATERIALS AND PRODUCTS

Raw Materials and Products	Raw Material Type	Units	Max Permitted Consumption Rate	Consumption Rate Aug-2025
	Coal	Tons	820 000	209 821
	Fuel Oil	Tons	3 200	1747.450

Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate Aug-2025
	Energy	GWh	1400.952	371.596
	Ash	Tons	290 000	46 097.674
	RE Ash	kg/MWh	not specified	0.065

Note: Max energy rate = AEL capacity [1,883MW] × 24 hrs × days in month ÷ 1,000 (to convert to GWh).

### 2 ENERGY SOURCE CHARACTERISTICS

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	18-22 (MJ/kg)	23.200
Sulphur Content	%	0.6 to < 1 (%)	0.590
Ash Content	%	20 to < 35 (%)	21.970

### 3 EMISSION LIMITS (mg/Nm<sup>3</sup>)

Associated Unit/Stack	Daily Limit		
	PM	SO <sub>2</sub>	NO <sub>x</sub>
North	50	3200	1100
South	50	3200	1100

### 4 ABATEMENT TECHNOLOGY (%)

Associated Unit/Stack	Technology Type	FFP Efficiency
North	Fabric Filter Plant (FFP)	100%
South	Fabric Filter Plant (FFP)	100%

Note: The FFP does not have a bypass mode; therefore, it operates at 100% utilization.

### 5 DATA RELIABILITY (%)

Associated Unit/Stack	PM	SO <sub>2</sub>	NO	O <sub>2</sub>
North	99.5	98.3	100.0	98.8
South	99.3	98.3		97.9

Note: NO<sub>x</sub> emissions are measured as NO in PPM. The final NO<sub>x</sub> value is expressed as total NO<sub>2</sub> equivalent.

### 6 EMISSION PERFORMANCE

Table 6.1: Monthly tonnages for August 2025

Associated Unit/Stack	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)
Unit 1	Off	Off	Off
Unit 2	Off	Off	Off
Unit 3	Off	Off	Off
Unit 4	4.3	555	303
Unit 5	12.1	1 275	717
Unit 6	2.2	764	
Unit 7	2.5	1 131	
Unit 8	Off	Off	Off
Unit 9	Off	Off	Off
Unit 10	3.0	1 043	
<b>SUM</b>	<b>23.98</b>	<b>4 769</b>	<b>1 021</b>

South Stack NO<sub>x</sub> Monitor reliability value is not reported because of a suspected error which is still under investigation. This report will be updated with a verified value after the investigation is concluded.

Values for the South Stack NO<sub>x</sub> (Units 6, 7, and 10) will be submitted one the investigation is concluded as indicated on item 5 above.

Table 6 2 PM AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	30	1	0	0	1	21.9
South	31	0	0	0	0	6.0
SUM	61	1	0	0	1	

Table 6 3 SO<sub>2</sub> AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	31	0	0	0	0	2.1405
South	31	0	0	0	0	2.1663
SUM	62	0	0	0	0	

Table 6.4: NO<sub>x</sub> AEL Daily Compliance - August 2025

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	31	0	0	0	0	774.6
South						
SUM	31	0	0	0	0	

South Stack NO<sub>x</sub> readings are suspected of an error and still under investigation.

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: Hendrina North Stack PM Emissions - August 2025

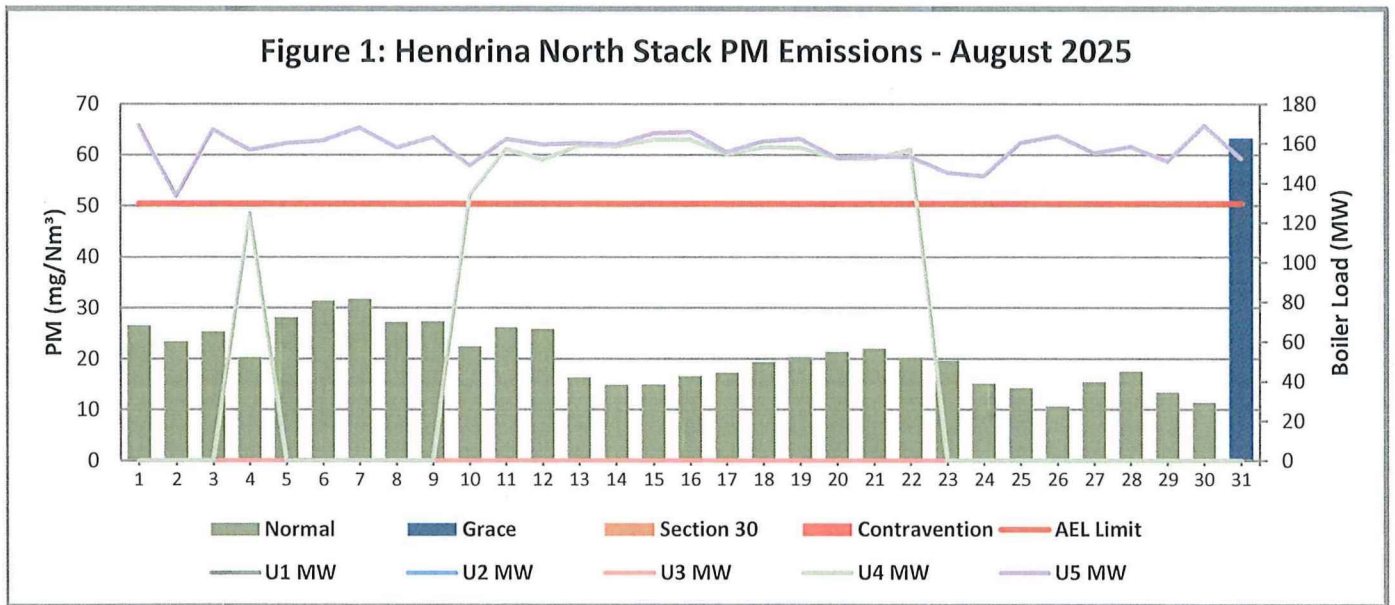


Figure 2: Hendrina South Stack PM Emissions - August 2025

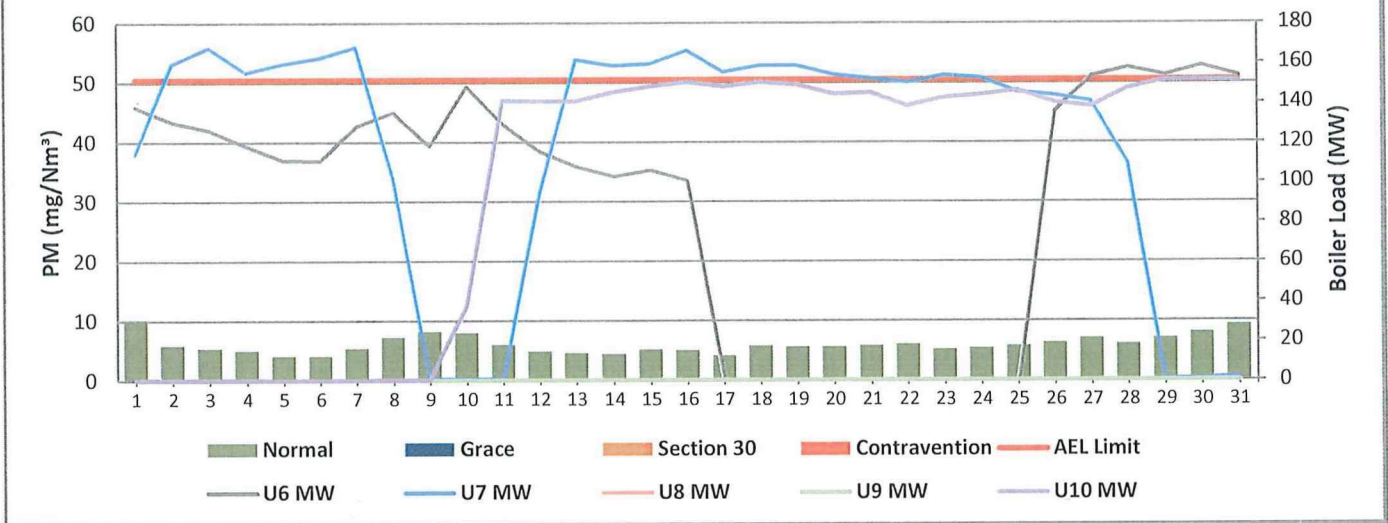


Figure 3: Hendrina North Stack SO<sub>2</sub> Emissions - August 2025

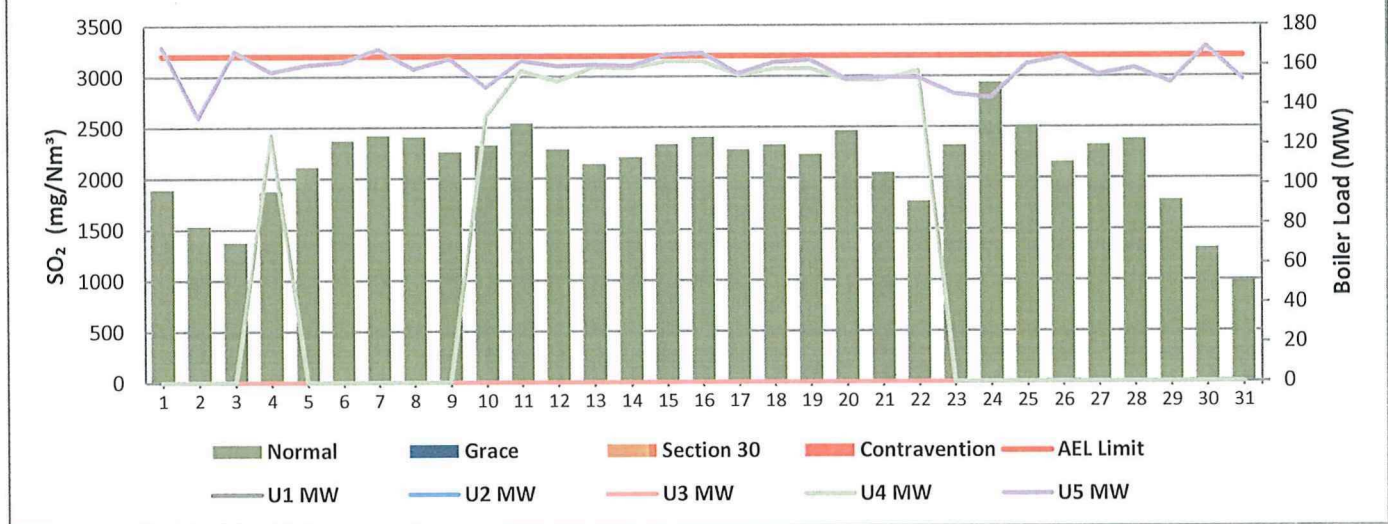


Figure 4: Hendrina South Stack SO<sub>2</sub> Emissions - August 2025

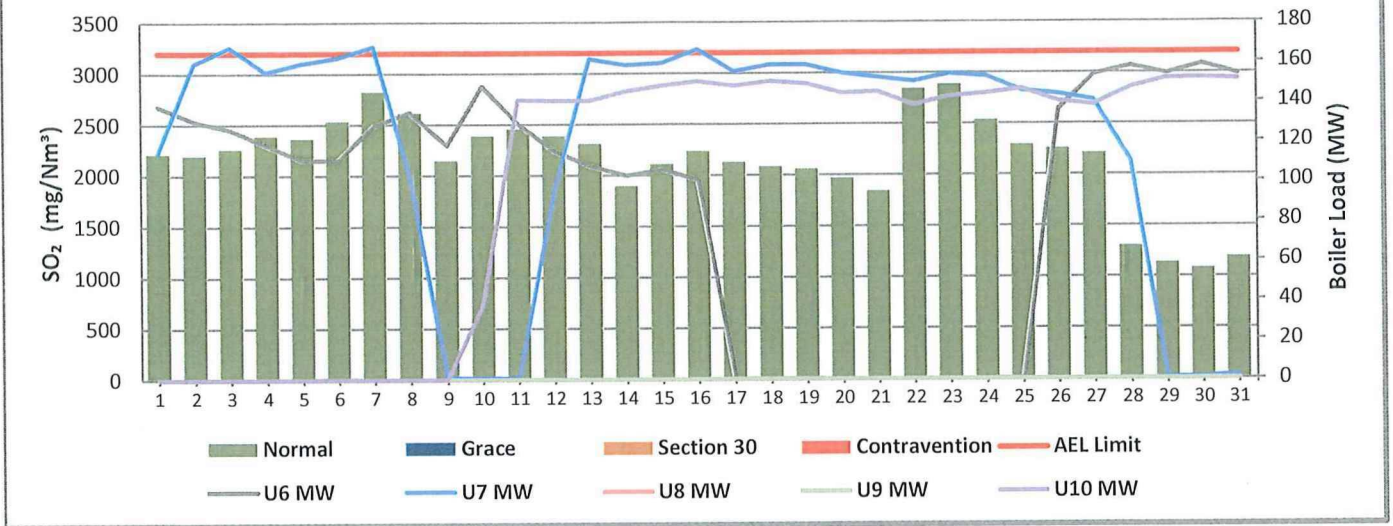
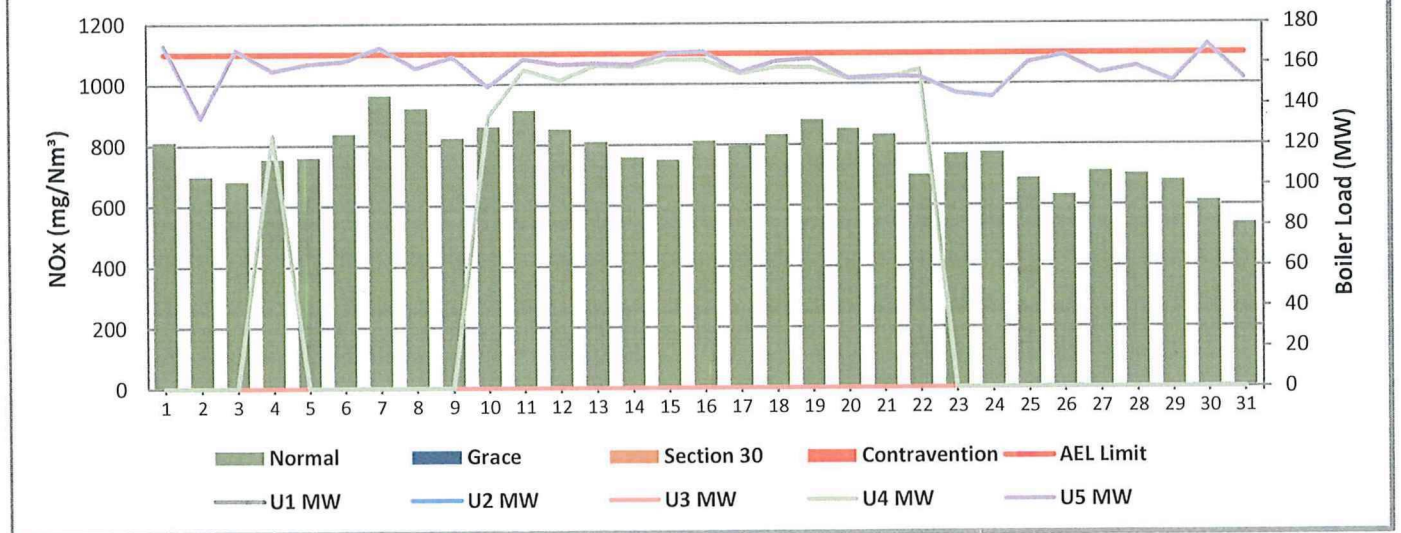
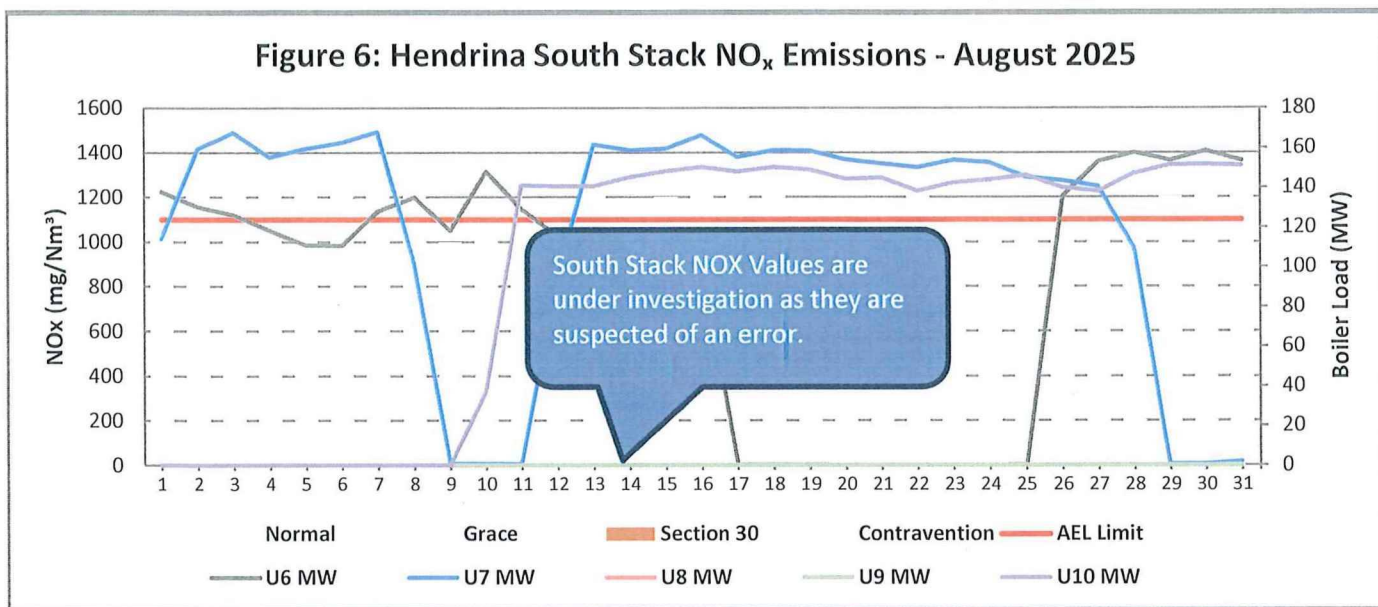


Figure 5: Hendrina North Stack NO<sub>x</sub> Emissions - August 2025



**Figure 6: Hendrina South Stack NO<sub>x</sub> Emissions - August 2025**



**7 COMPLAINTS**

There were no complaints for this month

Source Code / Name	Root Cause Analysis	Calculation of Impacts / emissions associated with	Dispersion modeling of pollutants where	Measures implemented to prevent reoccurrence

**8 GENERAL**

Unit 2 on the North Stack was offload during the month of August 2025.

The South Stack is currently using a spot test curve because the units do not meet the minimum operating conditions for a full correlations test (3200 operating hours for FFP bags per unit, and 2 units should be on load at the time of the test). The reports will be updated once valid correlations have been conducted and implemented.

South Stack NO<sub>x</sub> monitor readings are under investigation because of suspected erroneous data. Once the investigation is concluded, the value will be stated and the report will be resubmitted. Additional information demonstrating compliance as per the annual reporting requirements will be submitted to the authorities within the stipulated timeframe.

**9 Complaints and S30 Incidents Register**

No Section 30 or Complaints were reported for the Month of August 2025

A.Boja

17 April 2026

Compiled: Environmental Officer      Date  
A. Boja

Maoto

20 April 2026

Checked by. System  
Engineer Boiler/ FFP  
Moyahabo Cetlyff Maoto

pp Maoto

2026/04/20

Validated by Manager:      Boiler Engineering Manager  
G. Kgwatlhe

L. Ntila

21/04/2026

Supported by:      Environmental Manager  
L. Ntila

T. Lekalaka

22/04/2026

Authorised by: GM      Date  
T. Lekalaka

Compiled by      Boiler Engineering Department  
For      Nkangala District Municipality  
Copies.      Eskom Environmental Management  
  
Group Technology Engineering  
  
Hendrina Power Station

FFP SE/ Environmental Officer

Air Quality Officer

D Herbst  
B Mccourt

R Rampiar  
E. Patel

Engineering Manager  
Operating Manager  
Maintenance Manager  
Unit Production Manager  
Boiler Engineering Manager  
System Engineer Boiler Engineering  
Environmental Officer  
C & I Engineering Manager  
Production Manager  
Environmental Manager  
PSM