

## 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 Apr-2026
	Coal	Tons	820 000	156 389
	Fuel Oil	Tons	3 200	2970.3

Production Rates	Product / By-Product Name	Units	Max Production Capacity Permitted	Indicative Production Rate Apr-2026
	Energy	GWh	1355.76	251.3
	Ash	Tons	290 000	36 078.9
	RE Ash	kg/MWh	not specified	0.038

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)	22.3
Sulphur Content	%	0.6 to < 1 (%)	0.8
Ash Content	%	20 to < 35 (%)	23.1

### 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)	100.0%
South	Fabric Filter Plant (FFP)	100.0%

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	100.0	96.0	99.0	97.6
South	100.0	96.0		99.9

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 April 2026

Associated Unit/Stack	PM (tons)	SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)
Unit 1	Off	Off	Off
Unit 2	0.4	144	56
Unit 3	Off	Off	Off
Unit 4	2.8	434	312
Unit 5	Off	Off	Off
Unit 6	3.5	1 118	
Unit 7	1.9	507	
Unit 8	Off	Off	Off
Unit 9	Off	Off	Off
Unit 10	1.0	452	
<b>SUM</b>	9.59	2 654	368

South Stack NO<sub>x</sub> Monitor reliability value will be input when the error under investigation has been resolved. This report shall be updated with a verified value and submitted to the Licensing Authority.

Final figures for the South Stack NO<sub>x</sub> under investigation because of a suspected error.

Table 6.2: PM AEL Daily Compliance - April 2026

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	15	0	0	0	0	11.1
South	30	0	0	0	0	4.5
<b>SUM</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 6.3: SO<sub>2</sub> AEL Daily Compliance - April 2026

Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	18	0	0	0	0	1 651.7
South	30	0	0	0	0	1 455.0
<b>SUM</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 6.4: NO<sub>x</sub> AEL Daily Compliance - April 2026

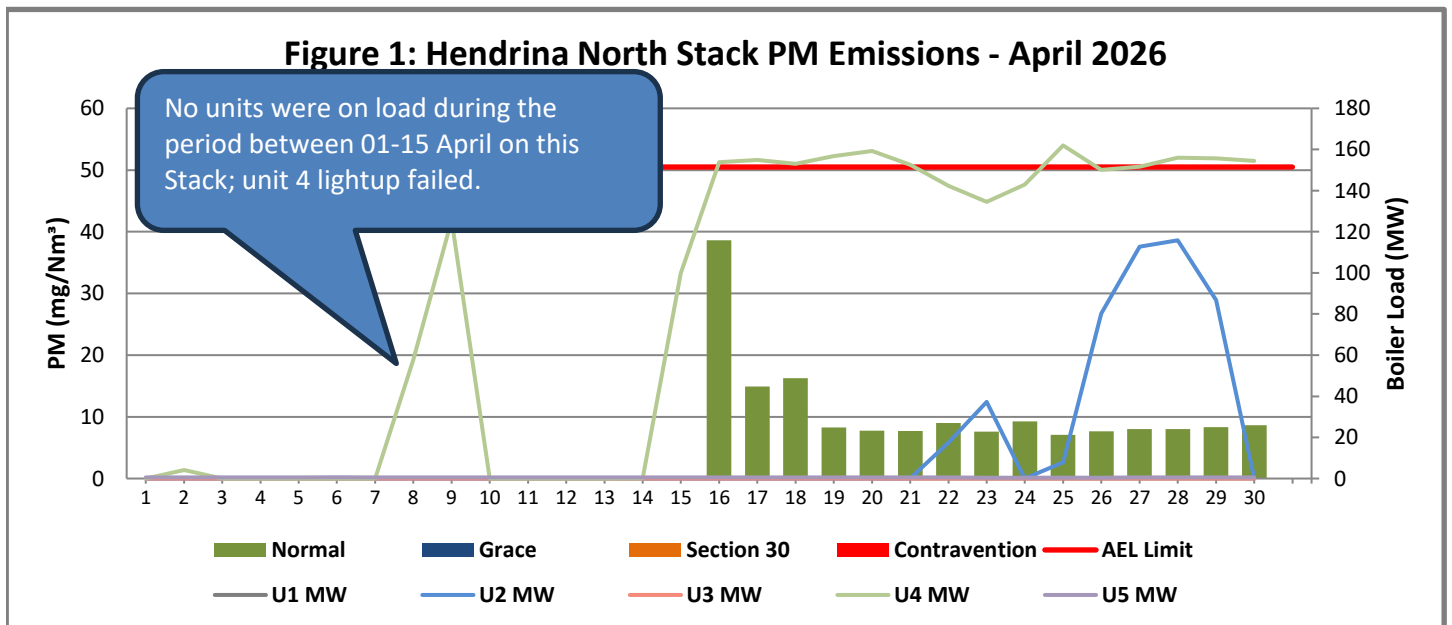
Associated Unit/Stack	Normal	Grace	Section 30	NC	Total Exceedance	Mnth Avg (mg/Nm <sup>3</sup> )
North	18	0	0	0	0	682.9
South						
<b>SUM</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

South Stack NO<sub>x</sub> error under investigation.

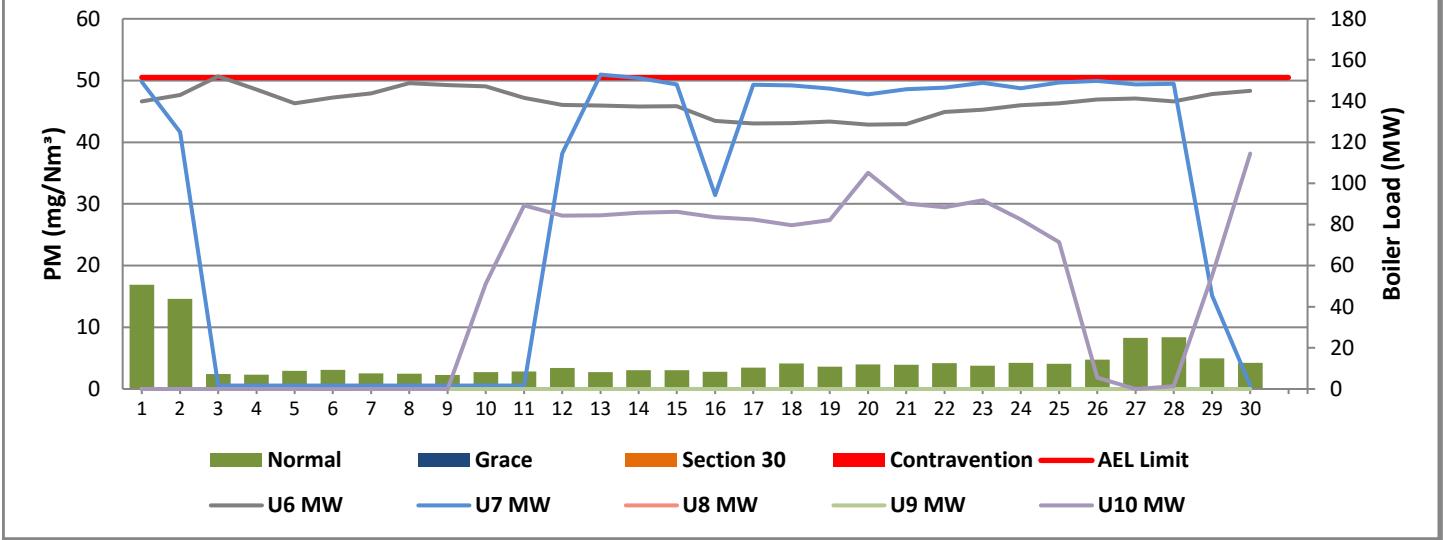
Table 6.5: Legend Description

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

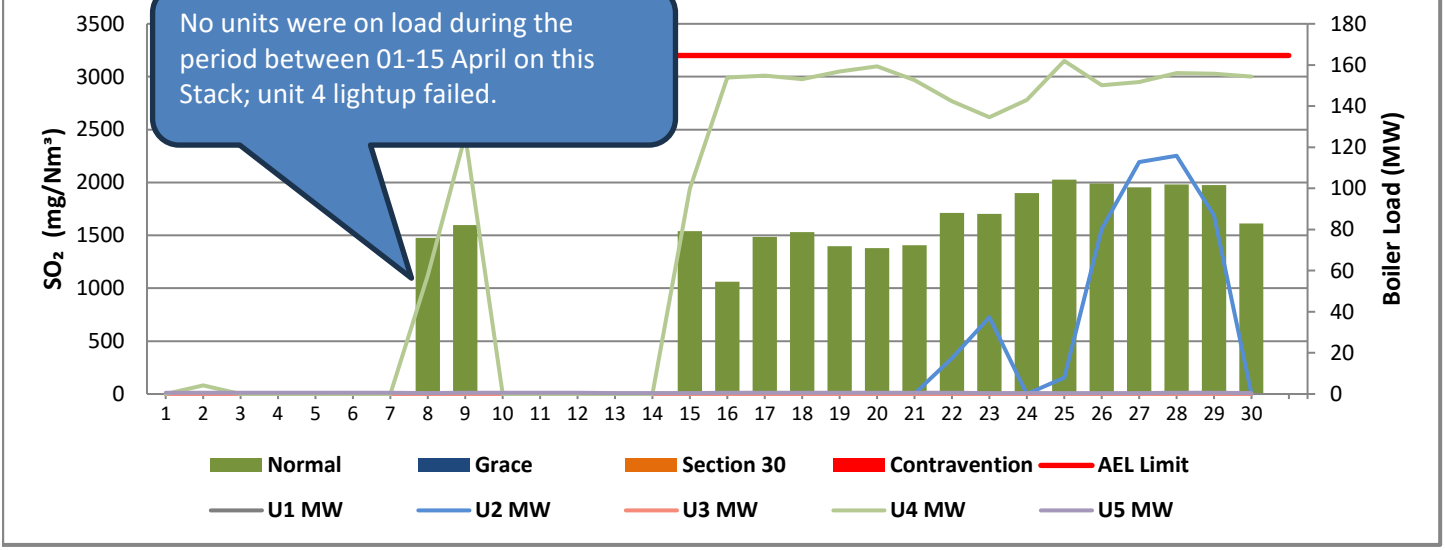
Figure 1: Hendrina North Stack PM Emissions - April 2026



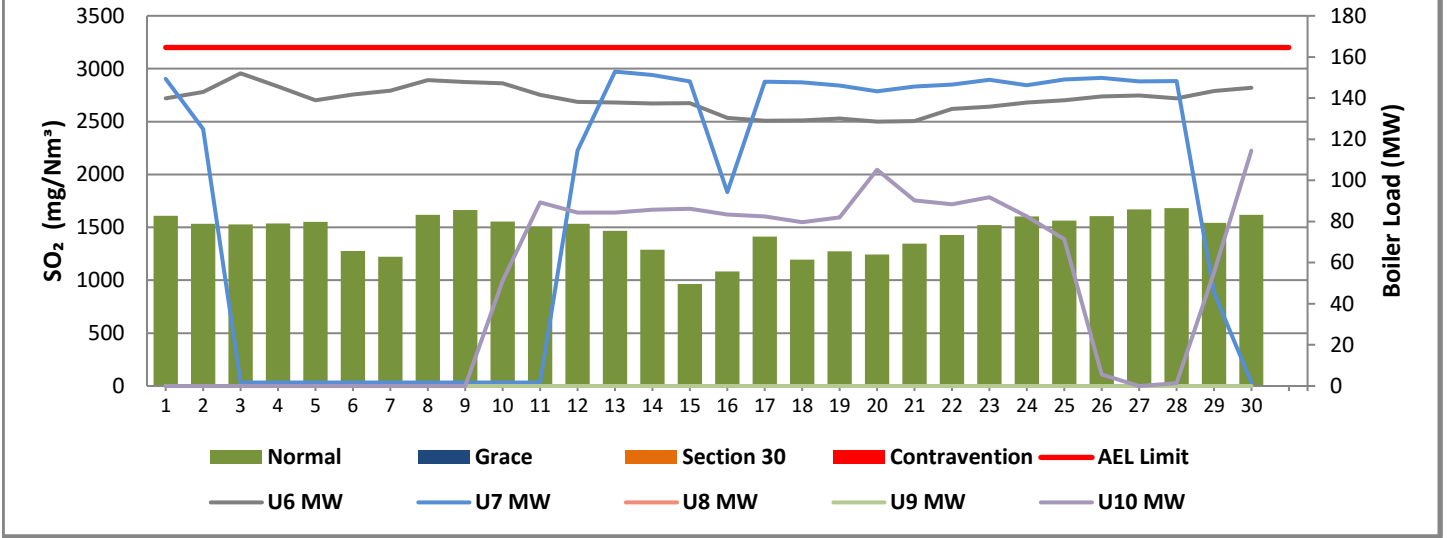
**Figure 2: Hendrina South Stack PM Emissions - April 2026**



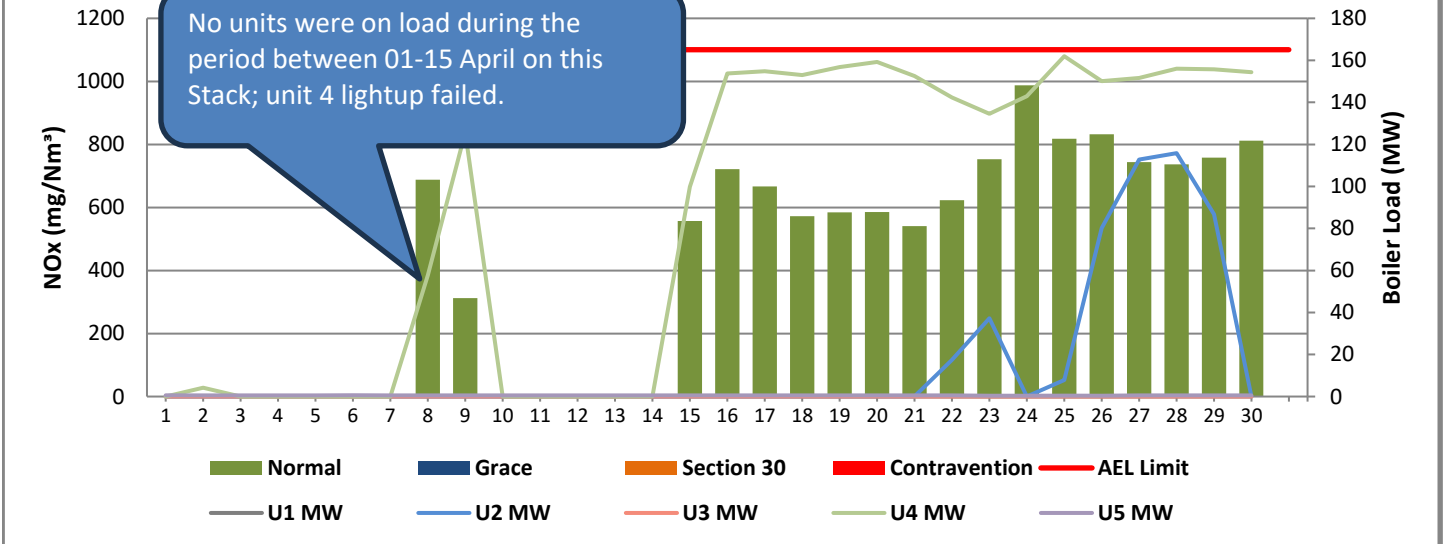
**Figure 3: Hendrina North Stack SO<sub>2</sub> Emissions - April 2026**



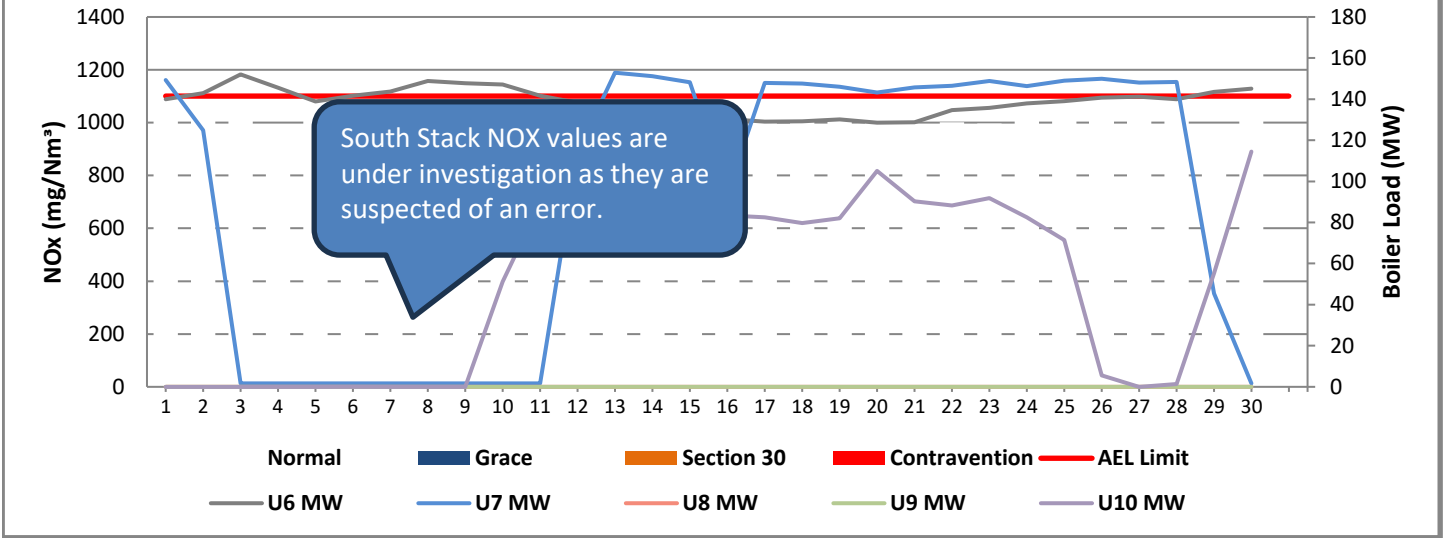
**Figure 4: Hendrina South Stack SO<sub>2</sub> Emissions - April 2026**



**Figure 5: Hendrina North Stack NO<sub>x</sub> Emissions - April 2026**



**Figure 6: Hendrina South Stack NO<sub>x</sub> Emissions - April 2026**



**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**

Units 2, 4, and 5 on the North Stack were offload during the month of April 2026. 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 full correlations have been implemented.

Surrogate values measured from QAL2 25/R3193-A3 were used to report the values for CO<sub>2</sub>, CO, and H<sub>2</sub>O because of a faulty GM35 probe.

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 Licensing Authority within the stipulated timeframe.

**9 Complaints and S30 Incidents Register**

Refer to Addendum (If any)

*A. Boja*

19 May 2026

Compiled: Environmental Officer      Date  
A. Boja

*Moyahabo Cetlyff Maoto*

2026/05/20

Checked by: System  
Engineer Boiler/ FFP  
Moyahabo Cetlyff Maoto

*G. Kgatlhe*

Validated by Manager: Boiler Engineering Manager  
G. Kgatlhe

*L. Ntila*

Supported by: Environmental Manager  
L. Ntila

*T. Lekalakala*

22/May 2026

Authorised by: GM      Date  
T. Lekalakala

Compiled by: Boiler Engineering Department

FFP SE/ Environmental Officer

For: Nkangala District Municipality

Air Quality Officer

Copies: Eskom Environmental Management

D Herbst  
B Mccourt

Group Technology Engineering

R Rampiar  
E. Patel

Hendrina Power Station:

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