Eskom	Monthly Report	Kendal Power Station

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Content

1. Introduction

KENDAL POWER STATION MONTHLY EMISSIONS REPORT FOR THE MONTH OF APRIL 2026

This document serves as the monthly emissions report required in terms of Section 7.4 of Kendal Power Station Provisional Atmospheric Emission License (AEL), **17/4/AEL/MP312/11/15.**

This report reflects Unit 1 to Unit 6 gaseous and particulate emissions performance against the AEL limit for the month of April 2026 only.

2. Raw Materials and Products

Table 1- Quantity of Raw Materials and Products Consumption in April 2026

Raw Materials and Products	**Raw Material Type**	**Units**	**Max Permitted Consumption Rate**	**Consumption Rate Mar-2026**
	Coal	Tons	2 260 000	815 070
	Fuel Oil	Tons	5 000	3675.950
Production Rates	**Product / By-Product Name**	**Units**	**Max Production Capacity Permitted**	**Indicative Production Rate Mar-2026**
	Energy	GWh	2 963.520	1 406.004
	Ash	Tons	770 000	247 944.294
	RE Ash	kg/MWh	not specified	0.143

Note: The station has improved its fuel oil consumption due to enhanced milling plant availability. The units are now operating with the required mills following the refurbishment. Cumulative fuel oil consumption has decreased and is now within the limit of 5,000 tons, as required by AEL conditions.

3. Abatement Technology

Table 2-Abatement Equipment Control Technology Efficiency in April 2026

Associated Unit/Stack	Technology Type	ESP Efficiency	Technology Type	SO_3 Plant Utilization
Unit 1	ESP + SO_3	99.866%	SO_3	73.3%
Unit 2	ESP + SO_3	99.935%	SO_3	100.0%
Unit 3	ESP + SO_3	99.856%	SO_3	6.7%
Unit 4	ESP + SO_3	99.903%	SO_3	100.0%
Unit 5	ESP + SO_3	99.825%	SO_3	96.7%
Unit 6	ESP + SO_3	99.949%	SO_3	100.0%

Note: The ESP plant does not have a bypass mode; therefore, it operates at 100% utilization. There is no Sulphur value for SO3 utilization due to switch failure on the server, however DCS signals used for its tripping alarms were used to get its utilization values. Sulphur flow will be available once we have commissioned the new PI system.

To achieve the required operational dust removal efficiency based on measured values, several assumptions such as:

- Coal ash content (%) and burnt rate mass
- Fly: Coarse ash ratio of 80:20 - 80% of fly-ash mass obtained from burnt coal goes to ESP
- Measurement of dust emission by Dust Monitor over a period (monthly)

Operational Dust Removal Efficiency

$$\eta = (1 - (Output/Input)) \times 100$$

$$\eta = 1 - \frac{(DustEmissionFromAQR\ ReportDustMonitor(tons)}{(CoalBurnt(tons) * \%AshContent * 80\%)} \times 100$$

4. Energy Source Characteristics

Table 3: Energy Source Material Characteristics for April 2026

Coal Characteristic	Units	Stipulated Range	Monthly Average Content
CV Content	MJ/kg	*16-24 (MJ/kg)*	19.210
Sulphur Content	%	*<1 (%)*	0.780
Ash Content	%	*40 (%)*	30.420

5. Emissions Reporting

In terms of Section 59 of National Environmental Management: Air Quality Act (Act no.39 of 2004) and decision made by the Minister of DFFE, in respect of the Eskom exemption applications for new Minimum Emission Standards (MES) were granted and effective as of 01 April 2025, 01 October 2025 and 01 April 2026.

Table 4- New Minimum Emission Limits are as follows:

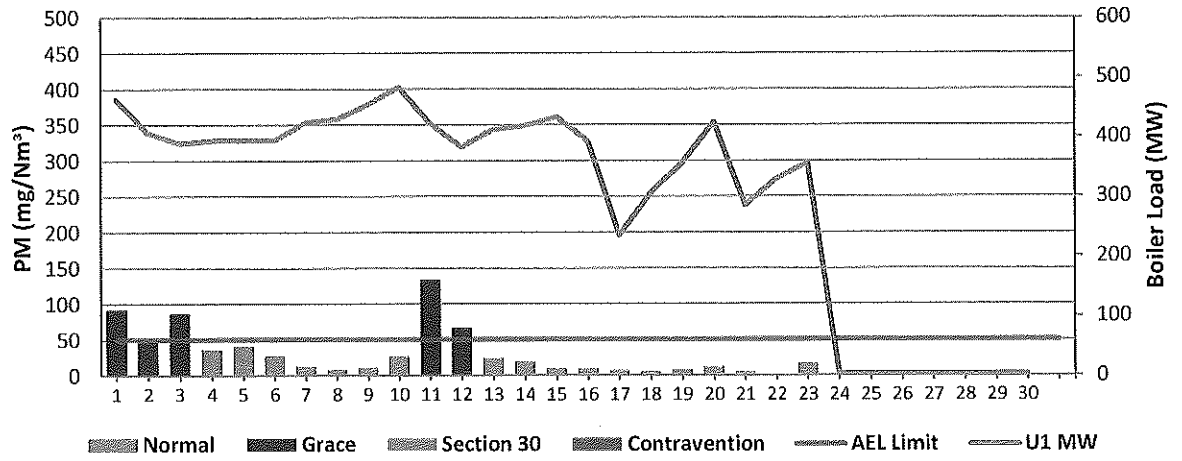
SO_2 Monthly = 3000 mg/Nm^3	Dust Daily (PM) = 50 mg/Nm^3	NO_2 Daily =750 mg/Nm^3

Table 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

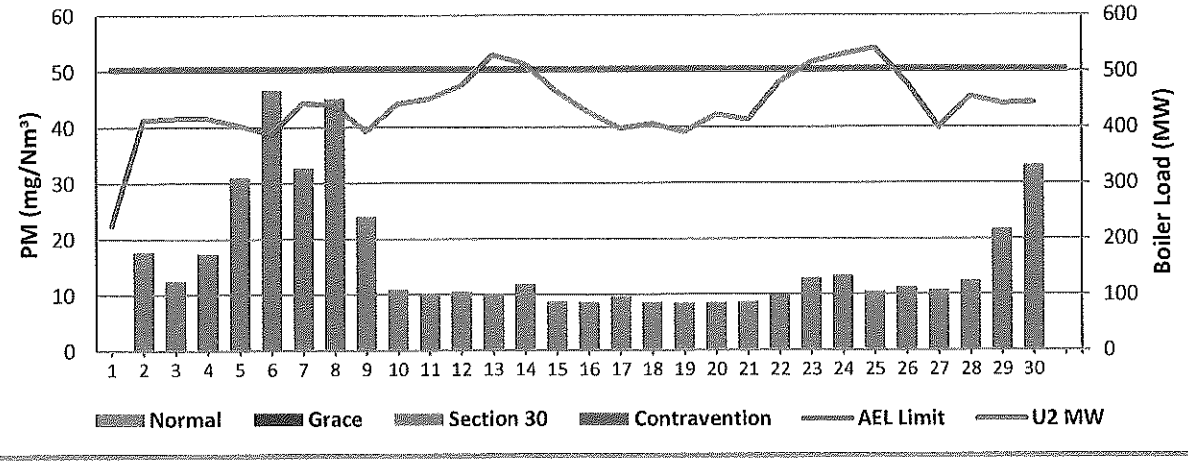
5.1 PM Daily Averages

Figure 1: Kendal Unit 1 PM Emissions - April 2026



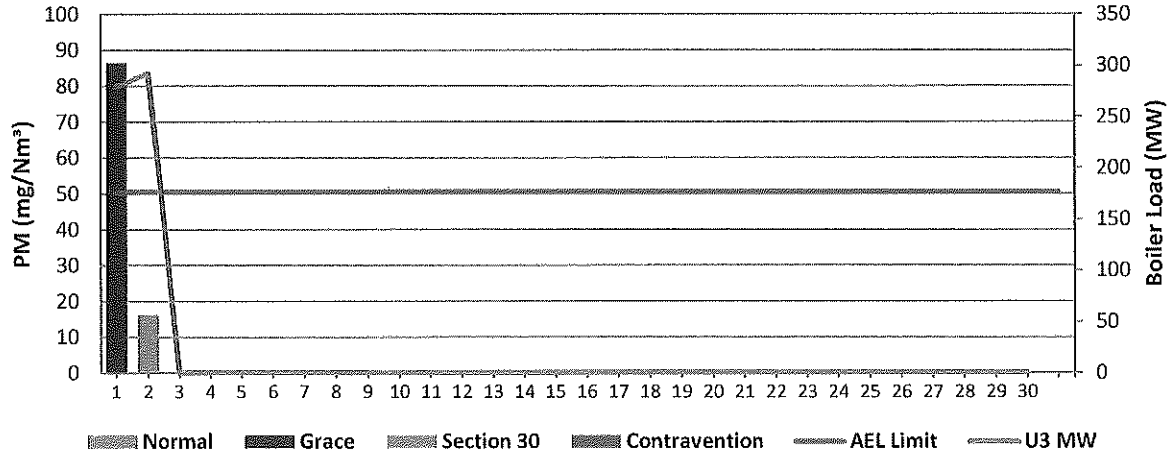
Note: Kendal Power Station Unit 1 exceeded the particulate matter (PM) emission limit of 50 mg/Nm³ on several occasions during April. Exceedances were recorded on 01 April (15 hours), 02 April (8 hours), and 03 April (20 hours) due to F22 and F34 high-voltage (HV) faults, which tripped because of low coolant levels. In addition, several fields (F1, F2, F31, F41, F32, F42, F24, F27, F37, and F43) were affected by ash backlogs, further contributing to poor ESP performance. Additional exceedances occurred on 11 April (23 hours) and 12 April (14 hours), mainly due to the unavailability of the F46 transformer. High PM concentrations were recorded from 1 to 3 April 2026 under the 48 hours allowed period. The exceedance began at approximately 05:00 hours on 1 April and ended at 00:00 on 3 April, resulting in a total duration of 1 day and 19 hours (43 hours), as reflected in the ERT. Although spanning three calendar days, the exceedance remains within the 48-hour allowable grace period and is therefore not considered a contravention of the AEL.

Figure 2: Kendal Unit 2 PM Emissions - April 2026



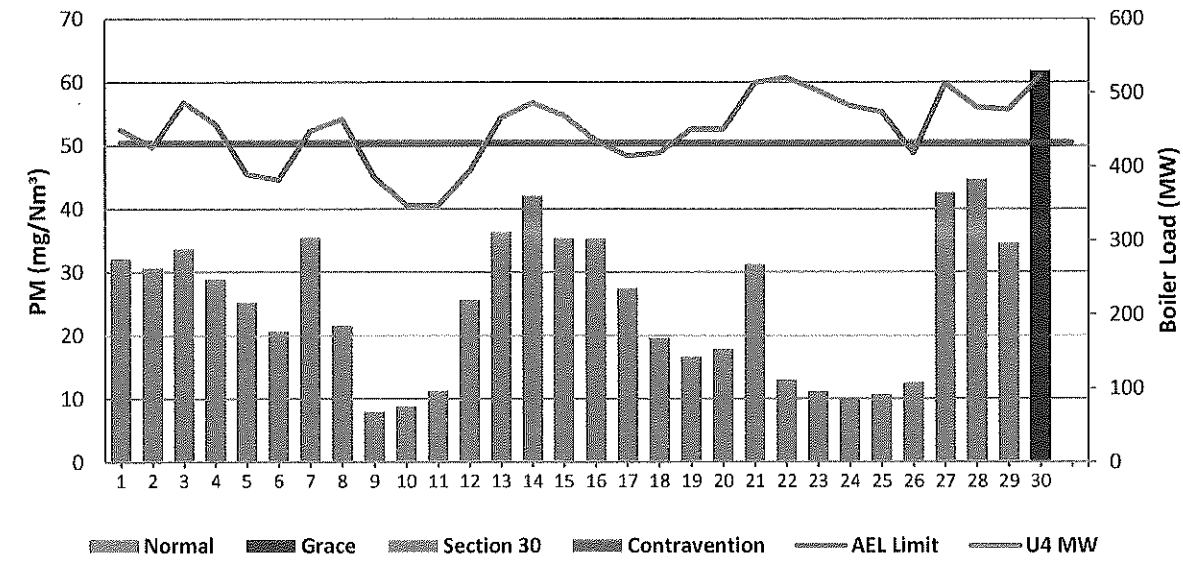
Note: Kendal Power Station unit 2 did not exceed PM limit of 50 mg/Nm³.

Figure 3: Kendal Unit 3 PM Emissions - April 2026



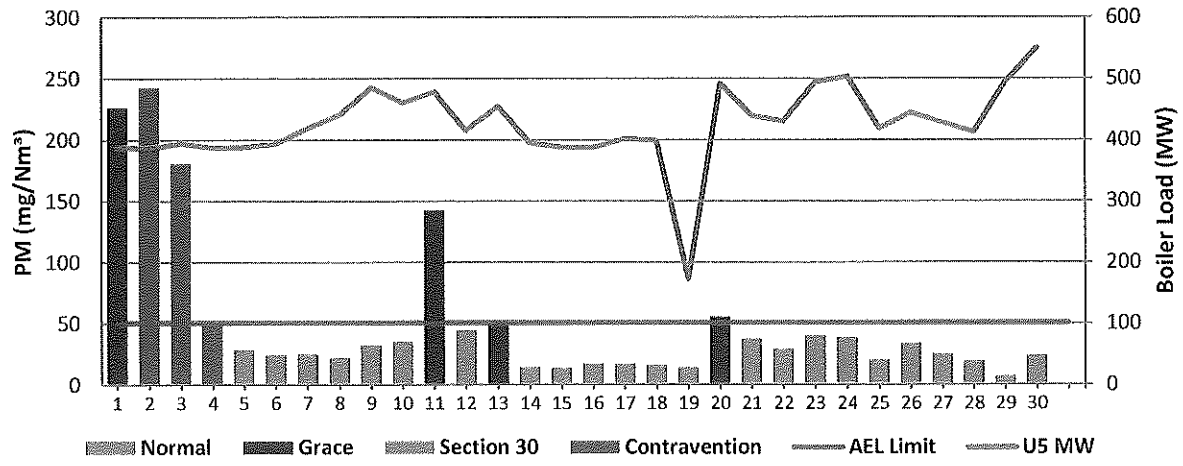
Note: Kendal Power Station Unit 3 exceeded the particulate matter (PM) emission limit of 50 mg/Nm³ on 01 April (4 hours) due to issues with the milling plant, as well as a communication bus fault in F45 and low voltage in F41.

Figure 4: Kendal Unit 4 PM Emissions - April 2026



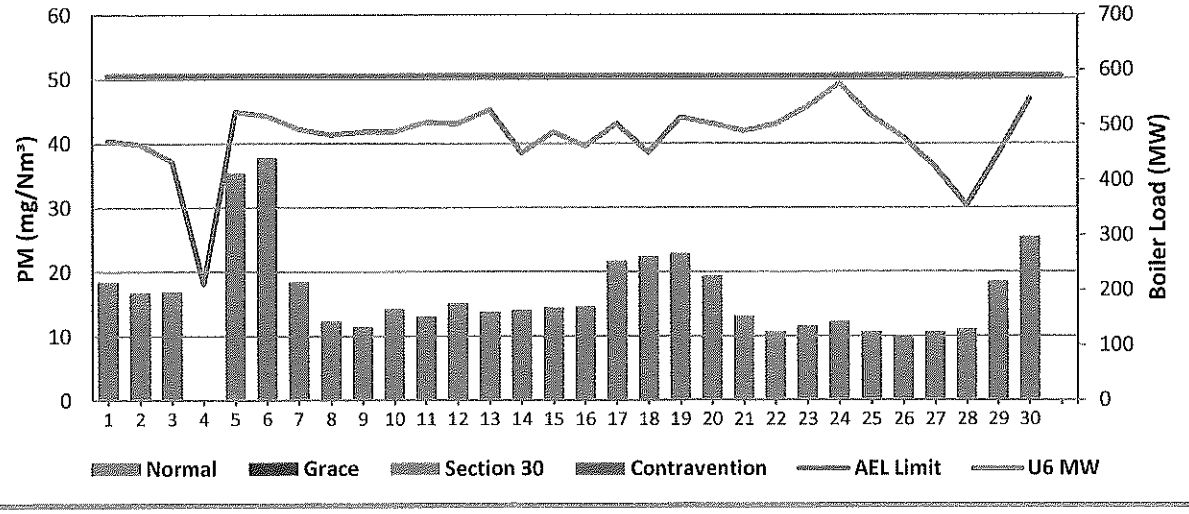
Note: Kendal Power Station Unit 4 exceeded the PM limit of 50 mg/Nm³ on 30 April 2026 for approximately 18 hours due to ESP performance issues which was caused by faults such as dirty plates and loose wires in fields F16, F21, F41, F27, F31, F32, F33, F35, and F44, resulting in underperformance.

Figure 5: Kendal Unit 5 PM Emissions - April 2026



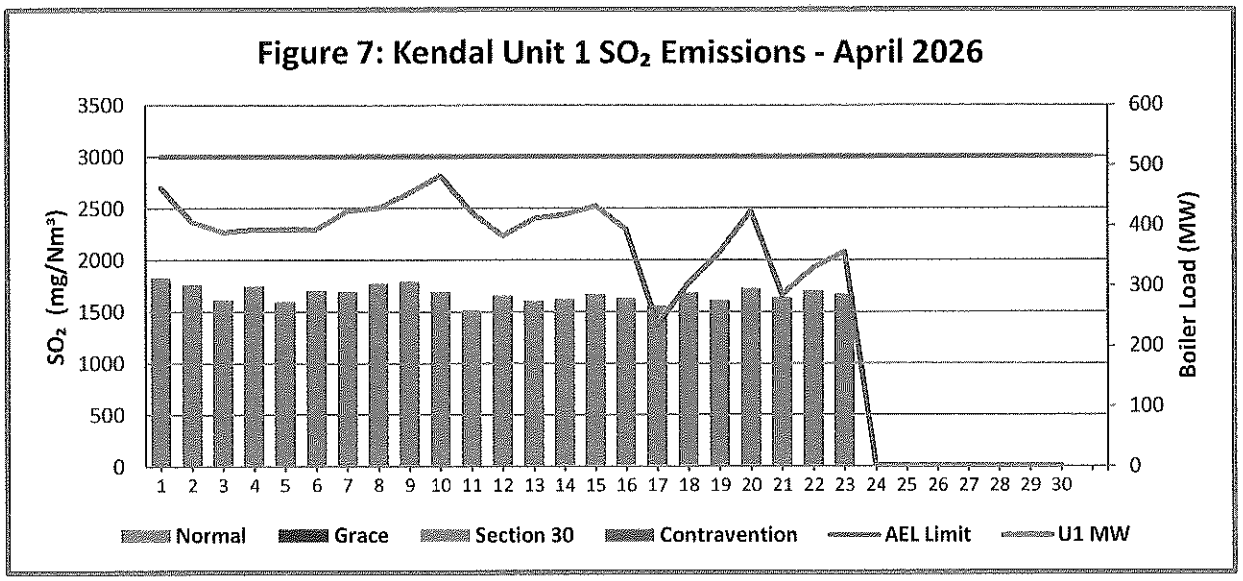
Note: Kendal Power Station Unit 5 exceeded the particulate matter (PM) emission limit of 50 mg/Nm³ on 01 April (24 hours), 02 April (24 hours), and 03 April (24 hours), as well as 04 April (6 hours), due to faults in F15, F16, F25, F35, F36, and F37, which were underperforming as a result of ash backlogs, short circuits, suspected faults, and dirty plates. The F14 high-frequency transformer (HFT) was also damaged. Further exceedances occurred on 11 April (14 hours), 12 April (3 hours), and 20 April (12 hours) due to RH CE Rapper 1 tripping as a result of a short circuit, affecting fields F31 and F41. In addition, fields F12, F22, F13, F23, F32, and F42 were impacted by high ash hopper levels. There was no conditioner in service on Fly Ash Bunker (FAB) 3, and the PC11 motor had also failed.

Figure 6: Kendal Unit 6 PM Emissions - April 2026

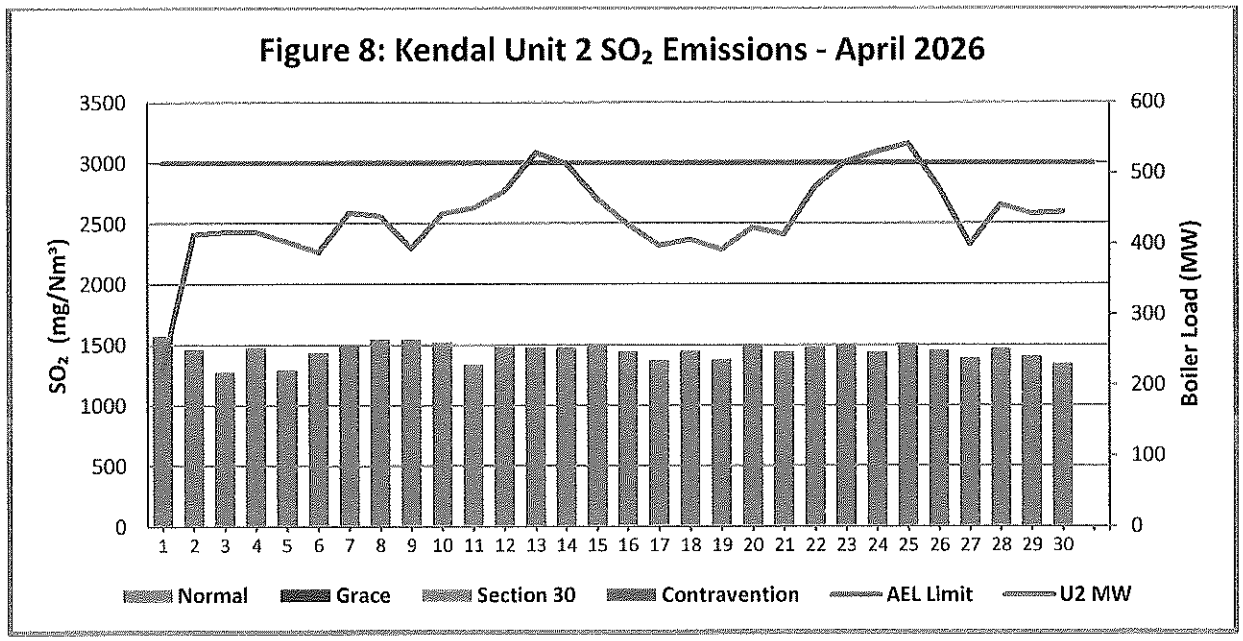


Note: Kendal Power Station unit 2 did not exceed PM limit of 50 mg/Nm³.

5.2 Sox Daily Averages

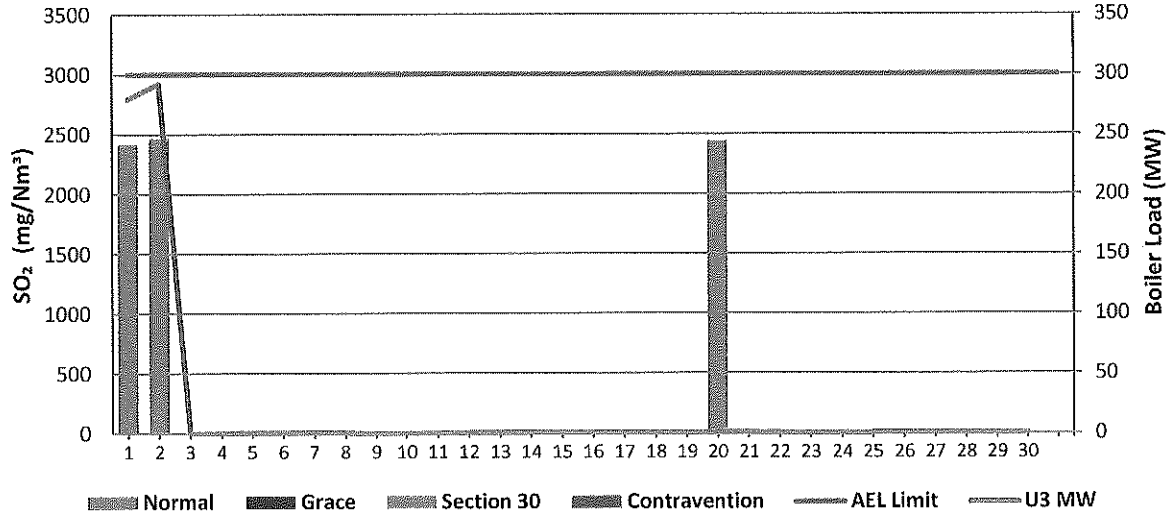


Note: Kendal Power Station unit 2 did not exceed SOx limit of 3000 mg/Nm³.



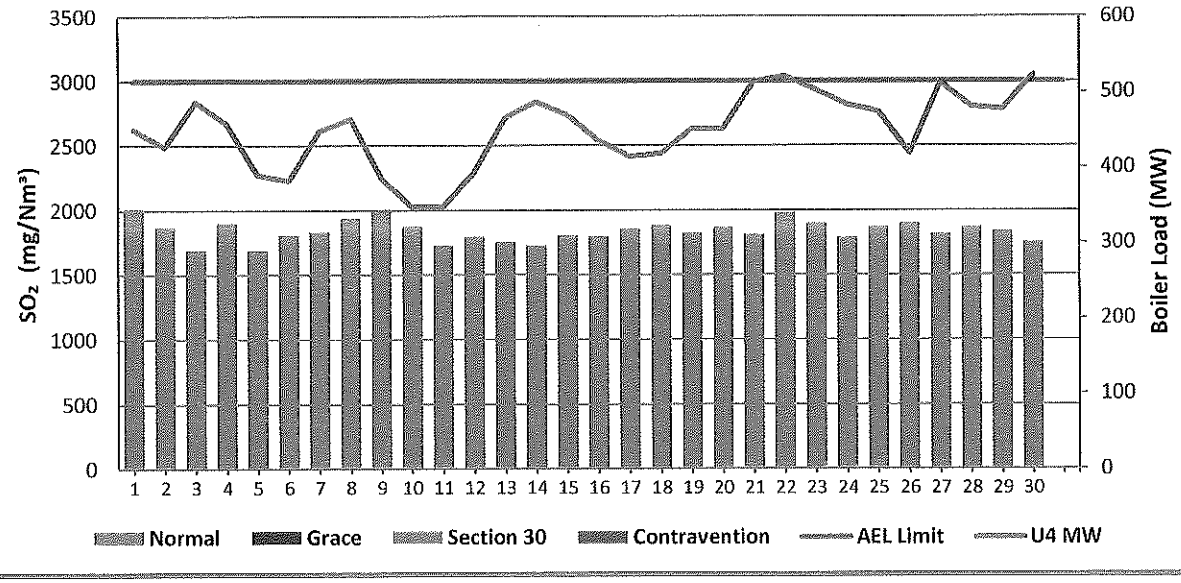
Note: Kendal Power Station unit 2 did not exceed SOx limit of 3000 mg/Nm³.

Figure 9: Kendal Unit 3 SO_2 Emissions - April 2026



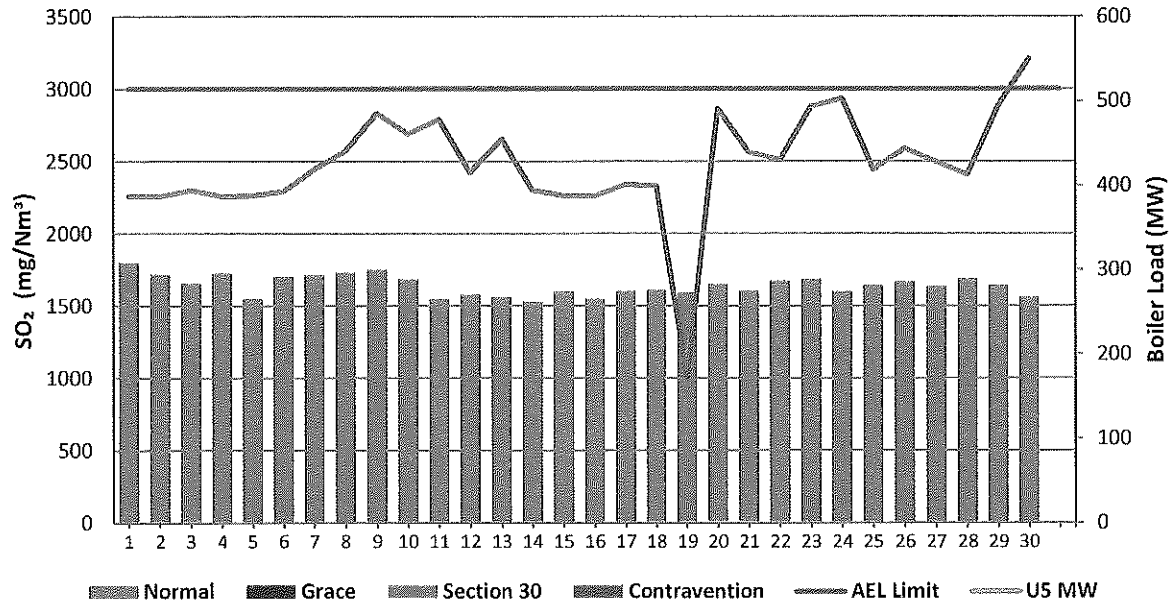
Note: Kendal Power Station unit 3 did not exceed SOx limit of 3000 mg/Nm³.

Figure 10: Kendal Unit 4 SO_2 Emissions - April 2026



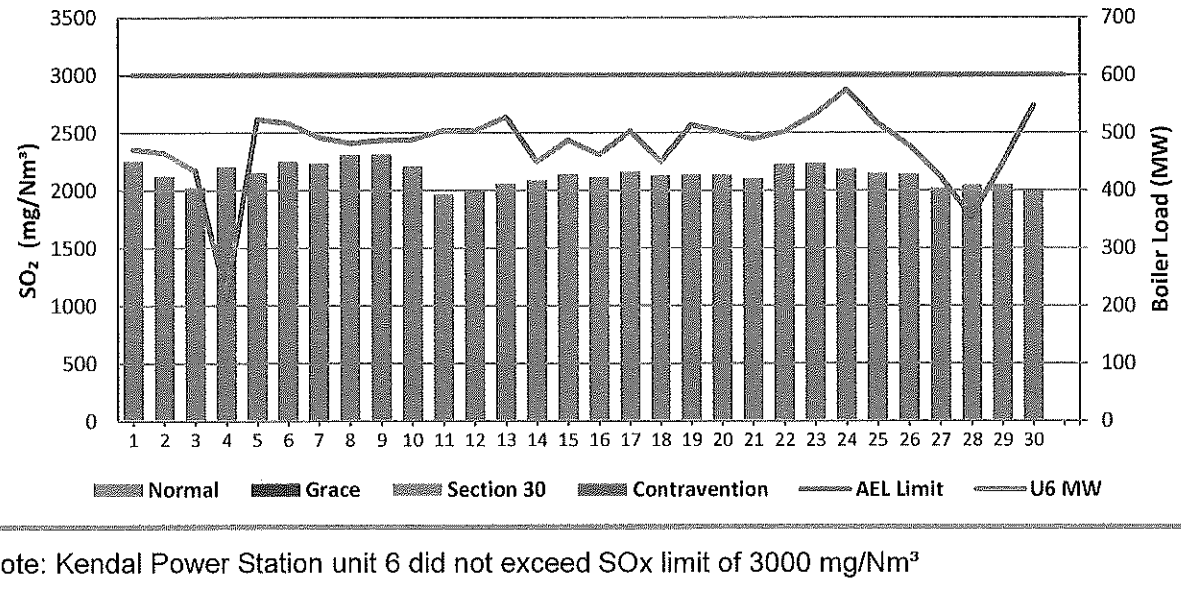
Note: Kendal Power Station unit 4 did not exceed SOx limit of 3000 mg/Nm³.

Figure 11: Kendal Unit 5 SO_2 Emissions - April 2026



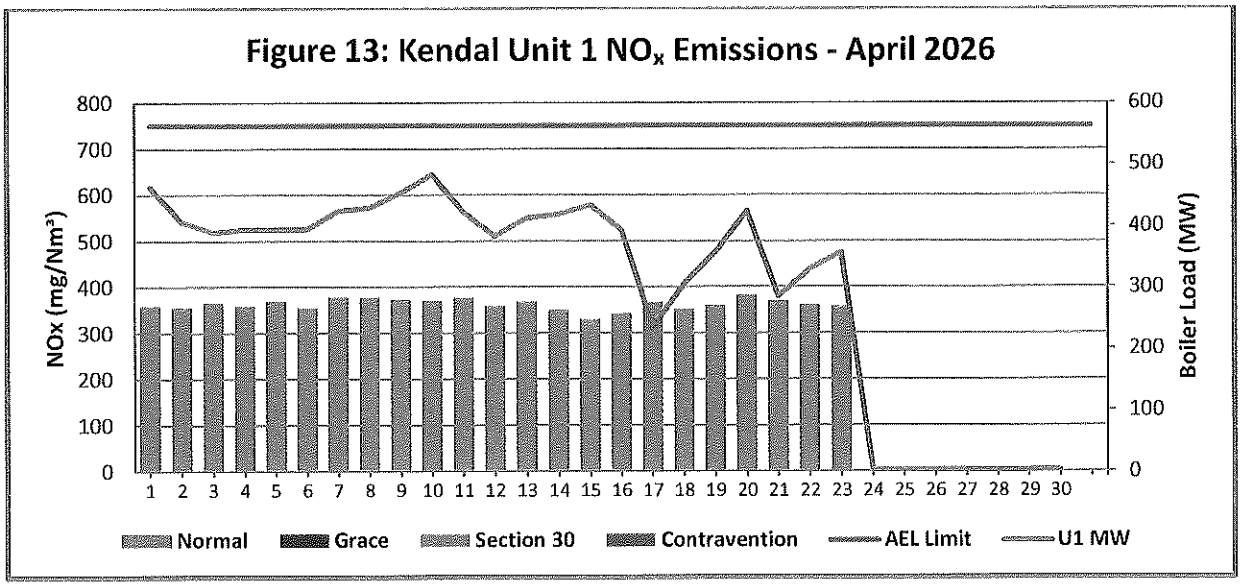
Note: Kendal Power Station unit 5 did not exceed SOx limit of 3000 mg/Nm³.

Figure 12: Kendal Unit 6 SO_2 Emissions - April 2026

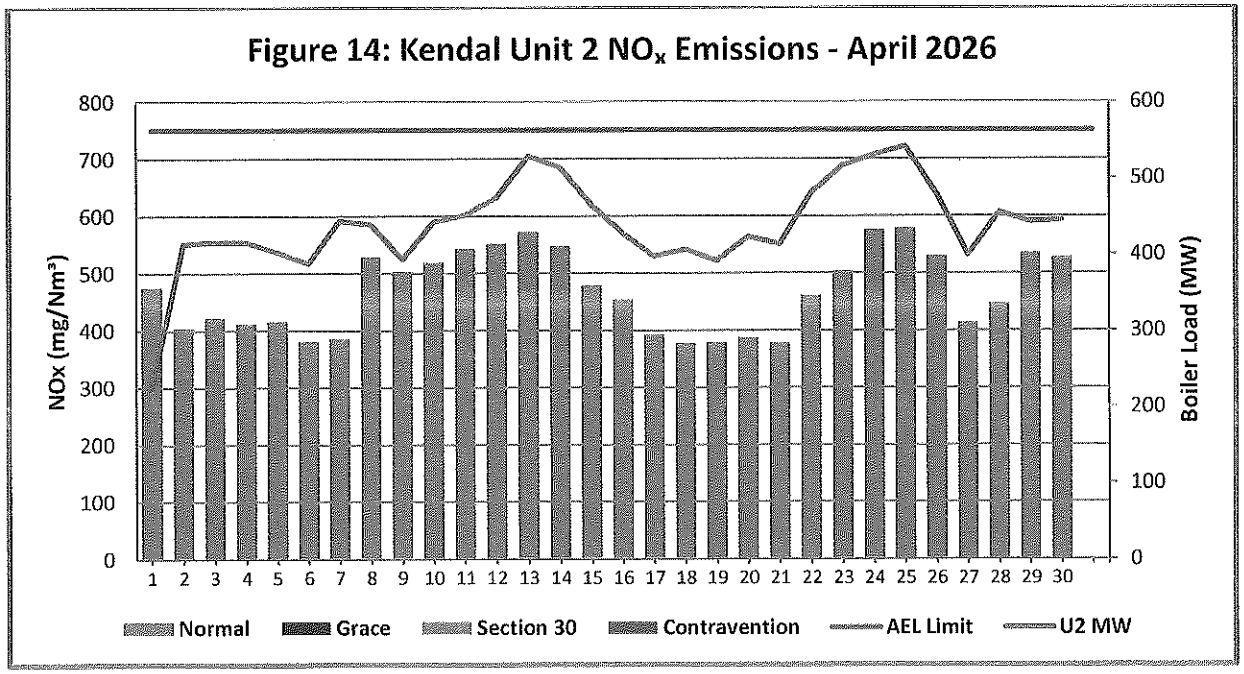


Note: Kendal Power Station unit 6 did not exceed SOx limit of 3000 mg/Nm³

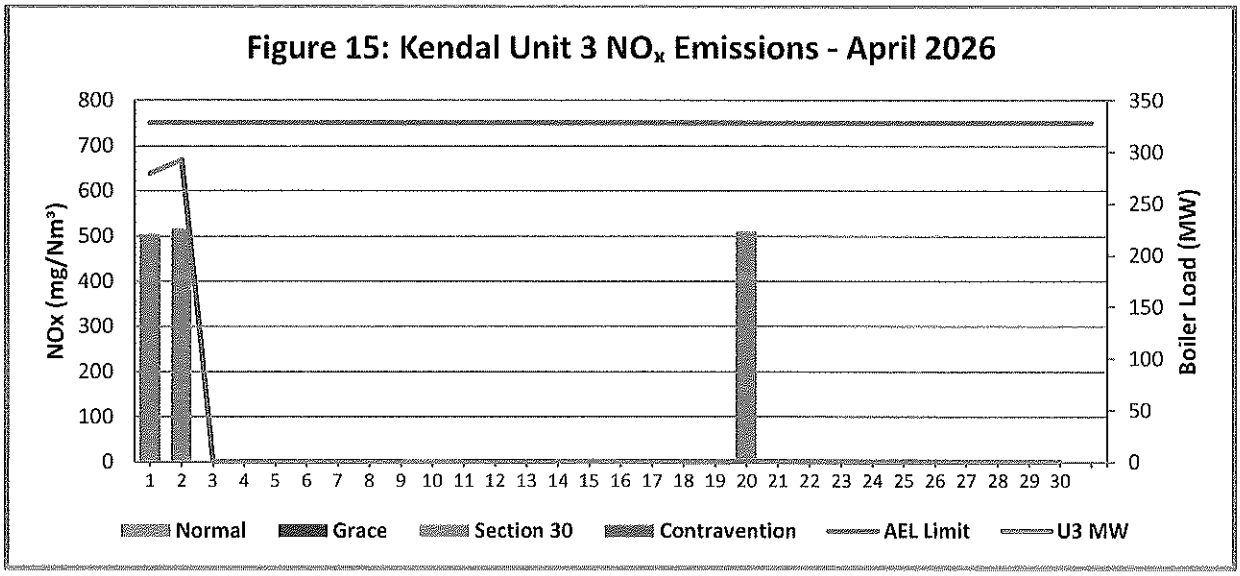
5.3 NOx Daily Averages



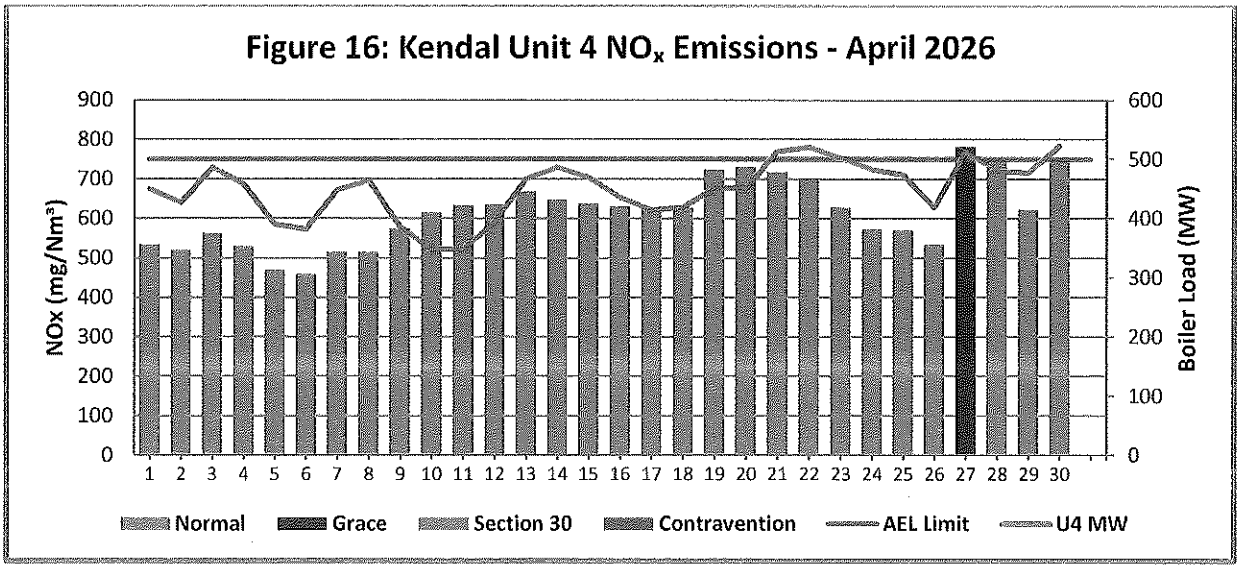
Note: Kendal Power Station unit 1 did not exceed NOx limit of 750 mg/Nm³.



Note: Kendal Power Station unit 2 did not exceed NOx limit of 750 mg/Nm³.

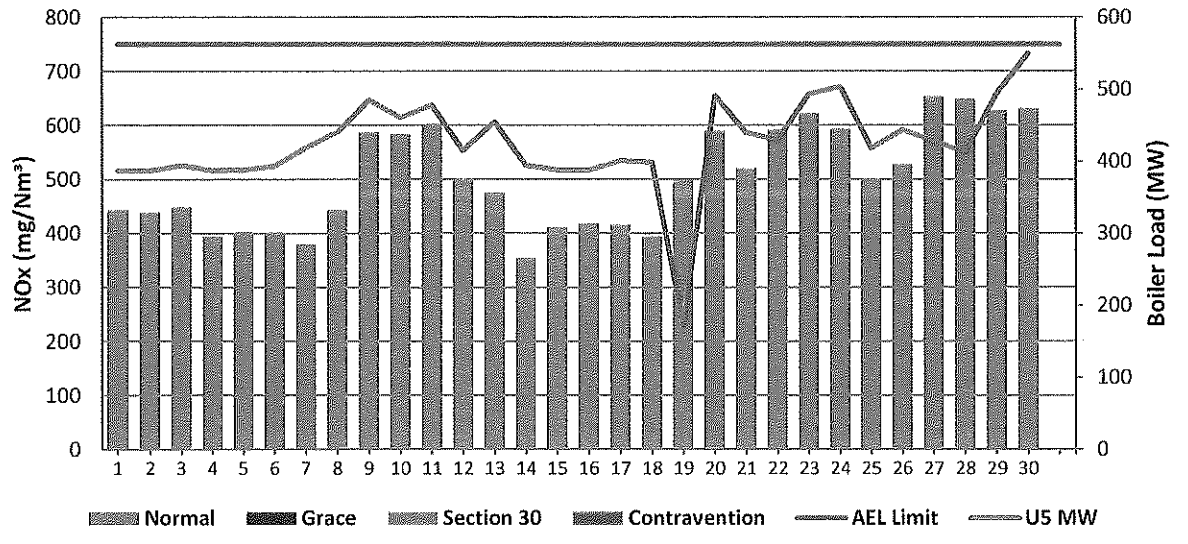


Note: Kendal Power Station unit 3 did not exceed NOx limit of 750 mg/Nm³.



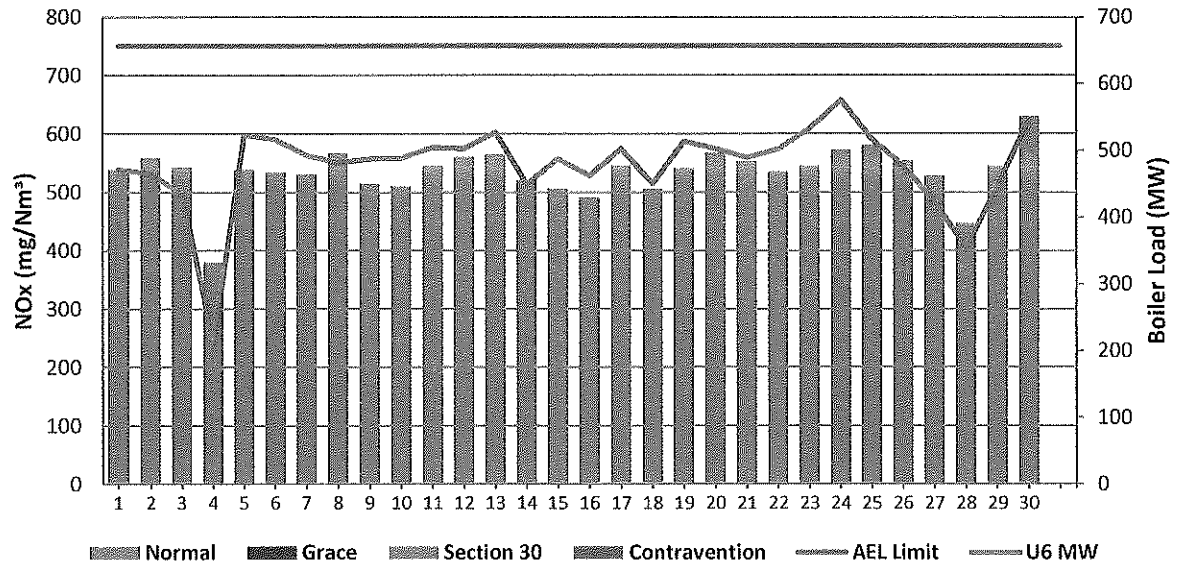
Note: Kendal Power Station Unit 4 exceeded the NOx limit of 750 mg/Nm³. Exceedances occurred 27 April (24 hours), these high Nox emissions were attributed to milling plant underperformance, incorrect burner tilt positioning due to component wear and defects.

Figure 17: Kendal Unit 5 NO_x Emissions - April 2026



Note: Kendal Power Station unit 5 did not exceed NOx limit of 750 mg/Nm³.

Figure 18: Kendal Unit 6 NO_x Emissions - April 2026



Note: Kendal Power Station unit 6 did not exceed NOx limit of 750 mg/Nm³.

Table 6-Monthly Tonnages for April 2026

Associated Unit/Stack	PM (tons)	SO_2 (tons)	NO_x (tons)
Unit 1	38.1	1 939	420
Unit 2	26.8	2 465	811
Unit 3	2.6	144	30
Unit 4	41.0	2 759	933
Unit 5	69.8	2 291	713
Unit 6	23.1	2 276	825
SUM	201.40	11 874	3 732

Table 7-Monthly Averages Concentration for April 2026 in mg/Nm3

Associated Unit/Stack	PM	SO_2	NO_2
Unit 1	32.8	1 674.6	363.2
Unit 2	16.7	1 448.9	469.9
Unit 3	51.4	2 442.2	510.3
Unit 4	26.2	1 840.5	615.9
Unit 5	50.9	1 642.4	503.7
Unit 6	16.8	1 496.2	534.1

6. Continuous Emissions Monitoring System (CEMS)

Table 8- Periods during which was inoperative/malfunctioning.

Date	CEMS status	Comments
April 2026	Malfunctioning	The station gas monitors for Unit 1 and 2 has been reading O_2 inaccurately. To ensure accurate reporting for this period, the QAL2 average (parallel test) values were used. In cases where the monitors experienced errors, surrogate values were used to the raw data.

Table 9-CEMS Monitor Reliability Percentage

Associated Unit/Stack	PM	SO_2	NO_2	O_2
Unit 1	100.0	94.7	94.0	99.5
Unit 2	99.7	96.0	96.0	100.0
Unit 3	100.0	66.7	66.7	100.0
Unit 4	99.7	100.0	89.0	100.0
Unit 5	99.4	100.0	100.0	100.0
Unit 6	100.0	100.0	100.0	93.3

Note: NO_x emissions are measured as NO in PPM. The final NO_x value is expressed as total NO_2 equivalent.

In terms of the minimum emissions standard, the requirement is that a monitor should be 80% reliable on a monthly average.

7. CEMS Calibration and Equipment Used for Calibration

Calibration certificates to be made available upon request.

8. Validity of Correlation and Parallel Test

Table 10-Validity of Correlation and Parallel Test.

Associated Unit/Stack	Correlation Test (PM)	Parallel Test (NO_2, CO_2, O_2, SO_2)
Unit 1	Valid until March 2027	Valid until September 2027
Unit 2	Invalid From May 2025	Valid until August 2027
Unit 3	Valid Until February 2027	Valid until October 2027
Unit 4	Invalid From March 2026	Valid until January 2028
Unit 5	Invalid From January 2026(Spot test)	Valid until March 2027
Unit 6	Valid until March 2027	Valid until October 2027

Note: It was identified that the use of four monitor channels with varying and non-standard ranges has resulted in unreliable emissions readings. Consequently, Units 2, 4, and 5 are currently operating without verified readings which are subject to change depending on correlation report. Correlation tests and equipment verification are being conducted, including adjustments and reinstallation where necessary. Once the correlation tests have been successfully completed and the appropriate calibration curves implemented, emissions data can be regarded as valid, reliable and will be back fitted to the test date. During this process, there is a risk of non-compliance, However, station will be particularly cautious with respect to the duty of care during this time.

9. Complaint Register

Table 11-Complaints for the month of April 2026

Source Code / Name	Root Cause Analysis	Calculation of Impacts / emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent reoccurrence
N/A	N/A	N/A	N/A	N/A