

Ms Nompumelelo Simelane
 Nkangala District Municipality
 PO BOX 437
 MIDDELBURG
 1050

Date:
 19 May 2026

Enquiries: Livhuwani Tshilate
 Tel +27 17 615 2317

Ref: 17/AEL/MP312/11/09

Dear Ms. Simelane

KRIEL POWER STATION'S MONTHLY STACK EMISSIONS REPORT FOR THE MONTH OF APRIL 2026

This serves as the monthly report required in terms of Section 7.4 in Kriel Power Station's Atmospheric Emission License 17/AEL/MP312/11/09. The emissions are for the month of April 2026. Verified emissions of particulates matter, SO₂ and NO_x (as NO₂) are also included.

Raw Materials and Products

Table 1: Quantity of Raw Materials and Products used/produced for the month of April 2026

Raw Materials and Products used	Raw Material Type	Units	Maximum Permitted Consumption / Rate (Quantity)	Consumption / Rate in Month of April 2026
	Coal	Tons/month	1 227 600	371 564
	Fuel Oil	Tons/month	8 000	3 465.530
Production Rates	Product/ By Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of April 2026
	Energy	GWh	2 052.000	883.176
	Ash	Tons/month	not specified	82 929.232
	RE PM	kg/MWh	not specified	2.227

Abatement Technology

Table 2: Abatement Equipment Control Technology for April 2026.

Associated Unit/Stack	Technology Type	Actual Efficiency (%)	Technology Type	SO ₃ Utilisation (%)
Unit 1	ESP& SO3	97.93%	SO ₃ Plant	100.00
Unit 2	ESP& SO3	97.45%	SO ₃ Plant	100.00
Unit 3	ESP& SO3	Off-line	SO ₃ Plant	Off-line
Unit 4	ESP& SO3	96.93%	SO ₃ Plant	95.04
Unit 5	ESP& SO3	98.36%	SO ₃ Plant	100.00
Unit 6	ESP& SO3	97.09%	SO ₃ Plant	100.00

Note: ESP plant does not contain bypass mode operation; hence plant 100% Utilised.

Energy Source Characteristics





Table 3: Energy Source Material Characteristics for the month of April 2026.

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.6-1.2 (%)	0.645
Ash Content	27-32 (%)	22.319

Monthly Monitor Reliability

Associated Unit/Stack	PM (%)	SO _x (%)	NO _x (%)
North	87.6	0.0	0.0
South	95.1	0.0	0.0

Emissions Reporting Graph Legend Description

Condition	Colour	Description
Normal		Emissions below Emission Limit Value (ELV)
Grace		Emissions above the ELV during grace period
Section 30		Emissions above ELV during a NEMA S30 incident
Contravention		Emissions above ELV but outside grace or S30 incident conditions

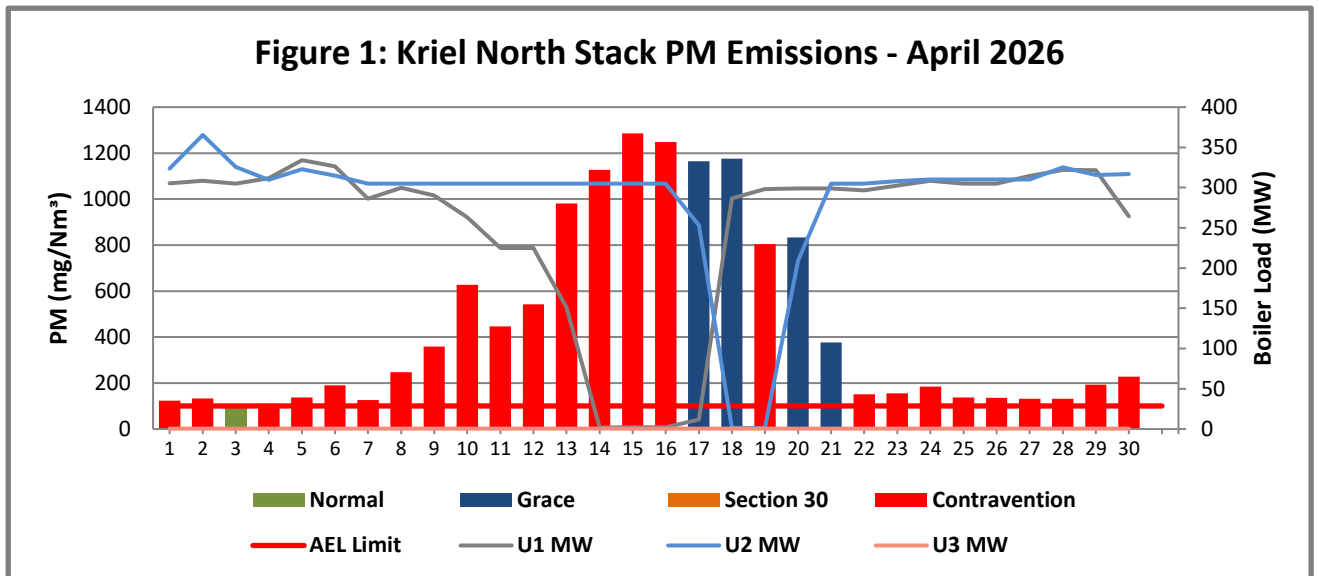


Figure 1: PM emissions for the month of April 2026 against daily emission limit (100 mg/Nm³) for the North Stack. Reasons for exceedances are indicated on Table 7 below.

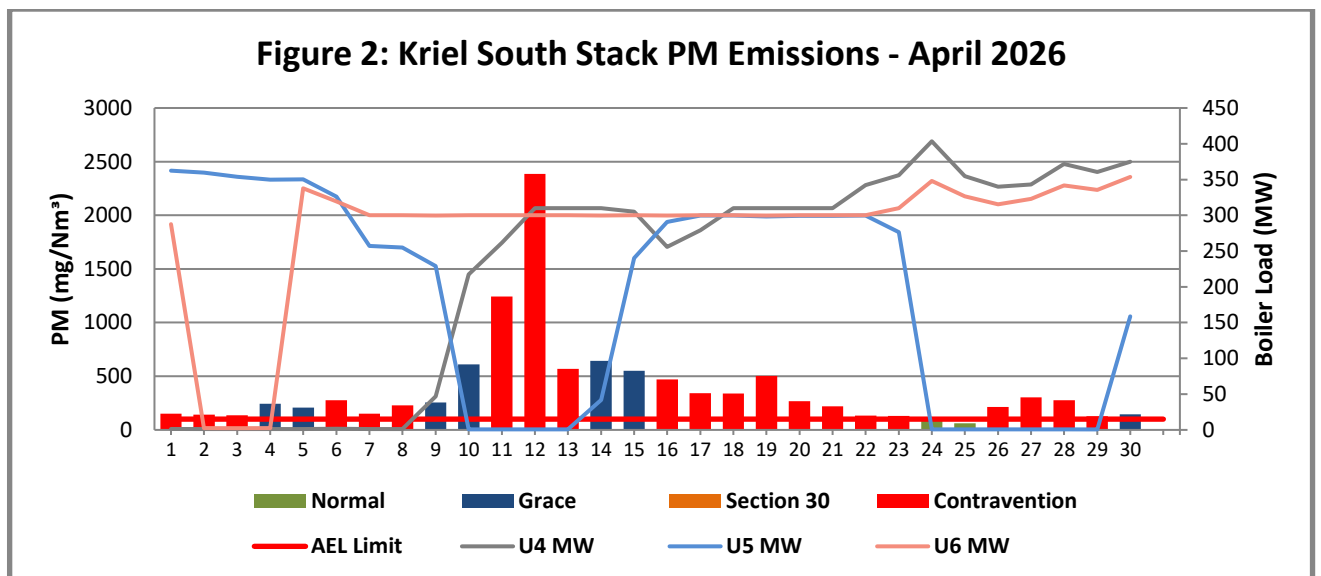


Figure 2: PM emissions for the month of April 2026 against daily emission limit (100 mg/Nm³) for the South Stack. Reasons for exceedances are indicated on Table 7 below.

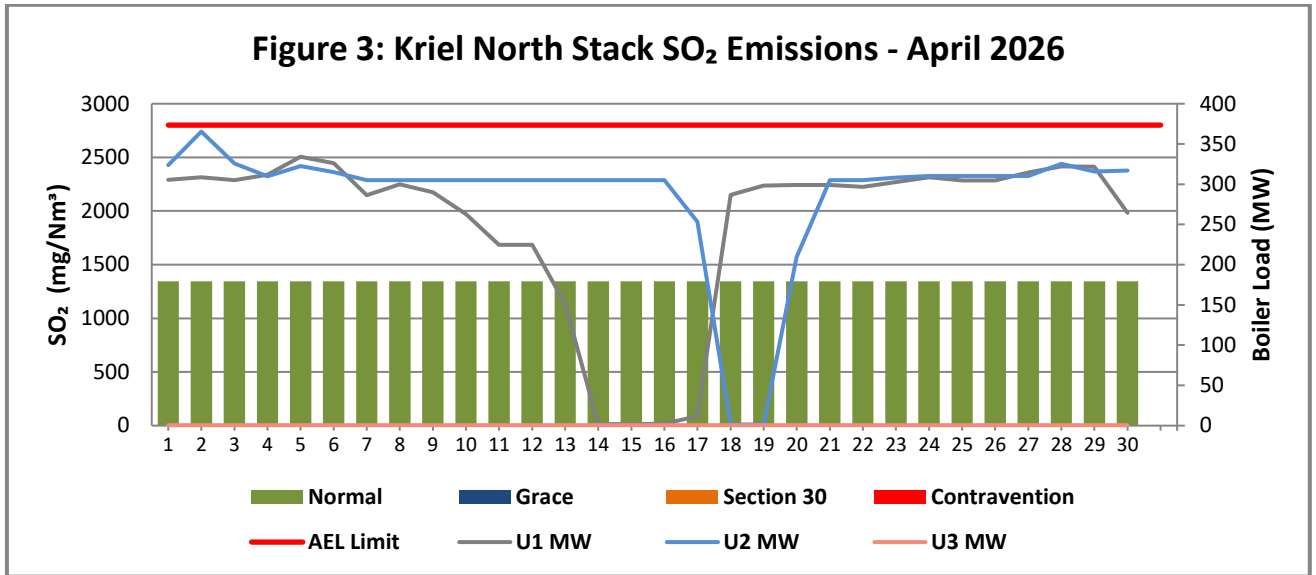


Figure 3. SO₂ emissions for the month of April 2026 against daily emission limit (2800 mg/Nm³) for the North Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

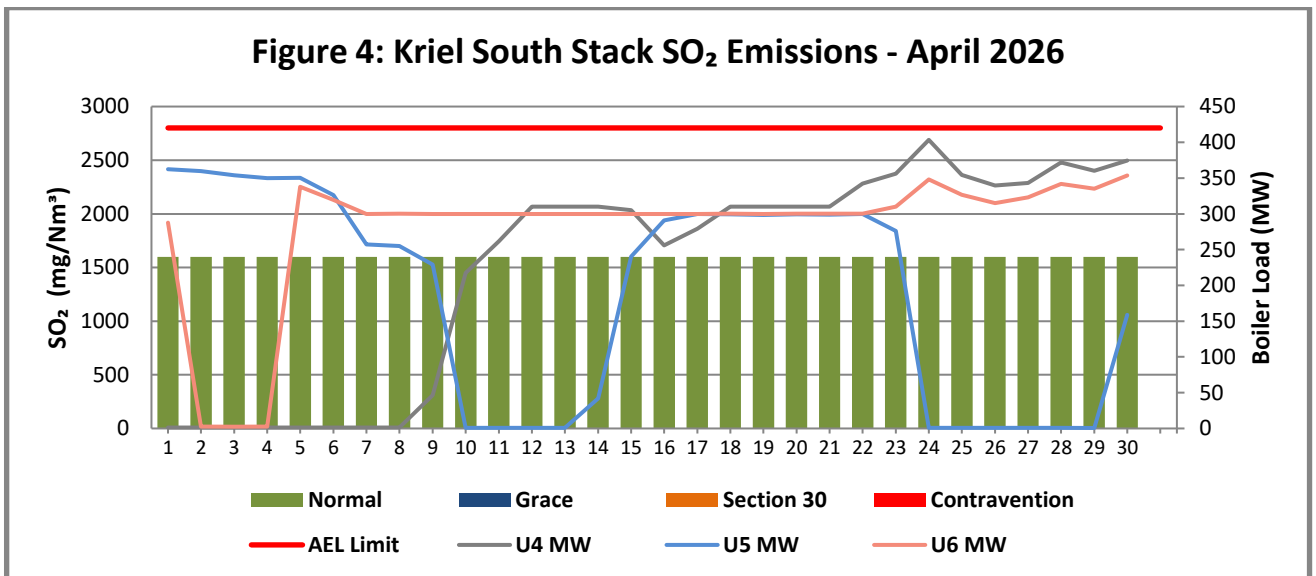


Figure 4. SO₂ emissions for the month of April 2026 against daily emission limit (2800mg/Nm³) for the South Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

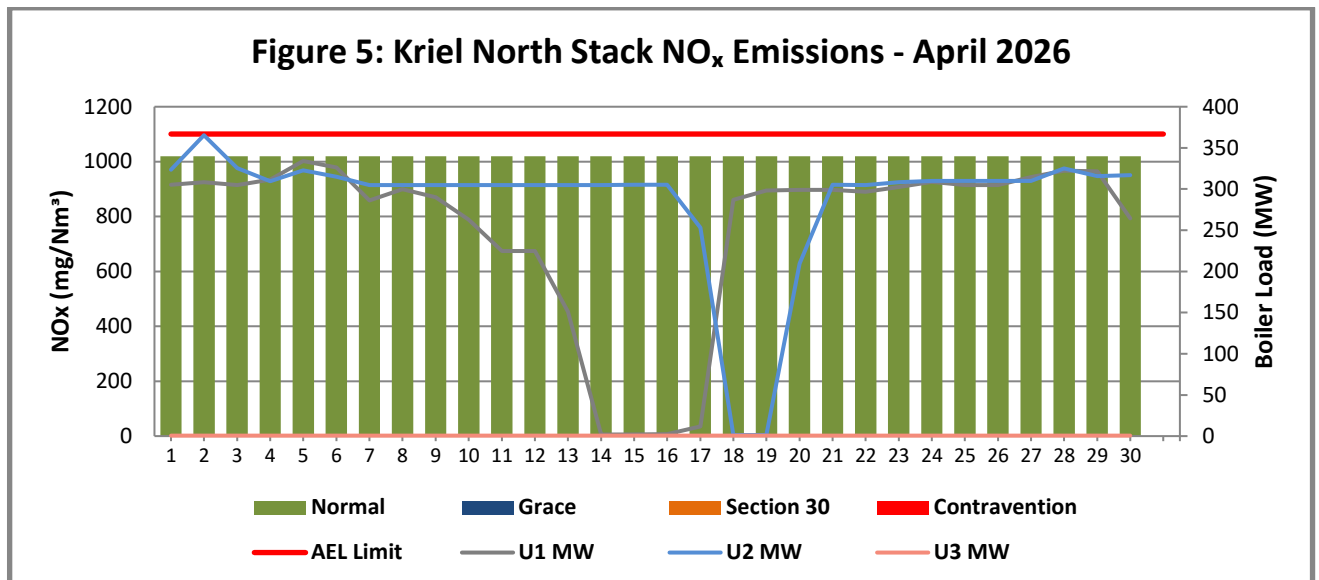


Figure 5. NO_x emissions for the month of April 2026 against daily emission limit (1100mg/Nm³) for the North Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

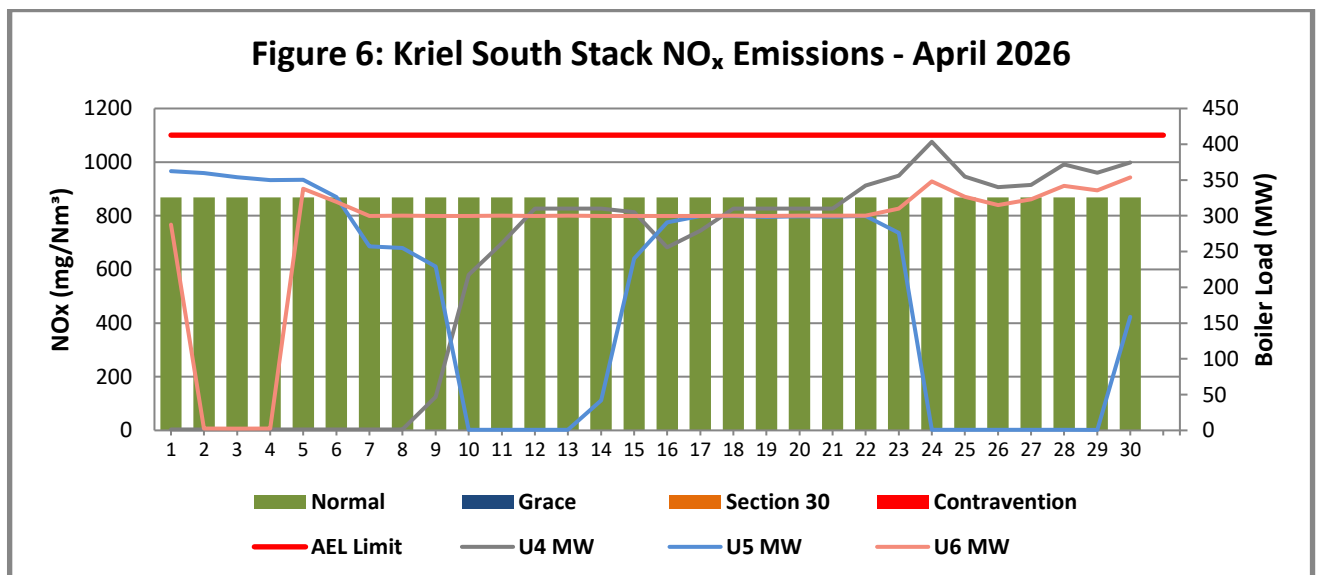


Figure 6. NO_x emissions for the month of April 2026 against daily emission limit (1100mg/Nm³) for the South Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

Table 4: Monthly tonnages for the month April 2026

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
SUM	1 857.56	8 071	5 051

Table 5: Each unit and respective days operating under normal operation and section 30 days respectively.

Table 5.1: Operating days in non-compliance to PM AEL Limit – April 2026

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Monthly Limit Exceedance	Average PM (mg/Nm ³)
North	1	4	0	25	29	452.7
South	2	7	0	21	28	381.0

Table 5.2: Operating days in compliance to SOx AEL Limit – April 2026

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm ³)
North	30	0	0	0	0	1 345.4
South	30	0	0	0	0	1 599.3

Table 5.3: Operating days in compliance to NOx AEL Limit – April 2026

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm ³)
North	30	0	0	0	0	1020.0
South	30	0	0	0	0	868.1

Light up information

Table 6: PM Start-up information for the month of April 2026

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 1	Breaker Open (BO)	4:10 pm	2026/04/13	7:45 pm	2026/04/30				
	Draught Group (DG) Shut Down (SD)	5:50 am	2026/04/14	12:15 pm	2026/05/01				
	BO to DG SD (duration)	00:13:40	DD:HH:MM	00:16:30	DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	11:20 am	2026/04/17						
	Synch. to Grid (or BC)	7:20 pm	2026/04/17						
	Fires in to BC (duration)	00:08:00	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/05/06						
	Emissions below limit from BC (duration)	18:04:40	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 2	Breaker Open (BO)	8:10 pm	2026/04/17						
	Draught Group (DG) Shut Down (SD)	10:55 am	2026/04/18						
	BO to DG SD (duration)	00:14:45	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	12:35 am	2026/04/20						
	Synch. to Grid (or BC)	5:50 am	2026/04/20						
	Fires in to BC (duration)	00:05:15	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/05/06						
	Emissions below limit from BC (duration)	15:18:10	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 4	Breaker Open (BO)	BO previously	BO previously						
	Draught Group (DG) Shut Down (SD)	n/a	n/a						
	BO to DG SD (duration)	n/a	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	3:45 pm	2026/04/08						
	Synch. to Grid (or BC)	5:05 pm	2026/04/09						
	Fires in to BC (duration)	01:01:20	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/04/25						
	Emissions below limit from BC (duration)	15:06:55	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 5	Breaker Open (BO)	9:45 pm	2026/04/09	10:15 pm	2026/04/23				
	Draught Group (DG) Shut Down (SD)	10:10 am	2026/04/10	11:00 am	2026/04/24				
	BO to DG SD (duration)	00:12:25	DD:HH:MM	00:12:45	DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	10:20 am	2026/04/14	1:55 am	2026/04/30				
	Synch. to Grid (or BC)	5:50 pm	2026/04/14	8:55 am	2026/04/30				
	Fires in to BC (duration)	00:07:30	DD:HH:MM	00:07:00	DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/04/25	12:00 am	2026/05/03				
	Emissions below limit from BC (duration)	10:06:10	DD:HH:MM	02:15:05	DD:HH:MM		DD:HH:MM		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 6	Breaker Open (BO)	9:30 pm	2026/04/01						
	Draught Group (DG) Shut Down (SD)	4:45 pm	2026/04/02						
	BO to DG SD (duration)	00:19:15	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	5:55 pm	2026/04/04						
	Synch. to Grid (or BC)	11:50 pm	2026/04/04						
	Fires in to BC (duration)	00:05:55	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/04/25						
	Emissions below limit from BC (duration)	20:00:10	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Reasons for emissions poor performance for both stacks in April 2026

Table 7: Reasons for emissions poor performance for April 2026

Start Date	Plant	Reason	Impact on Emissions	Actions	Feedback	Completion Date
Continuous Emission Monitoring Systems						
2025/03/01	South Stack	Gaseous monitor for O ₂ and NO _x malfunction	No readings available	OEM(SICK) to come on site and repair	CIE and CID requested OEM to come on site. Station awaiting SICK Automation technician.	05/06/2026
2025/06/29	North Stack	CO ppm Monitor malfunctioning	No readings available	CID and CIE to inspect	No feedback	05/06/2026
2025/06/29	South Stack	All gaseous readings are faulty. Possible monitor malfunction	No readings available	CID and CIE to inspect	No feedback	05/06/2026
Plant Failures						
05/04/2026-30/04/2026	North Stack	Sustained full dust hopper levels on unit 1 & 2 due to poor availability and/or unreliability of the overland conveyor belts (18A & 18B) and ash conditioners.	High emissions due to poor ESP performance	Maintenance to attend to defective ash conditioners	Maintenance attended the transportation defects	30/04/2026
01/04/2026-03/04/2026	South Stack	Unit 5 operating with sustained hopper levels due to transportation challenges which affected the ESP performance.	High emissions due to poor ESP performance	Maintenance to attend to transportation line defects	Unit 5 was shutdown on the 09/04/2026	09/04/2026
06/04/2026 - 29/04/2026	South Stack	Sustained full dust hopper levels on unit 5 & 6 due to poor availability and/or unreliability of the overland conveyor belts (18A & 18B) and ash conditioners	High emissions due to poor ESP performance	Maintenance to attend to defective ash conditioners	Maintenance attended the transportation defects	05/05/2026
10/04/2026-12/04/2026	South Stack	Unit 4 SO ₃ Plant off due to no converter temperature indication and incorrect MW indication	High Emissions due to no SO ₃ injection	Maintenance to attend to the incorrect indication	The indication was sorted by the 12/04/2026	12/04/2026
13/04/2026-15/04/2026	South Stack	Unit 4 SO ₃ plant dosing pump kept on tripping due to faulty Sulphur flow transmitter.	High Emissions due to no SO ₃ injection	Maintenance to attend to defective sulphur flow transmitter	The defective sulphur flow transmitter was sorted by 15/04/2026	15/04/2026

Complaints Register

Table 8: Complaint for the month of April 2026

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident	Dispersion modeling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
There was no complaint related to air quality received during the month of April 2026.					

General

The number of hours for which PM emissions exceeded the limit on the North Stack is 1 231.0 and on the South Stack is 1 518.75 for the month April 2026.

NB: The rest of the information demonstrating compliance with the emissions license conditions is supplied in the annual emission reports sent to your office.