Eskom

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Date:
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Ref: 17/AEL/MP312/11/09

Dear Ms. Simelane

KRIEL POWER STATION'S MONTHLY STACK EMISSIONS REPORT FOR THE MONTH OF JANUARY 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 January 2026. Verified emissions of particulates matter, SO_2 and NOx (as NO_2) are also included.

Raw Materials and Products

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

Raw Materials and Products used	Raw Material Type	Units	Maximum Permitted Consumption / Rate (Quantity)	Consumption / Rate in Month of January 2026
	Coal	Tons/month	1 227 600	340 545.00
	Fuel Oil	Tons/month	8 000	2 166.950
Production Rates	**Product/ ByProduct Name**	**Unit**	**Maximum Production Capacity Permitted (Quantity)**	**Production Rate in Month of January 2026**
	Energy	GWh	3 000/2 232	467.500
	Ash	Tons/month	320 000	78 694.957
	RE PM	kg/MWh	not specified	1.180

Abatement Technology

Table 2: Abatement Equipment Control Technology for January 2026.

Associated Unit/Stack	Technology Type	Actual Efficiency (%)	Technology Type	SO_3 Utilisation (%)
Unit 1	ESP& SO3	Off-line	SO3 Plant	Off-line
Unit 2	ESP& SO3	Off-line	SO3 Plant	Off-line
Unit 3	ESP& SO3	Off-line	SO3 Plant	Off-line
Unit 4	ESP& SO3	90.85%	SO3 Plant	34.90
Unit 5	ESP& SO3	99.19%	SO3 Plant	100.00
Unit 6	ESP& SO3	99.22%	SO3 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 January 2026.

Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.6-1.2 (%)	0.732
Ash Content	27-32 (%)	23.109

Monthly Monitor Reliability

Associated Unit/Stack	PM (%)	SOx (%)	NOx (%)
North	Off	Off	Off
South	98.8	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

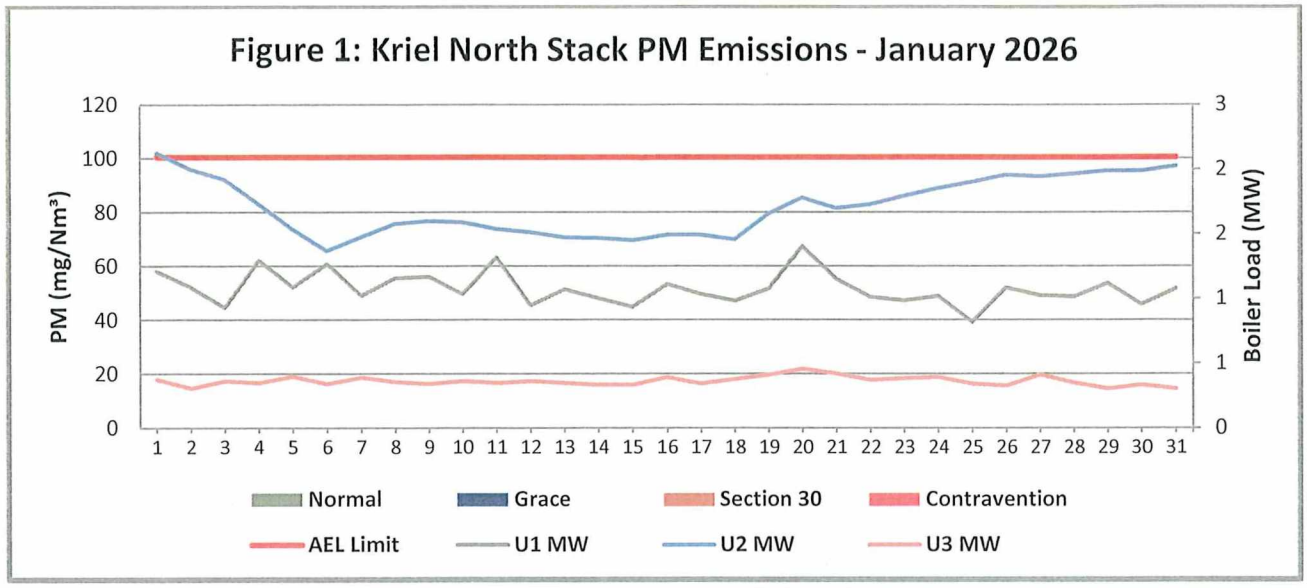

Figure 1: PM emissions for the month of January 2026 against daily emission limit (100 mg/Nm³) for the North Stack. Units were off on the north stack for the month of January 2026.

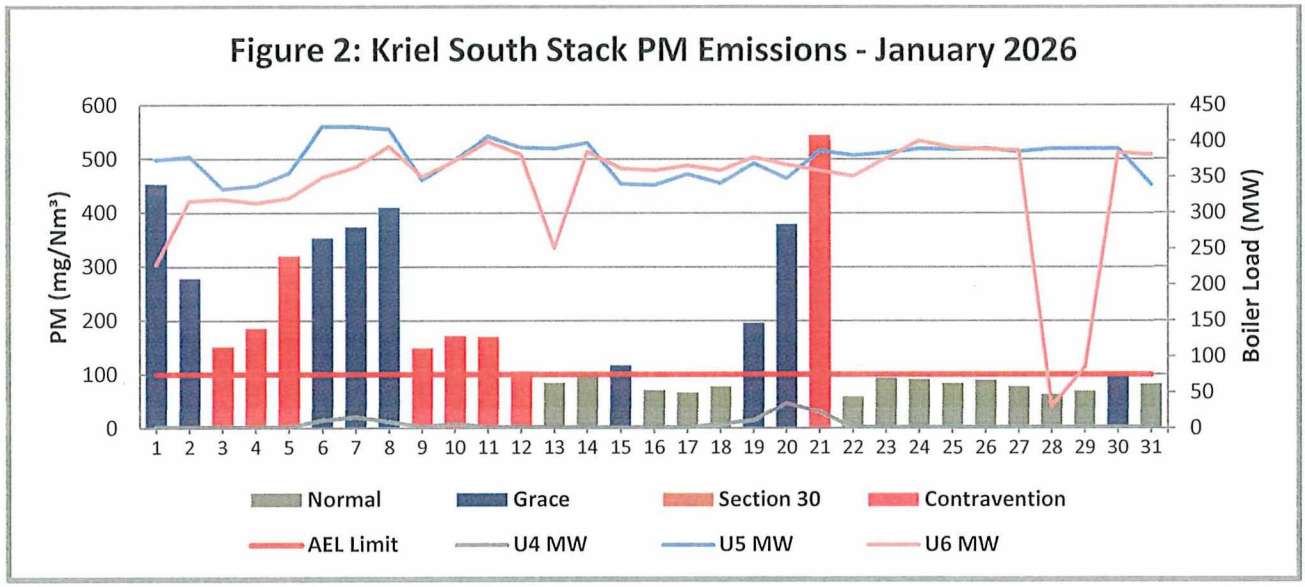

Figure 2: PM emissions for the month of January 2026 against daily emission limit (100 mg/Nm³) for the South Stack. Reasons for exceedances are indicated on Table 7 below.

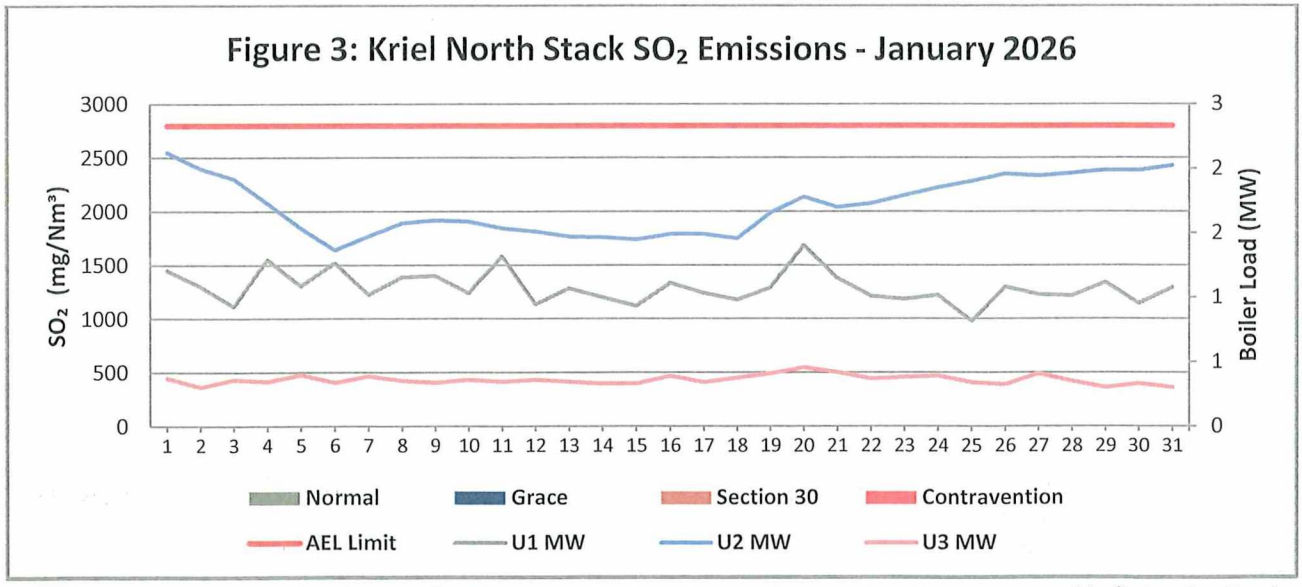

Figure 3. SO_2 emissions for the month of January 2026 against daily emission limit (2800 mg/Nm³) for the North Stack. Units on the north stack were off for the month of January 2026.

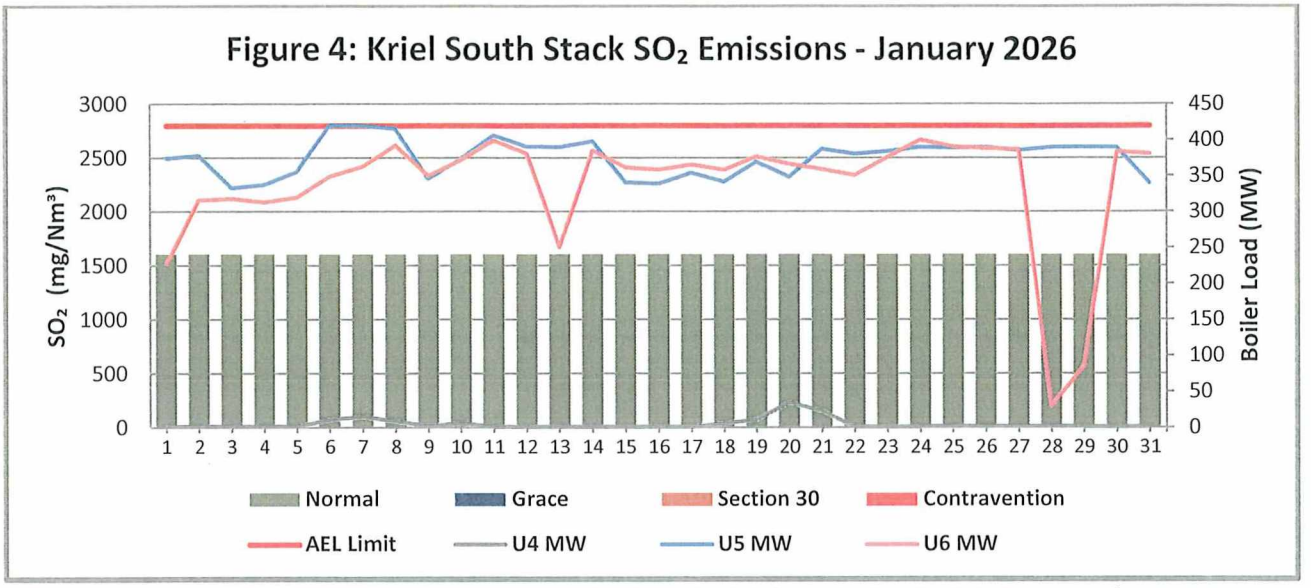

Figure 4. SO_2 emissions for the month of January 2026 against daily emission limit (2800mg/Nm³) for the South Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

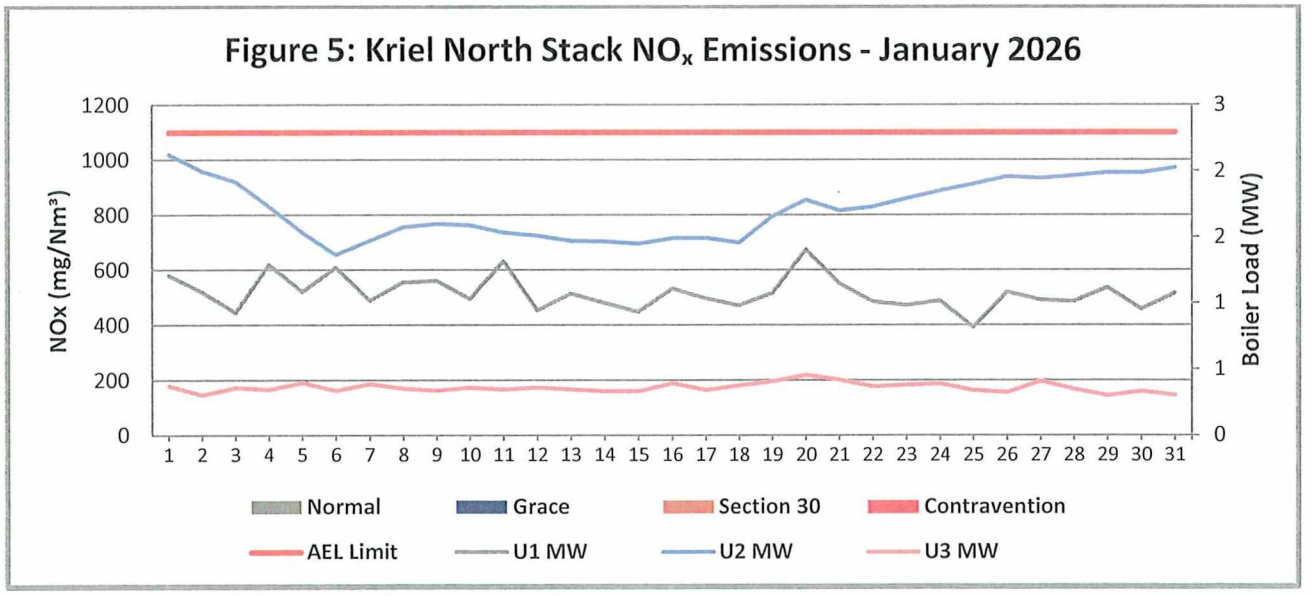

Figure 5. NO_x emissions for the month of January 2026 against daily emission limit (1100mg/Nm³) for the North Stack. Units were off on the North stack for the month of January 2026.

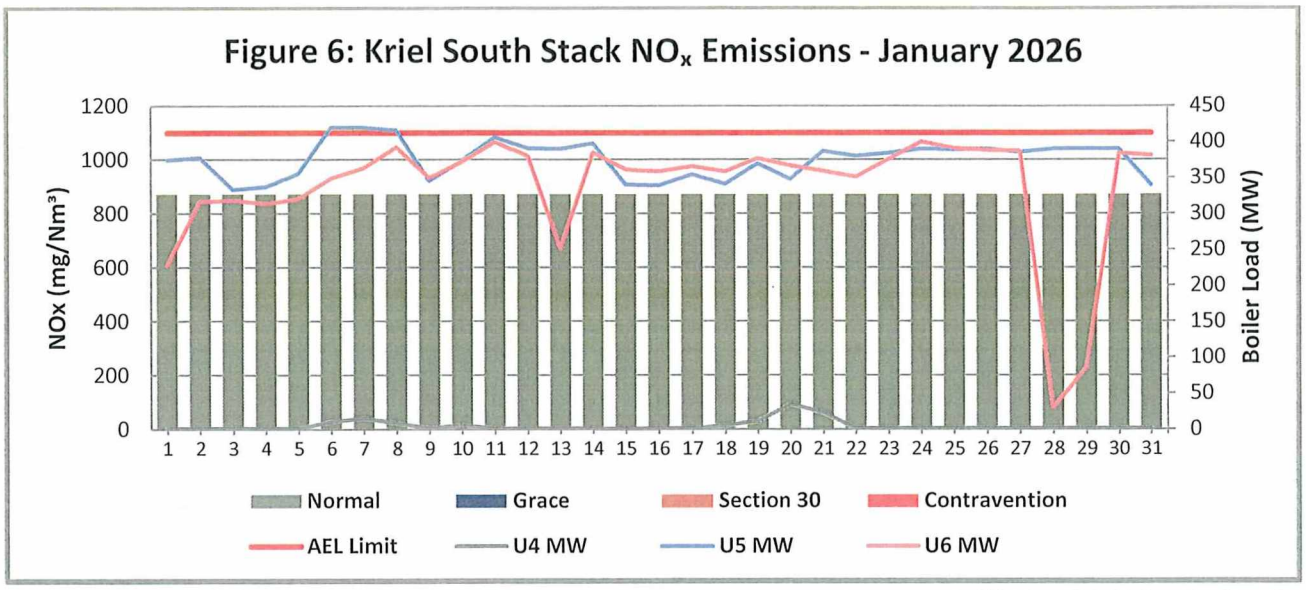

Figure 6. NO_x emissions for the month of January 2026 against daily emission limit (1100mg/Nm³) for the South Stack. Moreover, reason for constant reading is attributed to the fact that all gaseous readings are faulty due to possible monitor malfunctioning.

Table 4: Monthly tonnages for the month January 2026

Unit	PM (tons)	SO_2 (tons)	NO_2 (tons)
SUM	590.77	5 418	2 941

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 – January 2026

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Monthly Limit Exceedance	Average PM (mg/Nm³)
North	Off	Off	Off	Off	Off	Off
South	14	9	0	8	17	179.7

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm³)
North	Off	Off	Off	Off	Off	Off
South	31	0	0	0	0	1 606.9

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

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm³)
North	Off	Off	Off	Off	Off	Off
South	31	0	0	0	0	872.2

Light up information

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

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 1	Breaker Open (BO)	4:30 am	2025/12/27	2:25 am	2025/12/31				
	Draught Group (DG) Shut Down (SD)	6:35 am	2025/12/27	5:35 pm	2025/12/31				
	BO to DG SD (duration)	00:02:05	DD:HH:MM	00:15:10	DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	1:35 pm	2025/12/27						
	Synch. to Grid (or BC)	8:15 pm	2025/12/27						
	Fires in to BC (duration)	00:06:40	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2025/12/30						
	Emissions below limit from BC (duration)	02:03:45	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)	8:55 pm	2025/12/31						
	Draught Group (DG) Shut Down (SD)	9:00 pm	2026/01/01						
	BO to DG SD (duration)	01:00:05	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time								
	Synch. to Grid (or BC)								
	Fires in to BC (duration)		DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)								
	Emissions below limit from BC (duration)		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)	3:10 pm	2026/01/21						
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD						
	BO to DG SD (duration)	n/a	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Fires in time	7:20 am	2026/01/19						
	Synch. to Grid (or BC)	4:45 pm	2026/01/19						
	Fires in to BC (duration)	00:09:25	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/01/23						
	Emissions below limit from BC (duration)	03:07:15	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)	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	11:50 am	2025/12/29						
	Synch. to Grid (or BC)	6:05 pm	2025/12/29						
	Fires in to BC (duration)	00:06:15	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/01/17						
	Emissions below limit from BC (duration)	18:05:55	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Event Description		Event 1		Event 2		Event 3		Event 4	
Unit 6	Breaker Open (BO)	2:55 pm	2026/01/01	2:40 pm	2026/01/13	1:40 am	2026/01/28	BO previously	BO previously
	Draught Group (DG) Shut Down (SD)	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	DG did not trip or SD	6:10 am	2026/01/28	n/a	n/a
	BO to DG SD (duration)	n/a	DD:HH:MM	n/a	DD:HH:MM	00:04:30	DD:HH:MM	n/a	DD:HH:MM
	Fires in time	11:35 pm	2025/12/30	2:55 pm	2026/01/01	2:40 pm	2026/01/13	1:10 am	2026/01/29
	Synch. to Grid (or BC)	9:35 am	2025/12/31	9:55 pm	2026/01/01	8:50 pm	2026/01/13	4:05 pm	2026/01/29
	Fires in to BC (duration)	00:10:00	DD:HH:MM	00:07:00	DD:HH:MM	00:06:10	DD:HH:MM	00:14:55	DD:HH:MM
	Emissions below limit from BC (end date)	12:00 am	2026/01/17	12:00 am	2026/01/17	12:00 am	2026/01/17	12:00 am	2026/02/01
	Emissions below limit from BC (duration)	16:14:25	DD:HH:MM	15:02:05	DD:HH:MM	03:03:10	DD:HH:MM	02:07:55	DD:HH:MM

Reasons for emissions poor performance for both stacks in January 2026

Table 7: Reasons for emissions poor performance for January 2026

Start Date	Plant	Reason	Impact on Emissions	Actions	Feedback	Completion Date
Continuous Emission Monitoring Systems						
2025/03/01	South Stack	Gaseous monitor for O2 and NOx 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.	TBC
2025/06/29	North Stack	CO ppm Monitor malfunctioning	No readings available	CID and CIE to inspect	No feedback	TBC
2025/06/29	South Stack	All gaseous readings are faulty. Possible monitor malfunction	No readings available	CID and CIE to inspect	No feedback	TBC
Plant Failures						
03/01/2026 - 05/01/2026	South Stack	Unit 6 sustained full dust hoppers due 6B conditioner gearbox that failed to turn, diesel compressors that tripped on low fuel level, 18B tail end bearing damaged, 18B tripped on rip detector number 27 due to spillages at the tail end and unit 6 blow tanks on permit due to normal route leaking.	High emissions due to poor ESP performance	Operating to continously monitor the transportation of the ash to reduce hopper levels		TBC

10/01/2026-12/01/2026	South Stack	Unit 6 & 5 poor ESP performance due to stuck plate rappers. Plate rappers got stuck due to sustained full dust hoppers.	High emissions due to poor ESP performance	Operating to continously monitor the transportation of the ash to reduce hopper levels	Most stuck rappers were revived on the 11/01/2026	2026/01/12
21/01/2026	South Stack	Unit 4 SO3 not in service due to low load	High emissions due to no SO3 injection		Unit offload on the 21/01/2026	2026/01/21

Complaints Register

Table 8: Complaint for the month of January 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 January 2026.					

General

The number of hours for which PM emissions exceeded the limit on the North Stack is 0 and on the South Stack is 1 377.25 for the month January.

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