

Ms Nompumelelo Simelane
Nkangala District Municipality
PO BOX 437
MIDDELBURG
1050

Date:
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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 MAY 2025

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 May 2025. 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 May 2025

Raw Materials and Products used	Raw Material Type	Units	Maximum Permitted Consumption / Rate (Quantity)	Consumption / Rate in Month of May 2025
	Coal	Tons/month	1 227 600	644 209.00
	Fuel Oil	Tons/month	8 000	6 521.92
Production Rates	Product/ By-Product Name	Unit	Maximum Production Capacity Permitted (Quantity)	Production Rate in Month of May 2025
	Energy	GWh	3 000/2 232	989.000
	Ash	Tons/month	320 000	7215.2
	RE PM	kg/MWh	not specified	6.482

Abatement Technology

Table 2: Abatement Equipment Control Technology for May 2025.

Associated Unit/Stack	Technology Type	Actual Efficiency (%)	Technology Type	SO ₃ Utilisation (%)
Unit 1	ESP& SO3	97.04%	SO3 Plant	100.00
Unit 2	ESP& SO3	96.88%	SO3 Plant	100.00
Unit 3	ESP& SO3	97.07%	SO3 Plant	100.00
Unit 4	ESP& SO3	92.19%	SO3 Plant	100.00
Unit 5	ESP& SO3	94.56%	SO3 Plant	100.00
Unit 6	ESP& SO3	90.41%	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 May 2025.

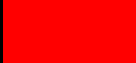
Characteristic	Stipulated Range (Unit)	Monthly Average Content
Sulphur Content	0.6-1.2 (%)	0.80
Ash Content	27-32 (%)	25.27

Monthly Monitor Reliability

Associated Unit/Stack	PM (%)	SO _x (%)	NO _x (%)
North	50.76	97.45	100.00
South	34.19	96.43	100.00

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

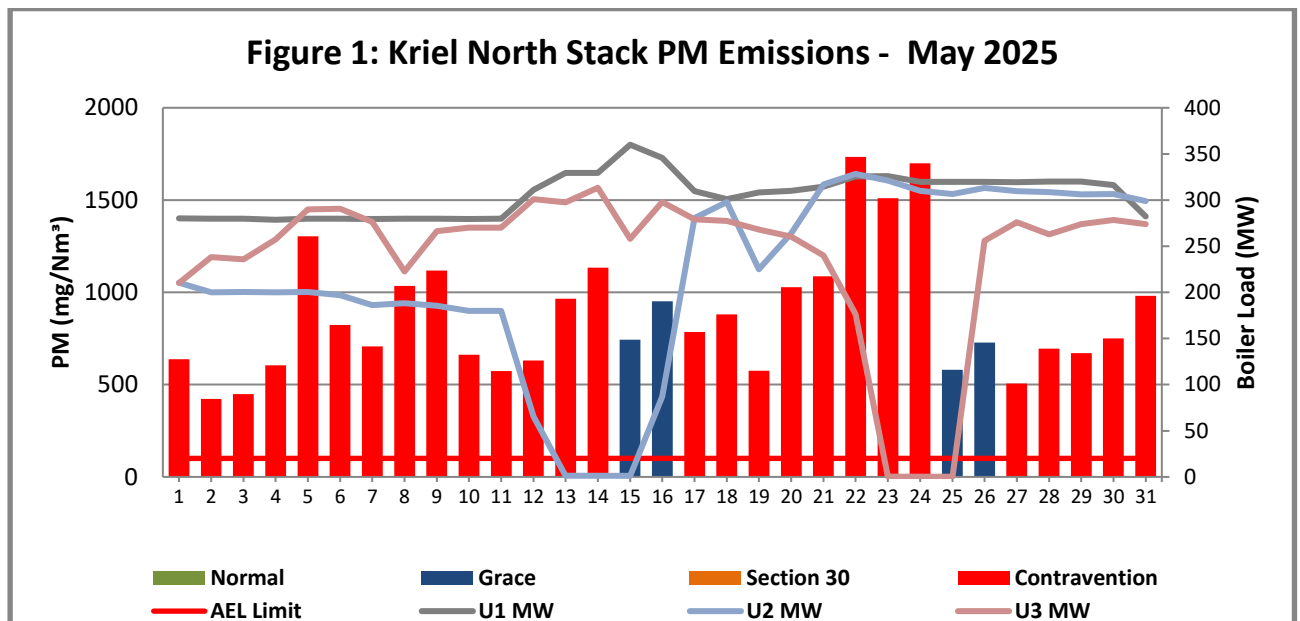


Figure 1: PM emissions for the month of May 2025 against daily emission limit (100 mg/Nm³) for the North Stack. Reasons for exceedances are indicated on Table 7 below.

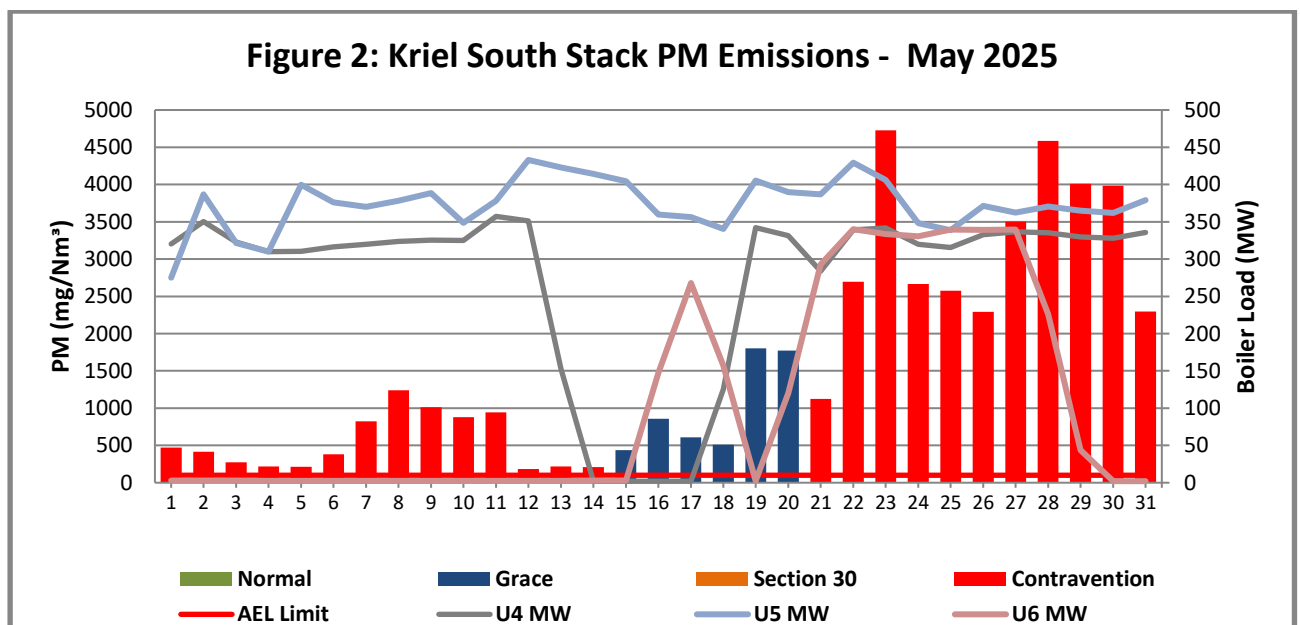


Figure 2: PM emissions for the month of May 2025 against daily emission limit (100 mg/Nm³) for the South Stack. Reasons for exceedances are indicated on Table 7 below.

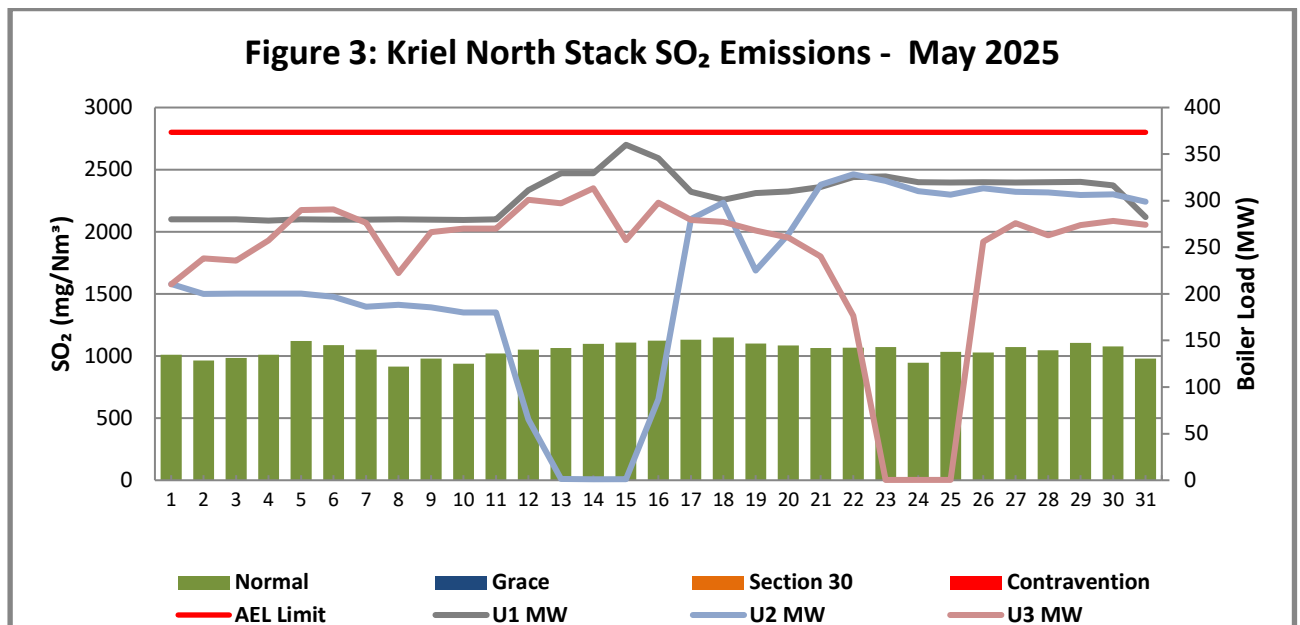


Figure 3. SO₂ emissions for the month of May 2025 against daily emission limit (2800 mg/Nm³) for the North Stack.

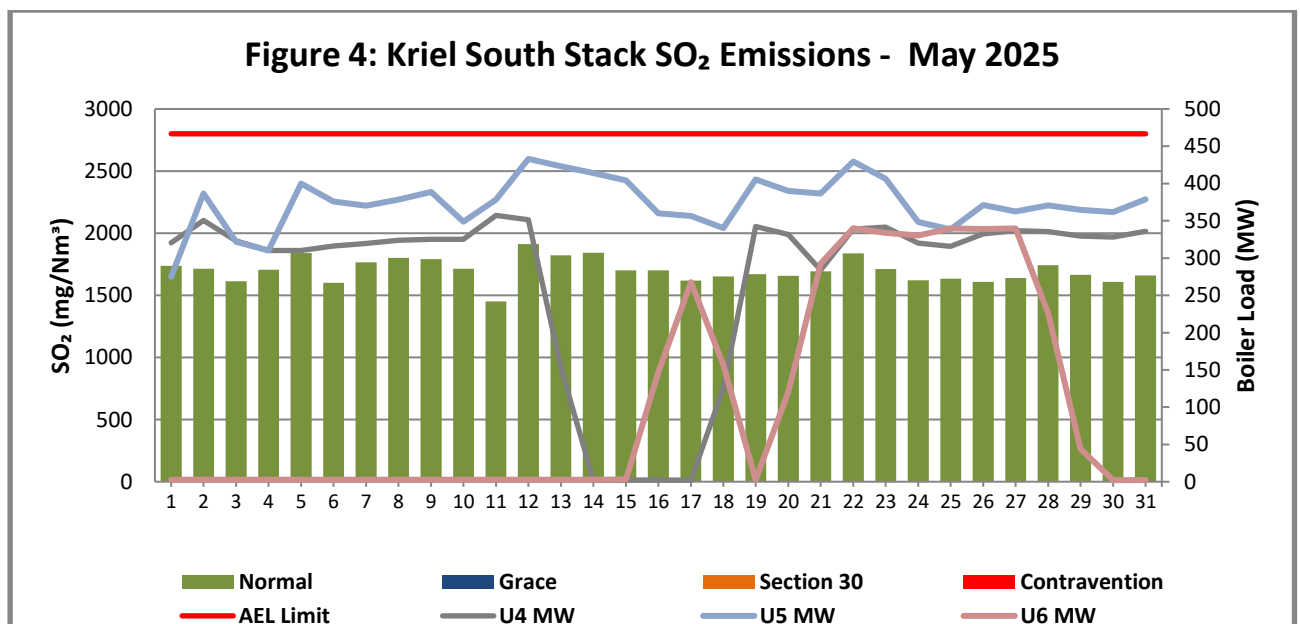


Figure 4. SO₂ emissions for the month of May 2025 against daily emission limit (2800mg/Nm³) for the South Stack.

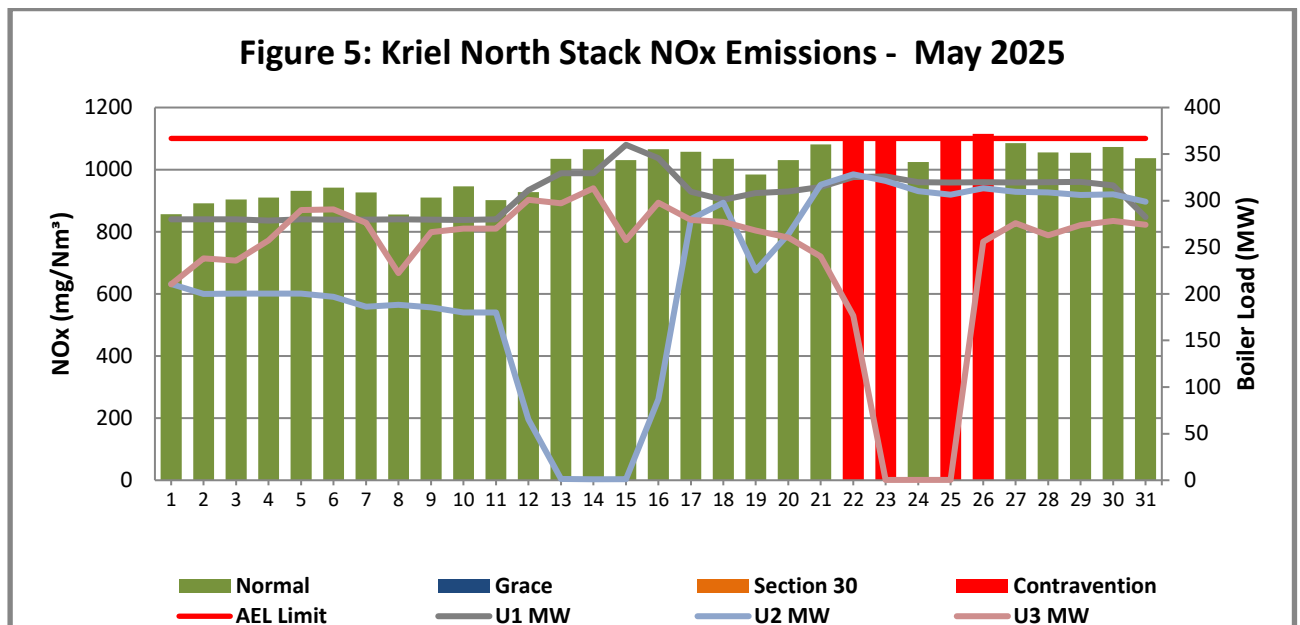


Figure 5. NO₂ emissions for the month of May 2025 against daily emission limit (1100mg/Nm³) for the North Stack.

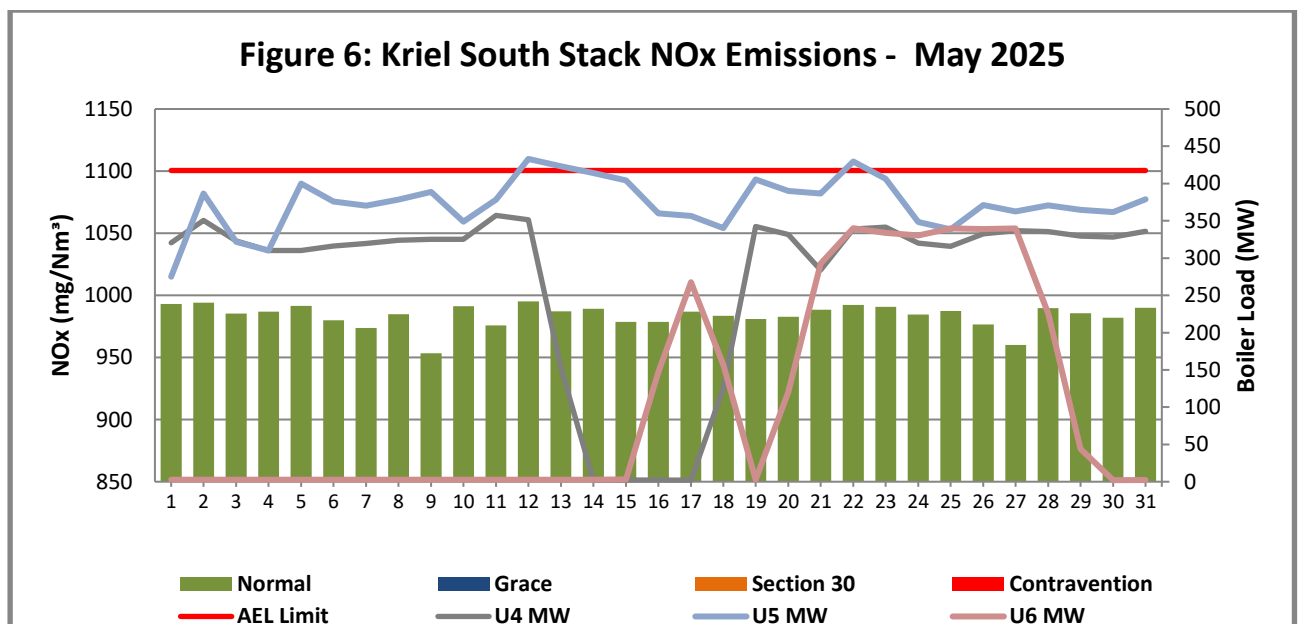


Figure 6. NO₂ emissions for the month of May 2025 against daily emission limit (1100mg/Nm³) for the South Stack.

Table 4: Monthly tonnages for the month May 2025

Unit	PM (tons)	SO ₂ (tons)	NO ₂ (tons)
SUM	7 215.2	7 708.3	5 508.2

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 – May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Monthly Limit Exceedance	Average PM (mg/Nm ³)
North	0	4	0	27	31	869.9
South	0	6	0	25	31	1 546.6

Table 5.2: Operating days in compliance to SOx AEL Limit - May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average SOx (mg/Nm ³)
North	31	0	0	0	0	1 047.9
South	31	0	0	0	0	1 701.3

Table 5.3: Operating days in compliance to NOx AEL Limit – May 2025

Associated Unit/Stack	Normal	Grace	Section 30	Contravention	Total Exceedance	Average NOx (mg/Nm ³)
North	27	0	0	4	4	1 001.6
South	31	0	0	0	0	983.9

Light up information**Table 6:** PM Start-up information for the month of May 2025

North Stack	Event 1		Event 2		Event 3		Event 4	
Unit No.	No event		Unit 2		Unit 2		Unit 3	
Breaker Open (BO)					8:45 am	2025/05/12	BO previously	BO previously
Draught Group (DG) Shut Down (SD)					9:10 pm	2025/05/12	n/a	n/a
BO to DG SD (duration)		DD:HH:MM		DD:HH:MM	00:12:25	DD:HH:MM	n/a	DD:HH:MM
Fires in time					5:15 am	2025/05/16		
Synch. to Grid (or BC)					12:45 pm	2025/05/16		
Fires in to BC (duration)		DD:HH:MM		DD:HH:MM	00:07:30	DD:HH:MM		DD:HH:MM
Emissions below limit from					8:55 am	2025/06/02		

BC (end date)								
Emissions below limit from BC (duration)		DD:HH:MM		DD:HH:MM	16:20:10	DD:HH:MM		DD:HH:MM

North Stack ...Cont.	Event 1		Event 2		Event 3		Event 4	
Unit No.	Unit 3		No event		No event		No event	
Breaker Open (BO)	4:45 pm	2025/05/22						
Draught Group (DG) Shut Down (SD)	6:10 pm	2025/05/22						
BO to DG SD (duration)	00:01:25	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	7:05 pm	2025/05/25						
Synch. to Grid (or BC)	12:25 am	2025/05/26						
Fires in to BC (duration)	00:05:20	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)	8:55 am	2025/06/02						
Emissions below limit from BC (duration)	07:08:30	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

South Stack	Event 1		Event 2		Event 3	Event 4	
Unit No.	Unit 4		Unit 5		Unit 5	Unit 6	
Breaker Open (BO)	10:10 am	2025/05/13	BO previously	BO previously		BO previously	BO previously
Draught Group (DG) Shut Down (SD)	8:45 pm	2025/05/14	n/a	n/a		n/a	n/a
BO to DG SD (duration)	01:10:35	DD:HH:MM	n/a	DD:HH:MM	DD:HH:MM	n/a	DD:HH:MM
Fires in time	9:45 pm	2025/05/17				2:35 am	2025/05/13
Synch. to Grid (or BC)	10:55 am	2025/05/18				8:50 am	2025/05/16

Fires in to BC (duration)	00:13:10	DD:HH:MM		DD:HH:MM	DD:HH:MM	03:06:15	DD:HH:MM
Emissions below limit from BC (end date)	8:55 am	2025/06/02				12:00 am	2025/06/03
Emissions below limit from BC (duration)	14:22:00	DD:HH:MM		DD:HH:MM	DD:HH:MM	17:15:10	DD:HH:MM

South Stack ...Cont.	Event 1		Event 2		Event 3		Event 4	
Unit No.	Unit 6		Unit 6		no event		no event	
Breaker Open (BO)	11:30 am	2025/05/18	3:40 pm	2025/05/28				
Draught Group (DG) Shut Down (SD)	12:05 pm	2025/05/18	4:30 pm	2025/05/29				
BO to DG SD (duration)	00:00:35	DD:HH:MM	01:00:50	DD:HH:MM		DD:HH:MM		DD:HH:MM
Fires in time	2:55 pm	2025/05/19						
Synch. to Grid (or BC)	10:30 am	2025/05/20						
Fires in to BC (duration)	00:19:35	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM
Emissions below limit from BC (end date)	12:00 am	2025/06/03						
Emissions below limit from BC (duration)	13:13:30	DD:HH:MM		DD:HH:MM		DD:HH:MM		DD:HH:MM

Reasons for emissions poor performance for both stacks in May 2025

Table 7: Reasons for emissions poor performance for May 2025

Start Date	Plant	Reason	Impact on Emissions	Action	Feedback	End Date
01/05/2025-31/05/2025	North and south stack	Unavailability of the overland conveyor belts (18A & 18 B). The belt is stopped frequently to allow for cleaning of the ash spillage around the tail end pulley and Ash conditioners that needs to be unblocked from time to time.	The consequence of failure to transport was ash accumulation inside the fields and stuck plate rappers	Opportunity outage is required for ESP internal inspection.		TBC

Complaints Register

Table 8: Complaint for the month of May 2025

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 May 2025.					

General

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