AIMS

Report

Monthly Air Quality

August 2026

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Note

This report has been finalised with the available information at the time of its compilation.

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1. INTRODUCTION

This monthly air quality report, provided by the Richards Bay Clean Air Association (RBCAA), offers a comprehensive overview of air quality monitoring data for the month under review. It aims to provide a detailed analysis of meteorology, particulate matter (PM_{10} and $PM_{2.5}$), sulphur dioxide (SO_2), and total reduced sulphur (TRS) levels measured by the RBCAA's monitoring network. Each monthly report focuses on a single calendar month, highlighting any notable incidents or exceedances of the applicable ambient air quality standards during that period. By analysing the monthly data, trends and patterns in air quality can be identified, helping to assess potential environmental impacts and mitigate any adverse effects. Dust fallout is monitored separately under the National Dust Control Regulations (GN R.827 of 2013) and is reported outside this document; it is therefore not assessed here.

In addition to the monthly reports, RBCAA publishes annual air quality reports summarising the key findings and trends observed over a complete calendar year. These annual reports provide a comprehensive overview of the region's overall air quality performance and long-term trends. They provide stakeholders with a thorough understanding of air quality and serve as a valuable tool for informed decision-making, policy development, and environmental management. By consistently monitoring and reporting air quality data, the RBCAA aims to promote transparency, facilitate ongoing environmental assessments, and ensure the well-being of the local community and the surrounding environment.



Figure 1.1: RBCAA monitoring network.

The RBCAA monitoring network comprises eleven (11) primary monitoring stations (Figure 1.1 and Table 1.1). Airport and Felixton Met are meteorological stations, and Meerensee is a rain-gauge site; none of the three operates continuous air-quality analysers. The network also includes a secondary screening network comprising eleven (11) AirGradient monitors, the eleventh of which was commissioned at Scorpio on 18 August 2026; this network is reported separately in the monthly AirGradient report (Project 2026001 Report 023). Network operations, maintenance and calibration activity, recorded data interruptions and equipment status for the reporting period are reported in the operational report for August 2026 (Project 2026001 Report 024) and are not repeated here.

All timestamps are treated as time-beginning. Except for wind-rose outputs, data completeness is calculated from valid 10-minute records relative to the scheduled 10-minute intervals. Wind-rose valid data is calculated from valid hourly averages relative to scheduled hours; wind speeds below 1.0 m/s are classified as calm and excluded from directional-sector totals. Fixed clock-hour and calendar-day averages are used; rolling averages are not calculated. The secondary screening network is operated for indicative spatial screening only. Screening data are not assessed against the National Ambient Air Quality Standards in this report and are compiled and reported separately.

Table 1.1: Primary monitoring network station coordinates.

Station	Latitude	Longitude	Elevation (m)
Airport	-28.738161	32.093332	33.99
Arboretum	-28.752377	32.062791	25.20
Brackenham	-28.731325	32.039059	56.28
CBD	-28.744693	32.054851	32.26
eSikhaleni	-28.865278	31.911679	14.54
Felixton	-28.829255	31.893636	56.59
Meerensee	-28.772104	32.101308	14.89
Felixton Met	-28.836487	31.892513	27.87
Harbour West	-28.787297	32.027133	7.36
Richardia	-28.762769	32.066068	19.96
Scorpio	-28.769694	32.034282	29.39

2. METEOROLOGY

2.1. Data Completeness

Meteorological data completeness for August 2026, calculated from valid 10-minute records relative to scheduled 10-minute records, is shown in Table 2.1. Rainfall is assessed on a daily basis (31 days), because a 10-minute rainfall record is non-zero only when the gauge tips; a 10-minute count therefore measures logger uptime rather than rainfall recovery. Wind speed and wind direction are reported separately because they fail independently. The same figures are reported in Report 024, Table 2.6, and the recorded data interruptions are itemised in Report 024, Table 2.4.

Table 2.1: Meteorological data capture.

Station	Wind speed (%)	Wind direction (%)	Temperature (%)	RH (%)	Pressure (%)	SR (%)	Rain (%)
Airport	98.8	98.8	98.8	98.8	98.8	98.8	-
Arboretum	98.6	100.0	100.0	-	-	-	-
Brackenham	100.0	100.0	100.0	-	-	-	-
CBD	100.0	100.0	100.0	100.0	-	-	-
CBD Rain	-	-	-	-	-	-	96.8
eSikhaleni	98.9	98.9	98.9	98.9	-	-	-
Felixton Met	100.0	100.0	100.0	100.0	-	-	-
Harbour West	100.0	100.0	100.0	-	-	-	-
Meerensee Rain	-	-	-	-	-	-	96.8

Notes:

1. *Red – Not acceptable for statistical purposes (<80%),*
2. *Orange – Below the RBCAA SANAS-related reporting threshold (<90%),*
3. *Yellow – below the RBCAA operational target (<95%)*
4. *Grey – parameter not monitored at the station.*

Missing Data (Meteorology):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*
- *CBD Rain – Power outage (1 day with <80% data capture, 31 August 2026).*
- *Meerensee Rain – Power outage (1 day with <80% data capture, 31 August 2026).*

2.2. Wind Roses

Monthly wind roses for August 2025 and August 2026 at Arboretum are presented in Figure 2.1. For August 2026, dominant sectors, applying the >6.25% sector criterion and clockwise ordering from north, were N–NE (34.3% combined), with a secondary SSW–WSW component (32.7%). These directional frequencies identify transport sectors but do not, by themselves, establish the governing synoptic mechanism.

Typically, there is an increase in light (1 to 3 m/s) to moderate (3 to 6 m/s) wind from the NNW during periods that include autumn and winter conditions and the seasonal increase in fresh (6 to 8 m/s) to strong (> 8 m/s) N to NE wind during periods that include spring and early summer. Strong southerly to SSW winds occur throughout the year and are typically associated with the arrival of coastal lows and cold fronts. Coastal lows are more frequent during summer, which explains the slightly higher proportion of these winds. The preceding paragraph describes the general seasonal wind climatology of the Richards Bay area and is not derived from the August 2026 record.

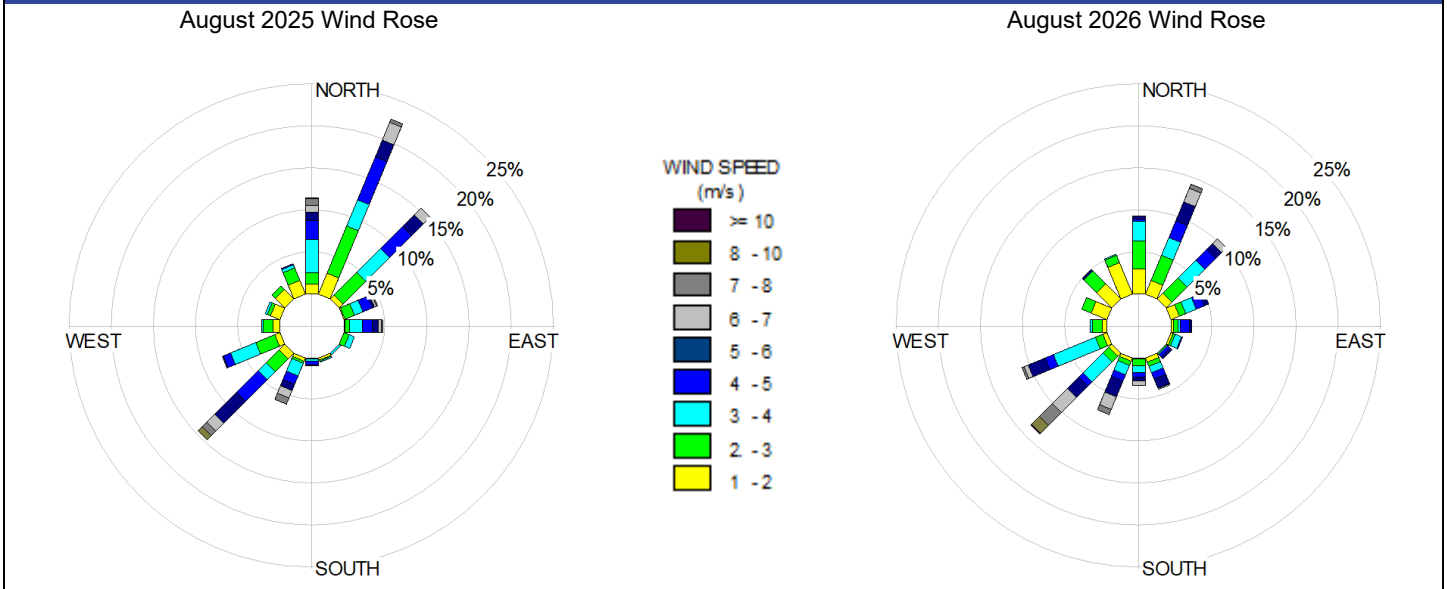
The August 2026 wind distribution was dominated by the NNE (14.3%) and SW (13.9%) sectors, with secondary contributions from the WSW (11.4%), NE (10.4%) and N (9.6%) sectors, indicating a predominantly northeast–southwest airflow pattern during the month.

Diurnal wind roses for August 2026 are shown in Figure 2.2. Early-morning flow (00:00–05:59) was dominated by the NW–NNE sectors (53.9%), with a secondary SW–WSW component (25.6%). Morning flow (06:00–11:59) retained NNW–

NE dominance (48.1%), with an SSW–WSW secondary component (35.4%). Afternoon flow (12:00–17:59) was almost evenly divided, with SSE–SW winds marginally dominant (46.2%) over NE–E winds (44.1%). Evening flow (18:00–23:59) was dominated by N–NE winds (37.0%), with a secondary SW–WSW component (32.0%). Interpretation as sea-breeze or land-breeze circulation should be supported by concurrent synoptic and atmospheric-stability evidence.

The Arboretum wind record carries recurring short losses of one to four 10-minute records that affect wind speed only (62 records in August 2026, following 81 records in July 2026); wind-speed availability was 98.6% against 100.0% for wind direction. The cause has not been established and is carried as an open item in Report 024 (Table 4.1, item 16). The losses are distributed through the month rather than concentrated in any period, so they are not expected to bias the sector frequencies materially. Still, the wind roses in this section should be read with this qualification in mind.

Arboretum



Period	Wind Speed	Dominant Sector 1		Dominant Sector 2		Calms	Valid Data
August 2025	3.8 m/s	N-NE	49.5%	SW-WSW	22.3%	0.4%	99.1%
August 2026	3.7 m/s	N-NE	34.3%	SSW-WSW	32.7%	1.6%	99.5%

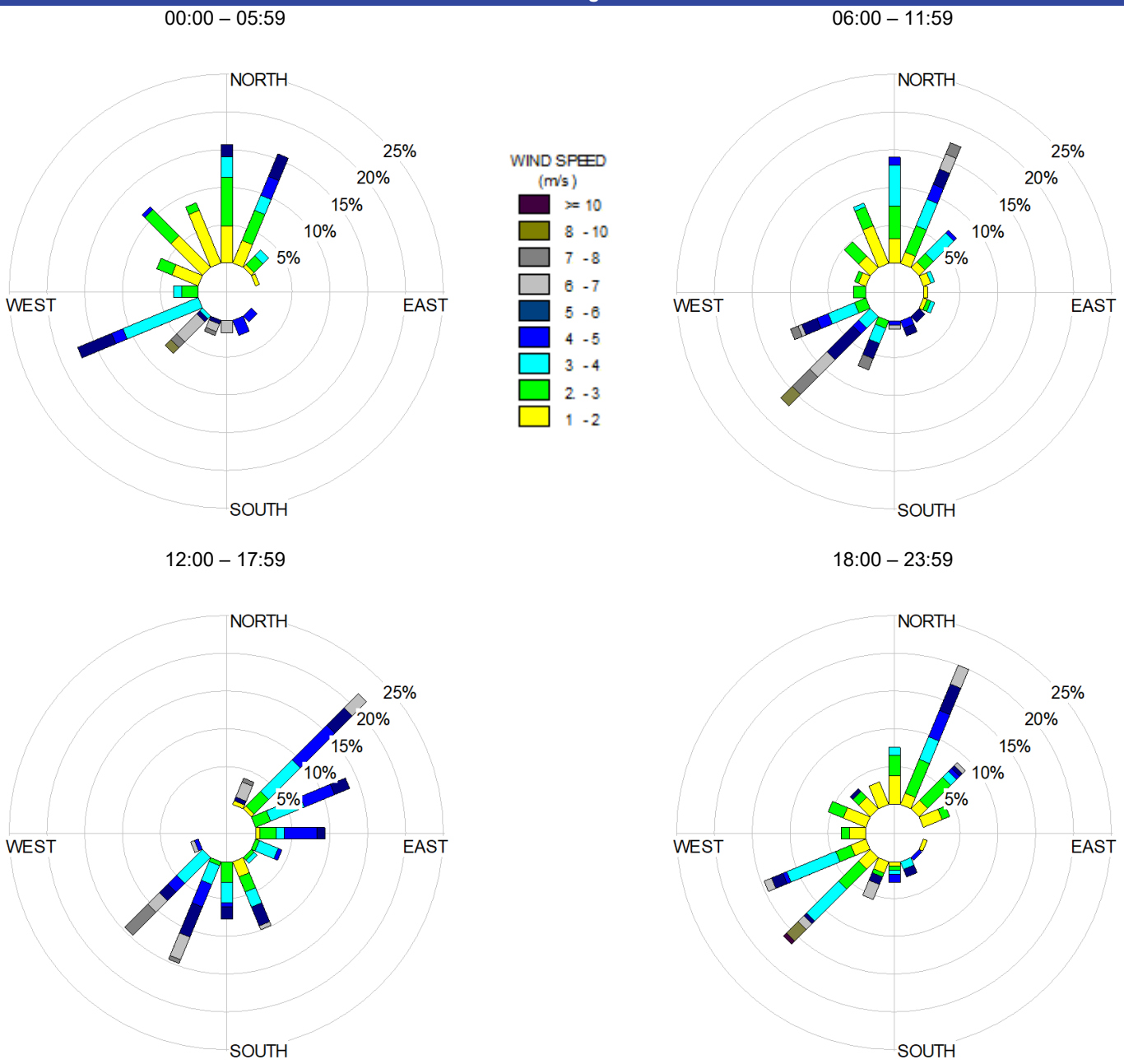
Figure 2.1: Wind roses – monthly.

Notes (Wind Roses):

Valid Data – an hour is counted as valid only where both wind speed and wind direction are present in the 1-hour average data; the denominator is the total possible hours in the period. Wind-speed and wind-direction availability are reported separately in Table 2.1.

Sector frequencies – expressed as a share of valid non-calm hours (wind speed ≥ 1.0 m/s). Dominant groupings are contiguous sectors each exceeding 6.25%, ranked by combined share.

Arboretum – August 2026



Period	Wind Speed	Dominant Sector 1		Dominant Sector 2		Calms	Valid Data
00:00 – 05:59	3.3 m/s	NW-NNE	53.9%	SW-WSW	25.6%	2.2%	98.9%
06:00 – 11:59	3.8 m/s	NNW-NE	48.1%	SSW-WSW	35.4%	1.6%	98.9%
12:00 – 17:59	4.4 m/s	SSE-SW	46.2%	NE-E	44.1%	0.0%	100.0%
18:00 – 23:59	3.2 m/s	N-NE	37.0%	SW-WSW	32.0%	2.7%	100.0%

Figure 2.2: Wind roses – diurnal.

2.3. Rainfall

Monthly rainfall totals measured at the reporting locations are presented in Table 2.2 and Figure 2.3 to Figure 2.8 (see Appendix E for tabulated rainfall data).

August rainfall ranged from 43 mm at South32 to 100 mm at RBCT, with a network average of 83 mm. The network average is calculated from the unrounded station totals.

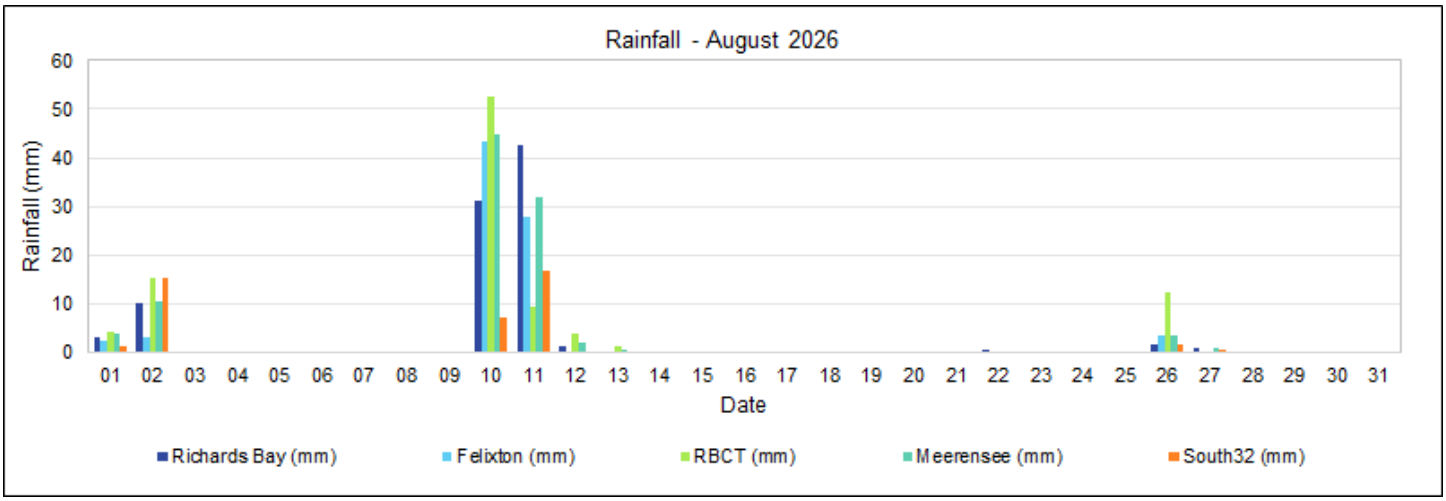


Figure 2.3: Rainfall.

Table 2.2: Rainfall – monthly totals and network average.

Month	Richards Bay (mm)	Felixton (mm)	RBCT (mm)	Meerensee (mm)	South32 (mm)	Average (mm)
August 2026	92	81	100	99	43	83

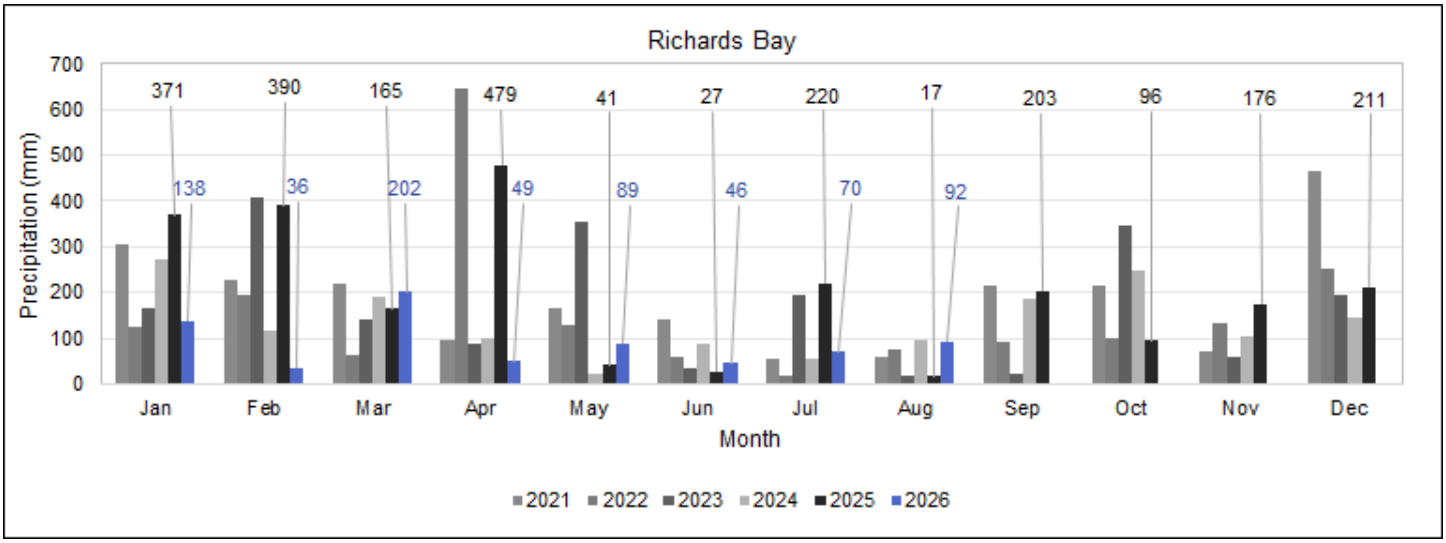


Figure 2.4: Rainfall – Richards Bay.

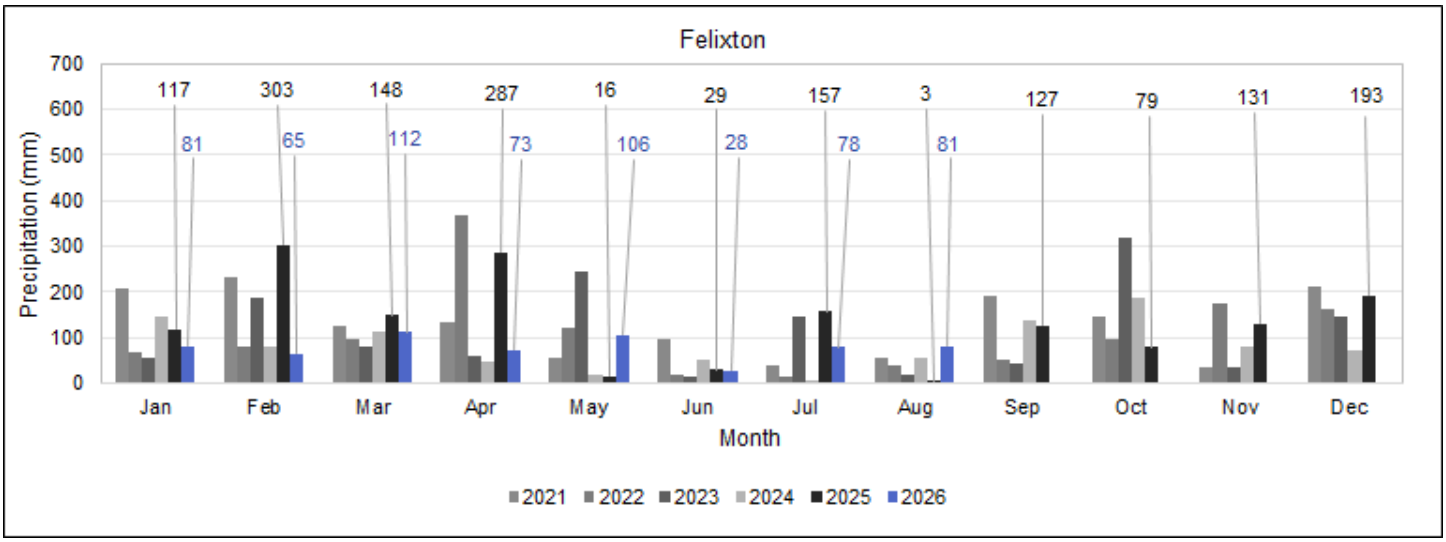


Figure 2.5: Rainfall – Felixton.

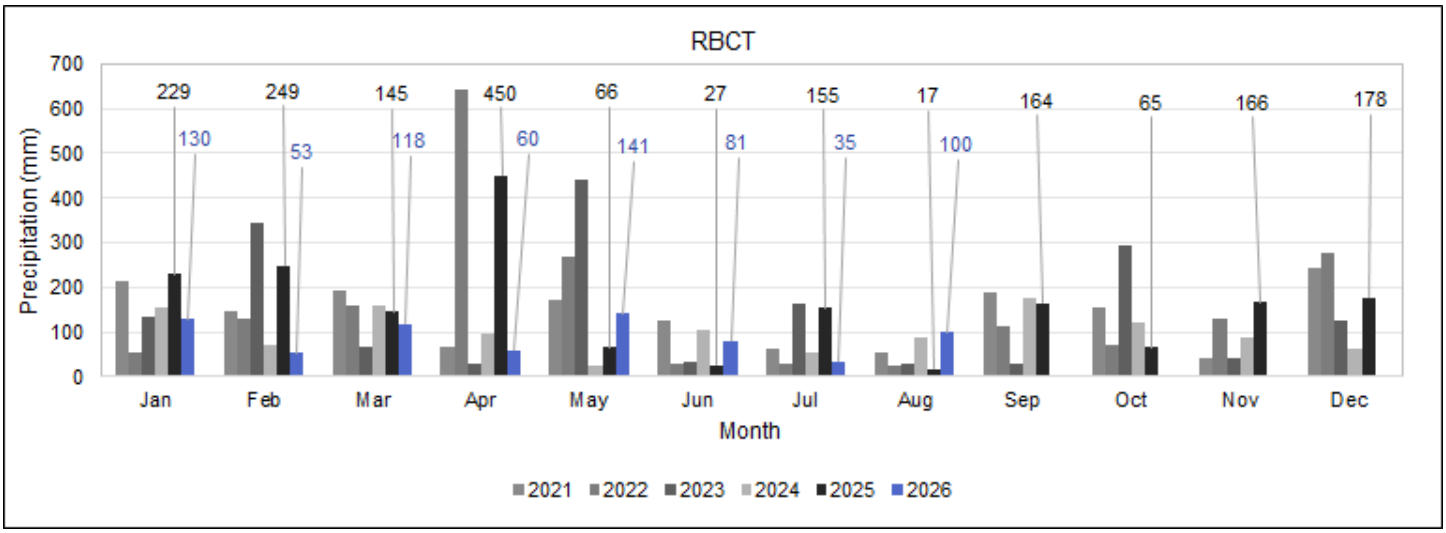


Figure 2.6: Rainfall – RBCT.

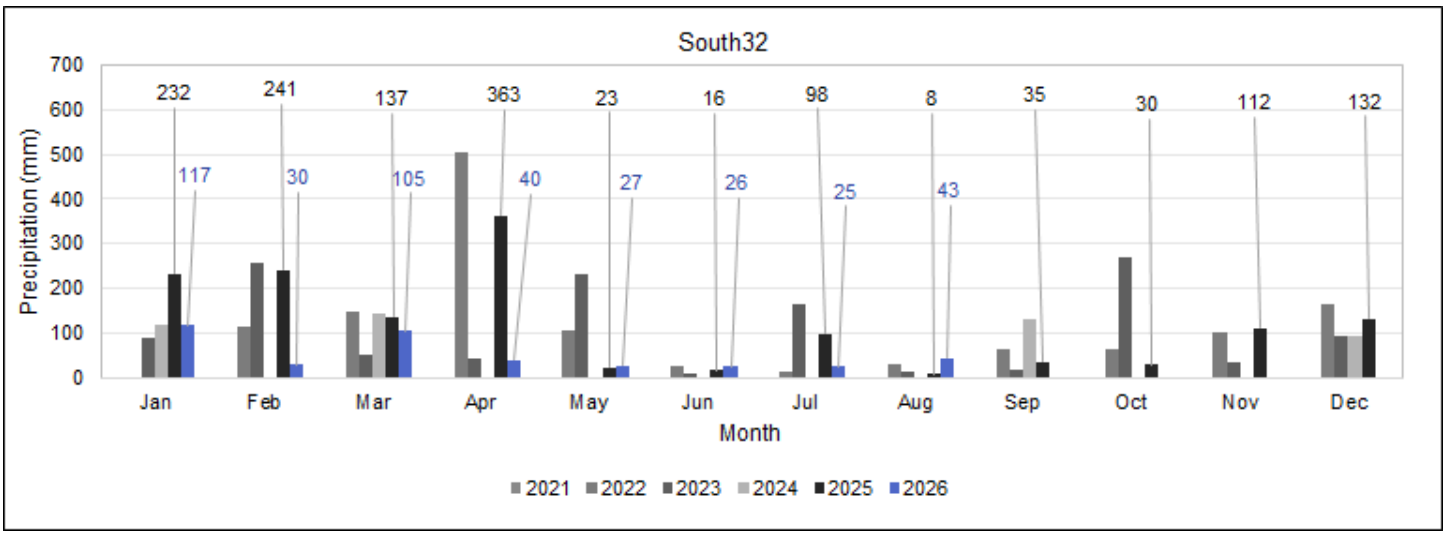


Figure 2.7: Rainfall – South32.

Note: South32 experienced rain-gauge data-quality issues in 2024.

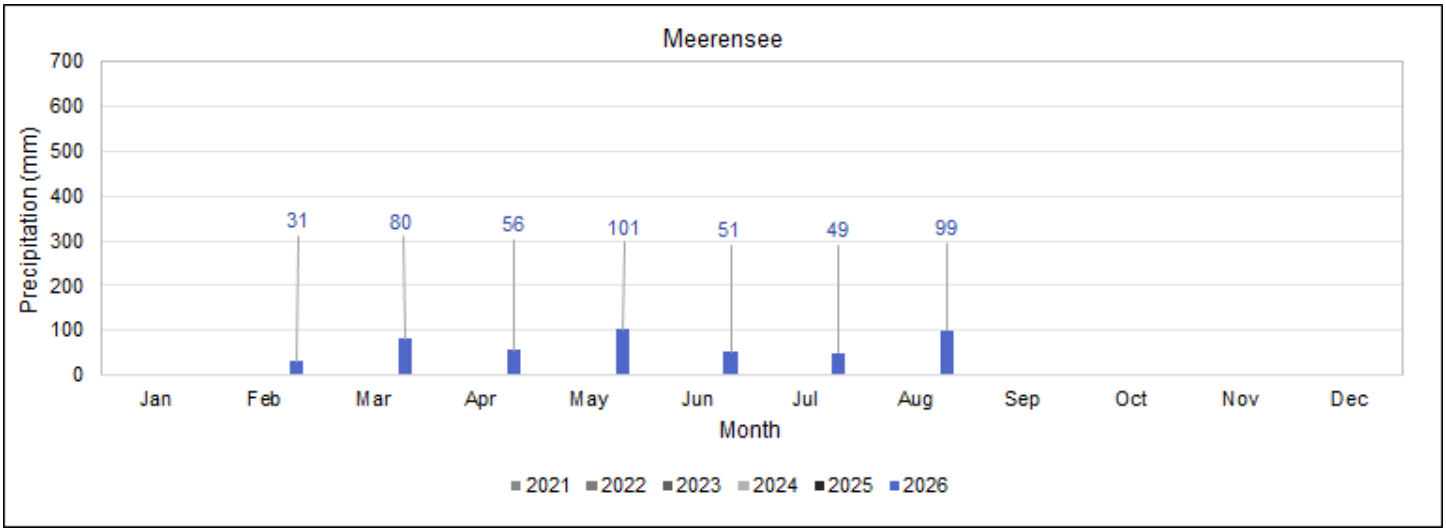


Figure 2.8: Rainfall – Meerensee.

Note: The Meerensee rain gauge was commissioned in February 2026.

3. AIR QUALITY COMPLAINTS

Detailed complaint records are maintained, updated, and distributed weekly to the RBCAA's complaints mailing list. The following sections summarise and analyse the complaints received during August 2026. Please see Appendix F for the complaints log. Abbreviations and defined terms used in this report are listed in Appendix A, and the quality-assurance basis for the reported data is set out in Appendix B.

3.1. Complaint Overview

Sixty-eight (68) air quality complaints were received during August 2026, compared with thirteen (13) complaints logged in August 2025. The daily complaint count and monthly historical comparison are shown in Figure 3.1 and Figure 3.2.

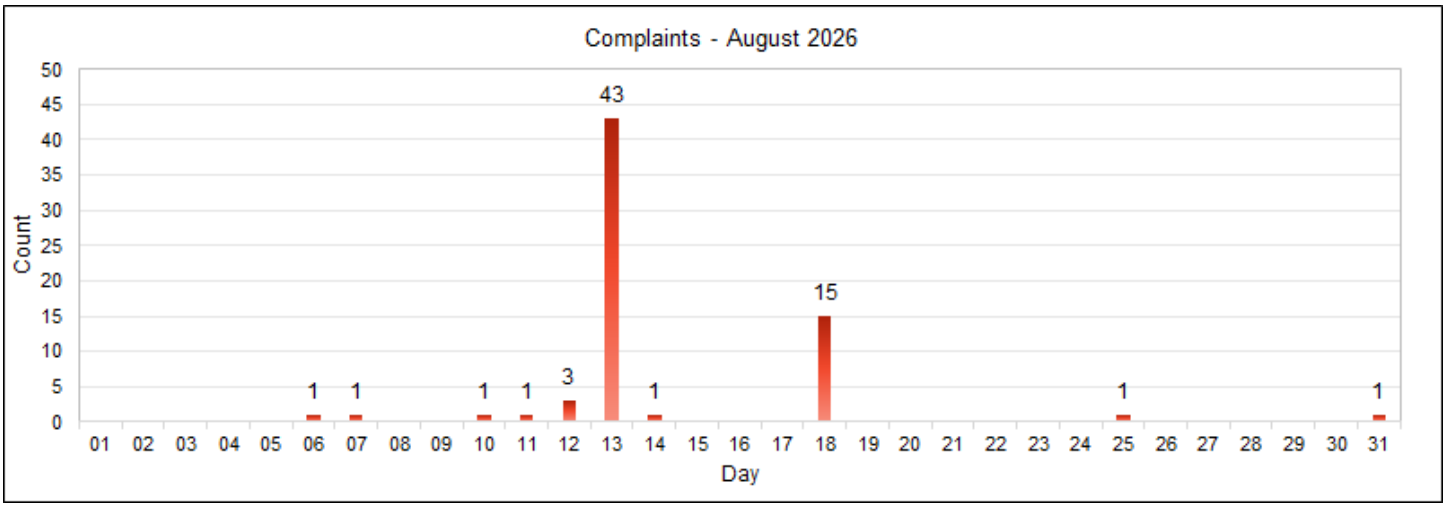


Figure 3.1: Complaints – daily.

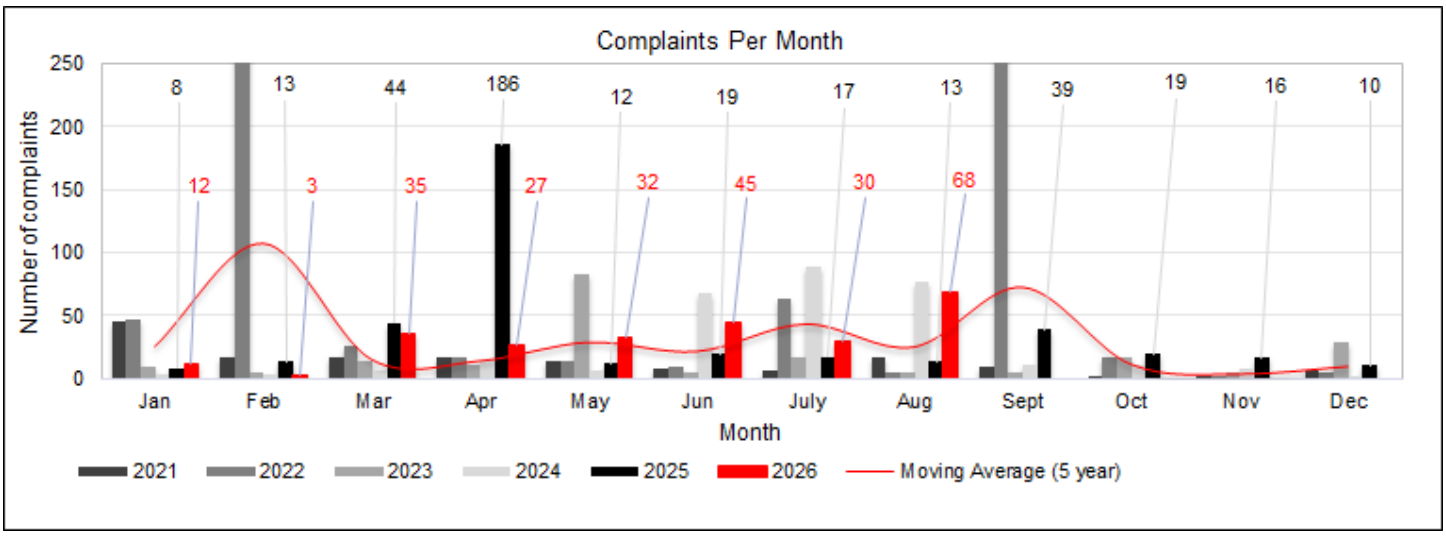


Figure 3.2: Complaints – historical monthly comparison.

3.2. Complaints Distribution

The distribution of complaints in August 2026 by region, type, and source is presented in Figure 3.3, Figure 3.4, and Figure 3.5.

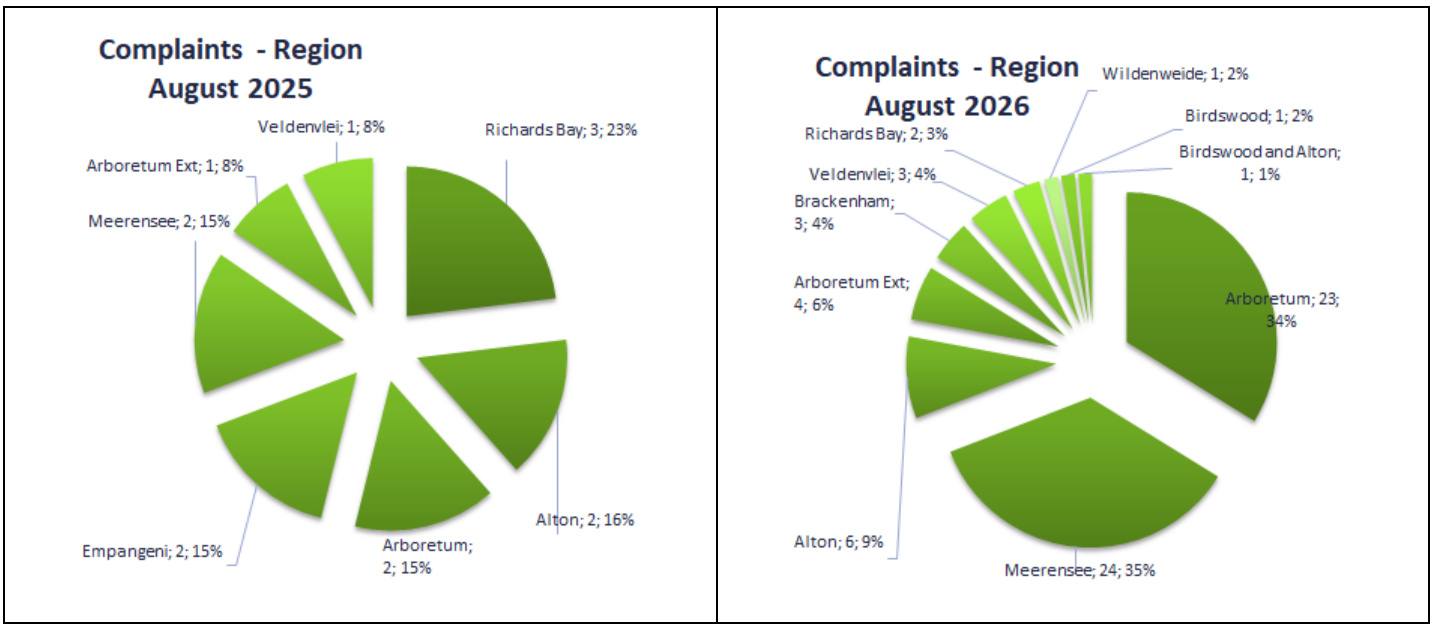


Figure 3.3: Complaints – region.

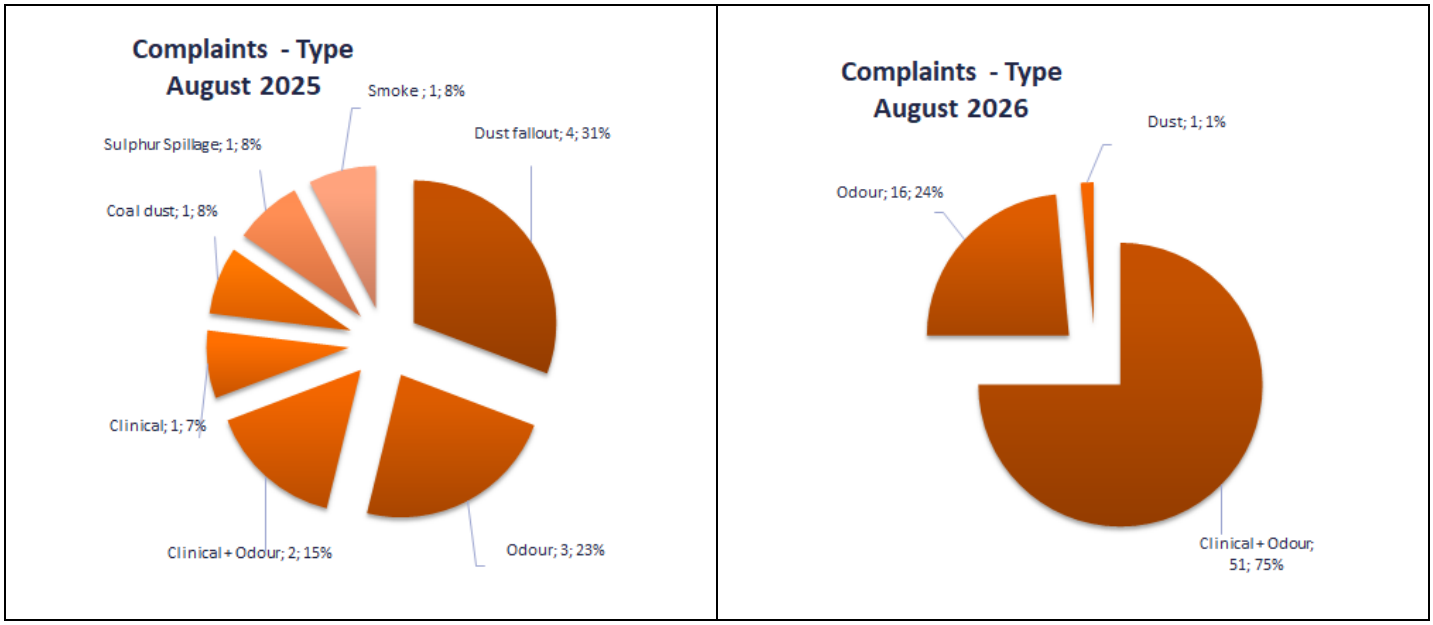


Figure 3.4: Complaints – type.

The complaints received were allocated as follows: Mondi (66, 97.1%), CoU-Sewerage (1, 1.5%), IDZ (1, 1.5%); percentages do not sum to 100% owing to rounding.

Complaint-source allocations reflect the best available assessment of timing, location, meteorology and operational information. They indicate a likely association and do not establish definitive causation.

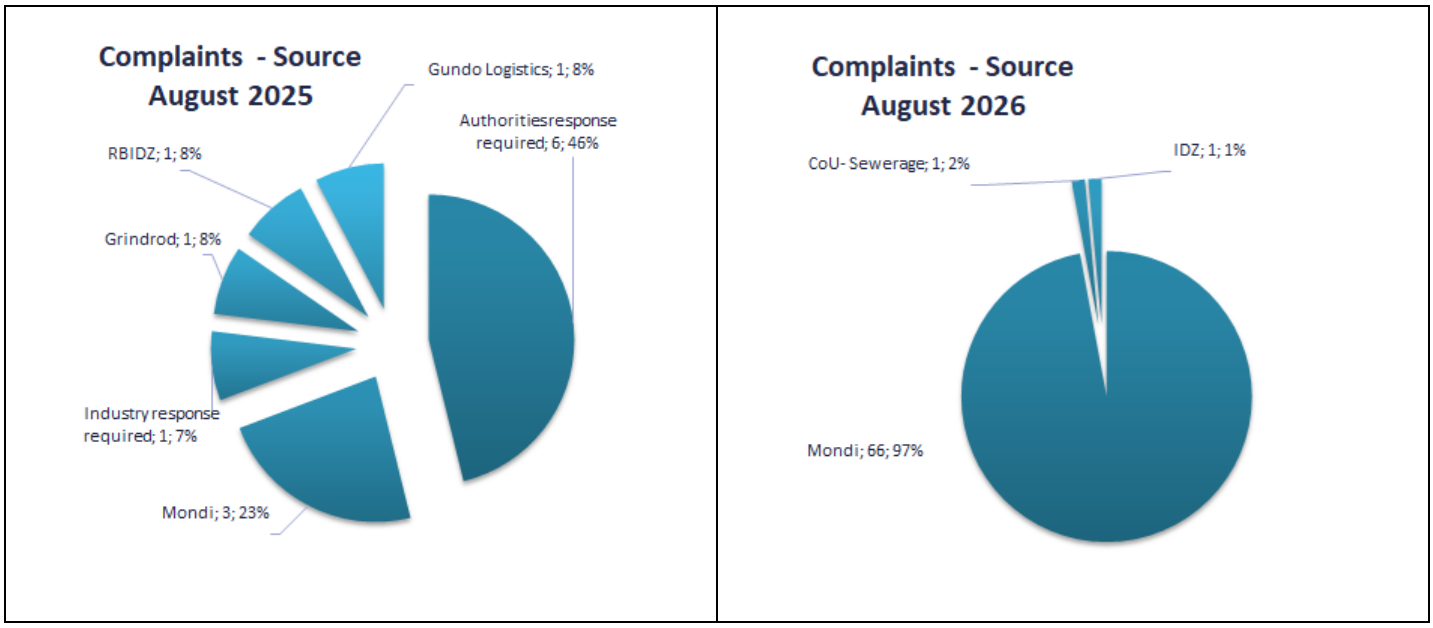


Figure 3.5: Complaints – source.

Table 3.1: Complaints – allocation, type, region.

Complaints – allocation, type, region	68
CoU- Sewerage	**1**
Clinical + Odour	1
Meerensee	1
IDZ	**1**
Dust	1
Richards Bay	1
Mondi	**66**
Clinical + Odour	50
Birdswood	1
Veldenvlei	2
Arboretum Ext	3
Alton	4
Meerensee	19
Arboretum	21
Odour	16
Birdswood and Alton	1
Wildenweide	1
Arboretum Ext	1
Veldenvlei	1
Richards Bay	1
Alton	2
Arboretum	2
Brackenham	3
Meerensee	4

4. PARTICULATE MONITORING

Particulate Matter (PM) refers to the solid particles and liquid droplets in the atmosphere. Many anthropogenic and natural sources emit PM directly or release other pollutants into the atmosphere, which subsequently form secondary PM. Particle size varies; for example, particles less than 10 micrometres (µm) in aerodynamic diameter are classified as PM_{10}, and particles less than 2.5 micrometres (µm) in aerodynamic diameter are classified as $PM_{2.5}$.

Inhalable particles, particularly $PM_{2.5}$, can penetrate deep into the respiratory system. Sustained exposure to high concentrations may therefore be associated with the following health effects:

- Reduced lung development in children
- Allergy-related inflammatory reactions of the airway
- Asthma, nasal congestion, and sinus problems
- Increased symptoms associated with the lower respiratory tract.
- In severe cases, a reduction in life expectancy

At eSikhaleni and Richardia, particulate monitoring uses Tapered Element Oscillating Microbalance (TEOM) Series 140AB instruments. These derive from the TEOM Series 1400/1400a design covered by U.S. EPA equivalent method designation EQPM-1090-079 (Federal Register Vol. 55, p. 43406, 29 October 1990, as modified), which applies to PM_{10} only (Report 024, section 2). The Richardia TEOM was reconfigured from PM_{10} to $PM_{2.5}$ on 3 March 2026, so the designation does not extend to the $PM_{2.5}$ data reported for Richardia; those data are interpreted on the same indicative basis as the E-Sampler $PM_{2.5}$ data and remain subject to the RBCAA QA/QC controls, service and calibration status, data validation and site-specific operating conditions described below.

Brackenham, CBD, Felixton, Harbour West and Scorpio use Met One E-Sampler instruments for particulate monitoring. The Met One E-Sampler / ES-642 instrument model holds UK MCERTS product-conformity certificate CSA MC130241/06 (issued 29 July 2025, renewal date 10 December 2028) as an indicative ambient particulate monitor for PM_{10} and $PM_{2.5}$, subject to the certified instrument configuration and the conditions stated in the applicable certificate (CSA Group Testing UK Ltd., 2025). The certificate defines a measurement uncertainty of ±50% for indicative instruments and makes site-specific calibration a condition of quantitative use; reported $PM_{2.5}$ 24-hour exceedance counts should be read with that uncertainty in mind. This certification is referenced as model-level supporting evidence only and should not be interpreted as confirmation that every RBCAA unit, serial number, firmware version, installation configuration or operational period is individually covered by the certificate. The reported particulate data are therefore interpreted as indicative/operational ambient PM measurements and remain subject to RBCAA QA/QC controls, service and calibration status, data validation, site-specific operating conditions and, where required, comparability checks against reference or reference-equivalent methods.

4.1. Ambient Air Quality Standards

Ambient air quality standards for particulate matter are listed in Table 4.1.

Table 4.1: Particulate ambient air quality limits.

Organisation	Limit	PM_{10} 24-hour Average (µg/m³)	PM_{10} Annual Average (µg/m³)	$PM_{2.5}$ 24-hour Average (µg/m³)	$PM_{2.5}$ Annual Average (µg/m³)
RSA [a, d]	Standard	75 [b]	40 [c]	40 [b]	20 [c]
WHO [e]	Guideline	45 [c]	15 [c]	15 [c]	5 [c]

Notes:
a) Government Gazette 32816 (24 December 2009) in terms of the National Environmental Management: Air Quality Act No. 39 of 2004, effective from 2015 (RSA-NEMAQA, 2009).
b) Not to be exceeded more than four (4) times in one year.
c) Not to be exceeded.
d) Government Gazette 35463 (29 June 2012) in terms of the National Environmental Management: Air Quality Act No. 39 of 2004, effective 1 January 2016 to 31 December 2029; a subsequent standard of 25 µg/m³ (24-hour) and 15 µg/m³ (annual) applies from 1 January 2030 (RSA-NEMAQA, 2012).
e) World Health Organisation global air quality guidelines, 2021, for the 24-hour and annual guideline values (WHO, 2021).

4.2. Data Completeness

PM data completeness for August 2026, calculated from valid 10-minute records relative to scheduled 10-minute records, is shown in Table 4.2.

Table 4.2: PM data capture.

Station	PM_{10} (%)	$PM_{2.5}$ (%)
Brackenham ES2	-	100.0
CBD ES1	99.6	-
eSikhaleni	98.9	-
Felixton ES1	99.9	-
Felixton ES2	-	98.7
Harbour West ES2	-	100.0
Richardia	n/m	99.9
Scorpio ES1	100.0	-
Scorpio ES2	-	100.0

Notes:
1. *Red – Not acceptable for statistical purposes (<80%),*
2. *Orange – Below the RBCAA SANAS-related reporting threshold (<90%),*
3. *Yellow – below the RBCAA operational target (<95%)*
4. *Grey – parameter not monitored at the station.*
5. *n/m – the Richardia TEOM was reconfigured from PM_{10} to $PM_{2.5}$ on 3 March 2026 (last valid PM_{10} record 2 March 2026 10:40), so PM_{10} is no longer monitored at Richardia.*

Missing Data (PM_{10}):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*

Missing Data ($PM_{2.5}$):

- *No day fell below 80% data capture. Individual record losses, including 59 single-record losses at Felixton (E-Sampler SN N6913, cause not established), are itemised in Report 024, Table 2.4.*

Scorpio – the Scorpio $PM_{2.5}$ record for August 2026 reports a monthly mean of 20 µg/m³ against a co-located PM_{10} monthly mean of 18 µg/m³, with the reported $PM_{2.5}$ 24-hour value exceeding the PM_{10} 24-hour value on 22 of the 31 days

in the month, and on 141 of 198 valid paired days from 1 February to 31 August 2026. As $PM_{2.5}$ is a subset of PM_{10}, this indicates an instrument or calibration fault affecting one or both Scorpio channels rather than a physical ambient condition. No direction of bias is asserted. The qualification was first recorded in the July 2026 report (Report 019, section 4.2). The 2026 annual service and calibration of the Scorpio E-Samplers SN B13480 (PM_{10}) and SN N7526 ($PM_{2.5}$), scheduled for February–March 2026, had not been carried out at the date of this report, and a co-location test of E-Sampler SN C16773 against SN N7526 began on 10 September 2026 (Report 024, section 2 and Table 4.1, items 6 and 7). Scorpio $PM_{2.5}$ values reported for August 2026 and year-to-date, including the associated exceedance counts, should be treated as provisional pending recalibration and instrument verification.

Instrument changes: the E-Sampler installations and removals during the reporting period, including the Version 2 E-Sampler installed at CBD (PM_{10}) on 14 August 2026, are recorded in Report 024, section 2 and Table 2.4, and are not repeated here. The August 2026 records at CBD (PM_{10}), Felixton (PM_{10}) and Harbour West ($PM_{2.5}$) are therefore not from a single instrument throughout the month.

4.3. Monthly Concentrations

Monthly mean PM_{10} concentrations were below the South African annual standard at all stations with sufficient August PM_{10} data. The WHO annual guideline value was exceeded at CBD, Felixton and Scorpio; this monthly comparison is indicative only and does not constitute an annual compliance determination (Figure 4.1). Comparisons to previous months are also provided (Figure 4.2).

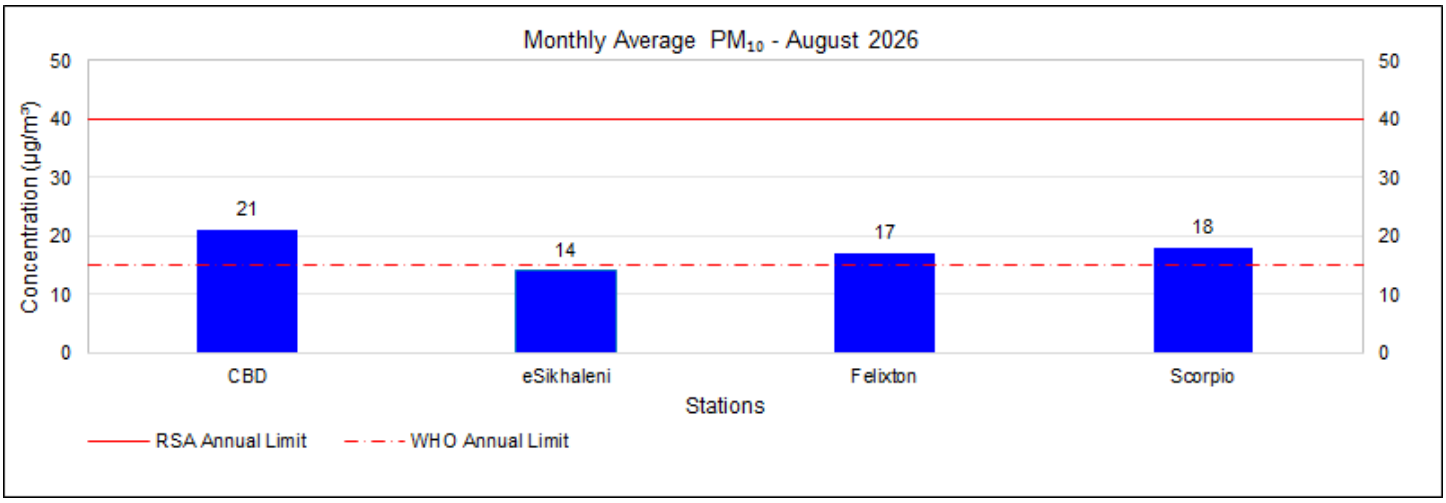


Figure 4.1: PM_{10} monthly concentrations.

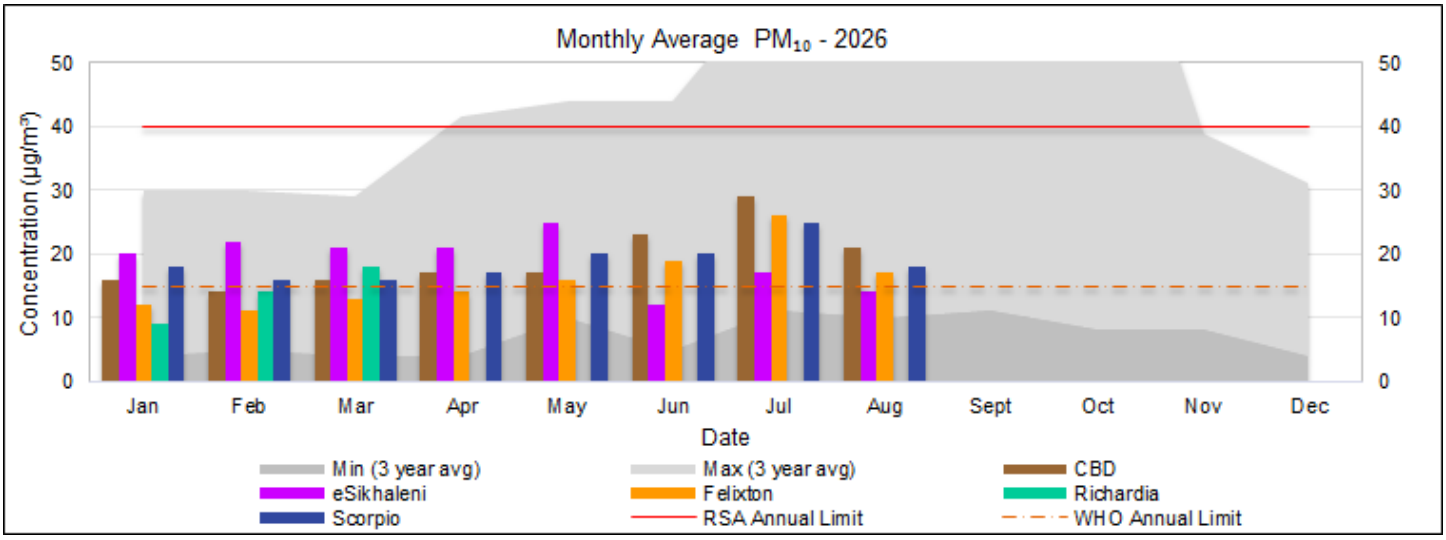


Figure 4.2: PM_{10} monthly comparison.

Monthly mean $PM_{2.5}$ concentrations exceeded the South African annual standard at Brackenham (22 µg/m³). The WHO annual guideline value was exceeded at Brackenham, Felixton, Harbour West, Richardia and Scorpio; this monthly comparison is indicative only and does not constitute an annual compliance determination (Figure 4.3). Comparisons to previous months are also provided (Figure 4.4). Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.

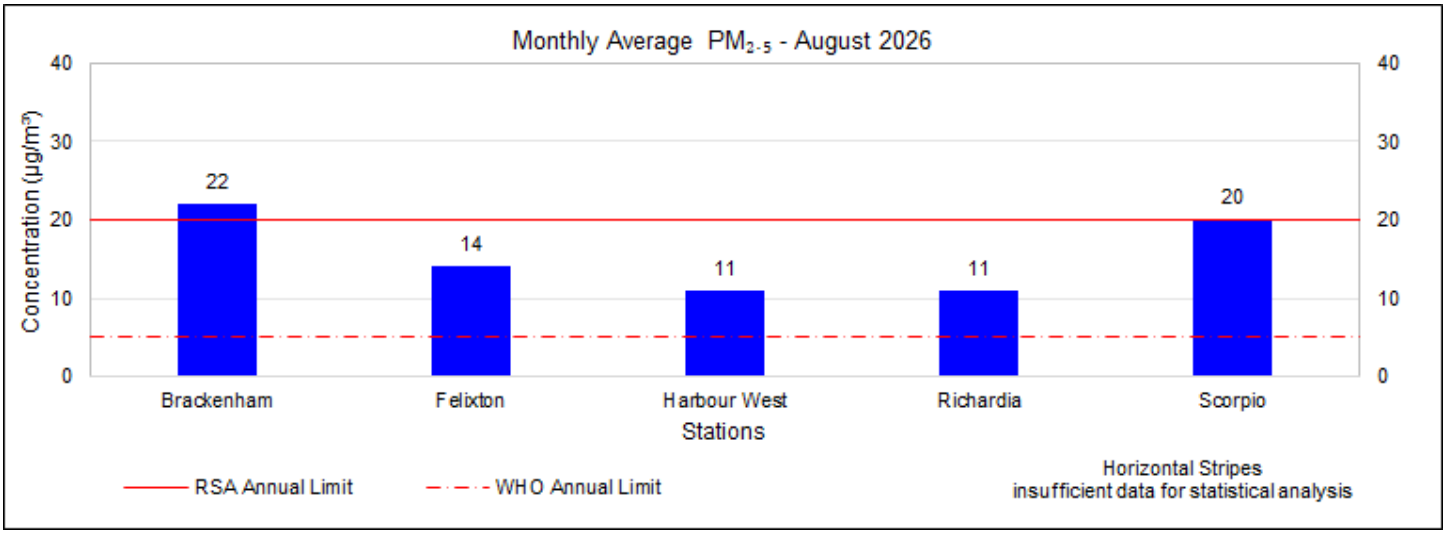


Figure 4.3: $PM_{2.5}$ monthly concentrations.

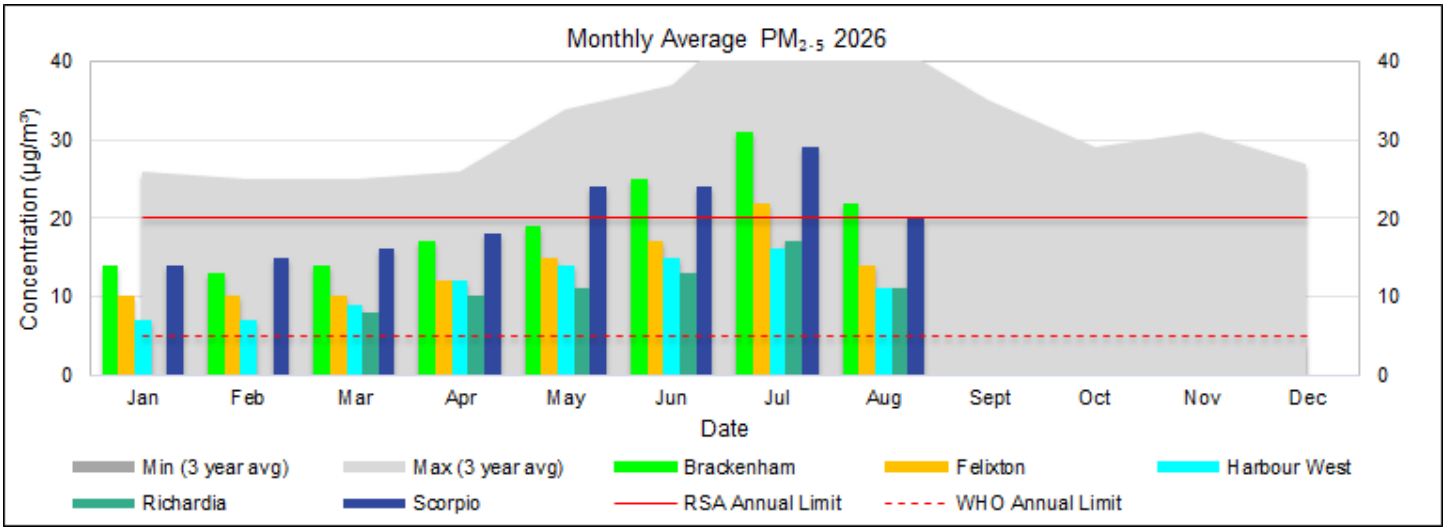


Figure 4.4: $PM_{2.5}$ monthly comparison.

4.4. Diurnal Concentrations

PM diurnal concentration profiles are shown in Figure 4.5 and Figure 4.6. The 24-hour values are included only as numerical visual references; hourly-of-day mean profiles cannot be used to determine 24-hour exceedances.

The PM_{10} hourly-of-day profile remained below the numerical value of the RSA and WHO 24-hour criteria; this is not a 24-hour exceedance determination.

The $PM_{2.5}$ hourly-of-day profile remained below the numerical value of the RSA 24-hour criterion.

The WHO 24-hour guideline was exceeded at Brackenham, Felixton and Scorpio; this is not a 24-hour exceedance determination.

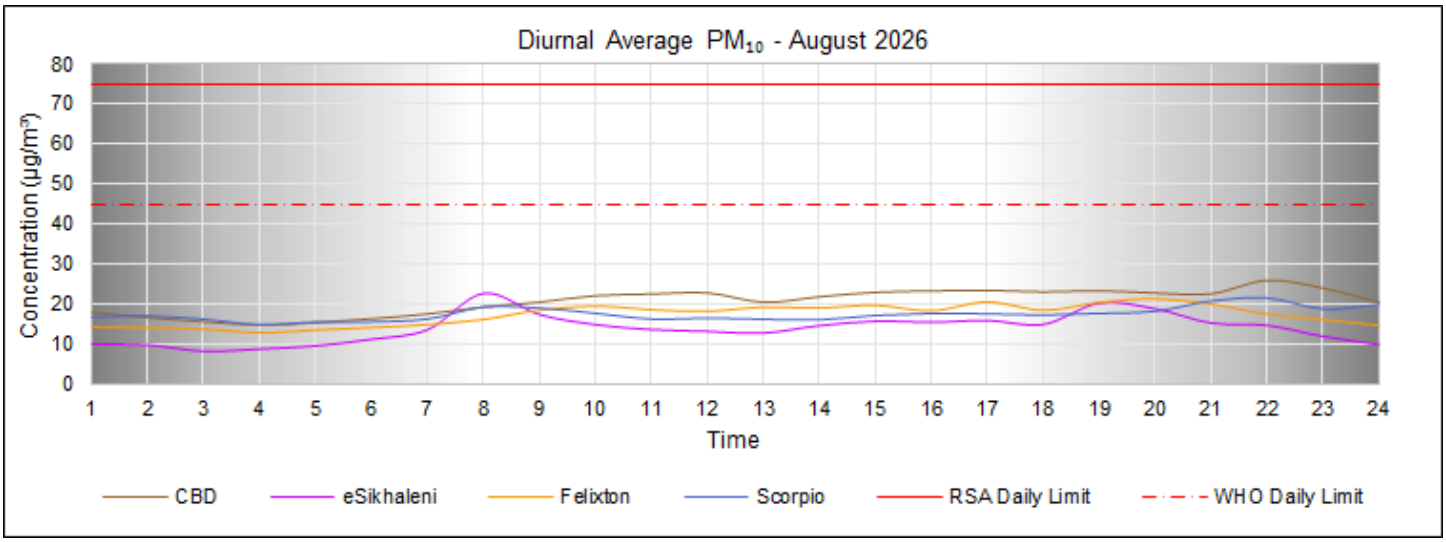


Figure 4.5: PM_{10} diurnal concentrations.

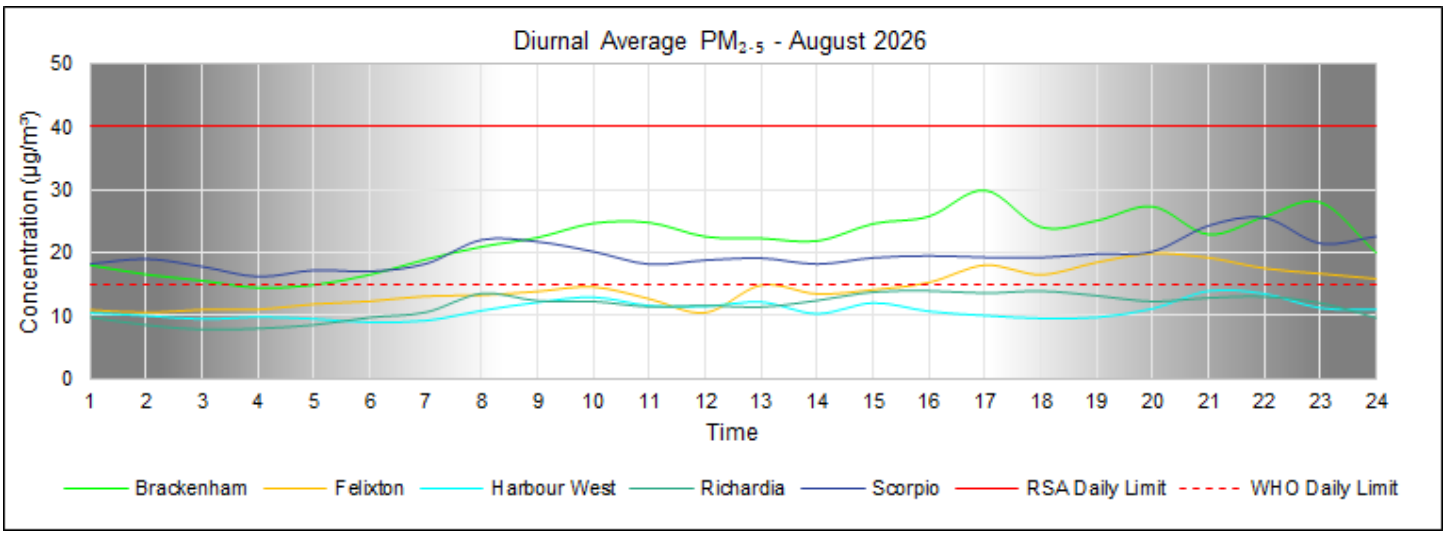


Figure 4.6: $PM_{2.5}$ diurnal concentrations.

4.5. 24-hour Concentrations

PM_{10} daily concentrations are shown in Figure 4.7. There were:

- No (0) measured exceedances of the RSA 24-hour standard (75 µg/m³); and
- No (0) measured exceedances of the WHO 24-hour guideline (45 µg/m³).

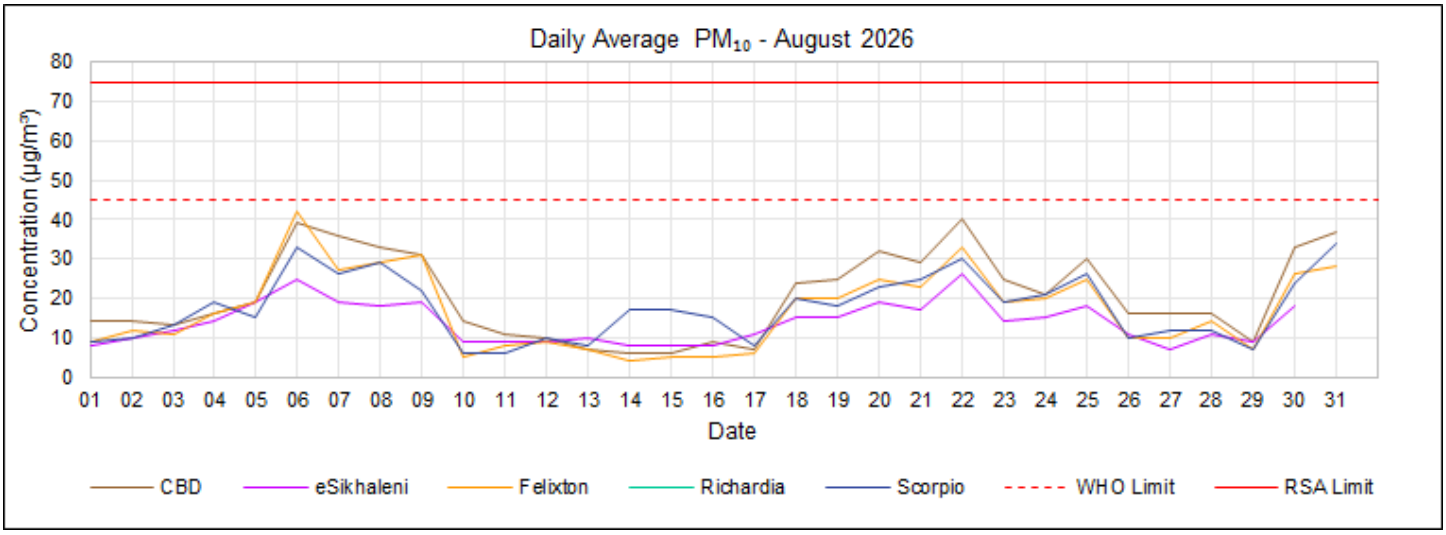


Figure 4.7: PM_{10} 24-hour average concentrations.

Missing Data (PM_{10}):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*

$PM_{2.5}$ daily concentrations are shown in Figure 4.8, and exceedances are summarised in Table 4.3. There were:

- Five (5) measured exceedances of the RSA 24-hour standard (40 µg/m³); and
- Sixty (60) measured exceedance-days of the WHO 24-hour guideline (15 µg/m³).

Table 4.3: $PM_{2.5}$ 24-hour exceedances.

$PM_{2.5}$ 24-hour RSA Limit (40 µg/m³)	
Industry response required - Refer to the notification.	
Responded: Mondi & Grindrod	
Brackenham	1
Responded: Mondi, Grindrod & South32	
Scorpio	2
CoU	
Municipal (CoU) wildfire	
Brackenham	2
$PM_{2.5}$ 24-hour WHO Limit (15 µg/m³)	
No response required	
Brackenham	16
Felixton	14
Scorpio	18
Harbour West	5
Richardia	7

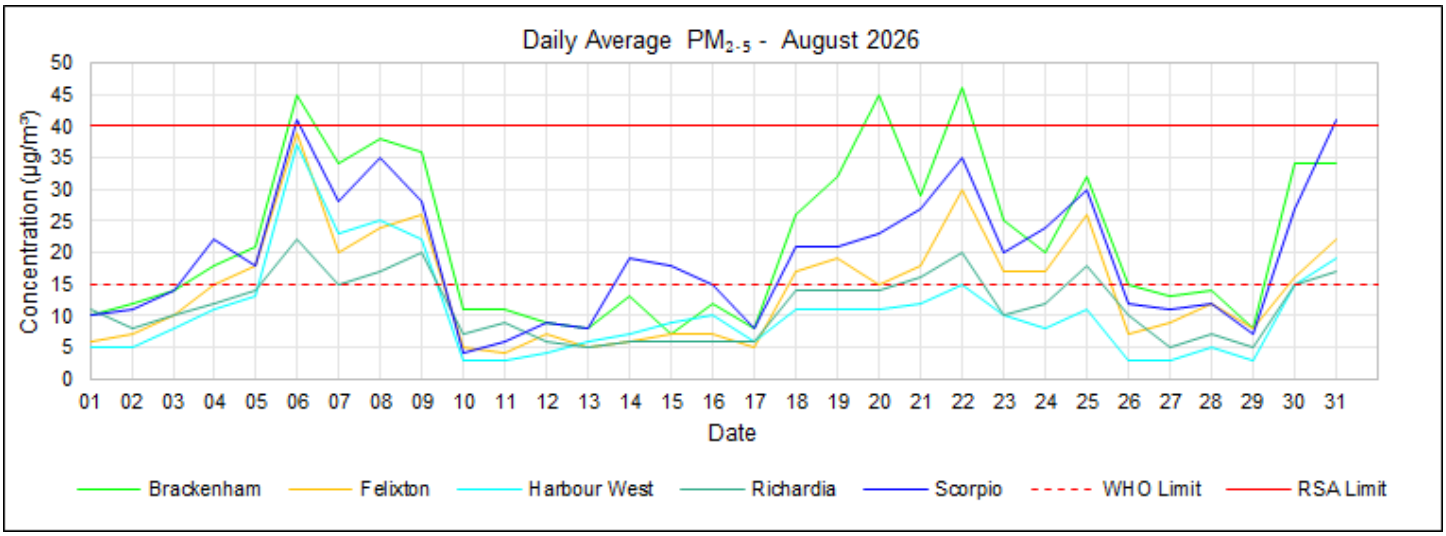


Figure 4.8: $PM_{2.5}$ daily average concentrations.

Missing Data ($PM_{2.5}$):

- *No day fell below 80% data capture (Report 024, Table 2.4).*

4.6. Exceedances

The number of days on which exceedances occurred, together with comparisons to previous months for PM_{10} and $PM_{2.5}$ (see Appendix G for the PM_{10} exceedance log and Appendix H for the $PM_{2.5}$ exceedance log), is shown in Figure 4.9 and Figure 4.10. Summaries of PM_{10} and $PM_{2.5}$ exceedances by station are presented in Table 4.4 and Table 4.5, respectively. Where no exceedances were measured, no exceedance of the assessed criterion was identified for the reported averaging period and monitoring locations; this does not exclude unmonitored localised or shorter-duration impacts. Two distinct metrics are reported. An exceedance is a single averaging period whose value exceeds the criterion. An exceedance day is a calendar day at a given station on which one or more exceedances occurred, so multiple exceedances at that station within a day count once; station exceedance-day counts are therefore additive across stations. The figures in this section report exceedance days; the summary tables report exceedances.

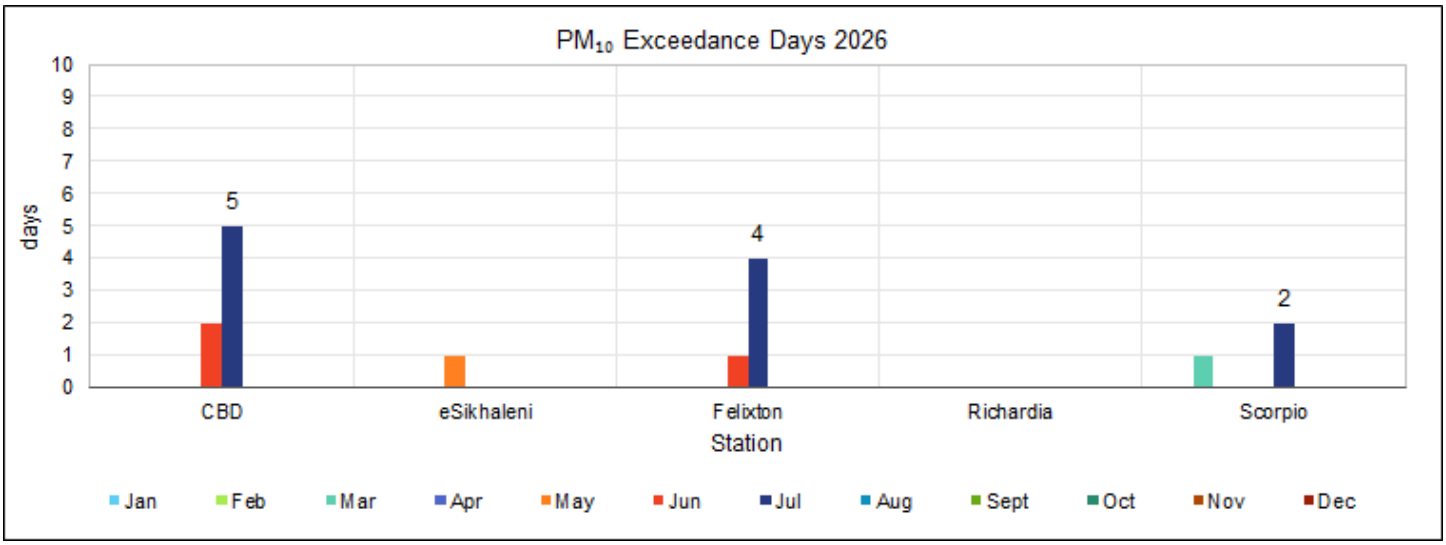


Figure 4.9: PM_{10} exceedance days.

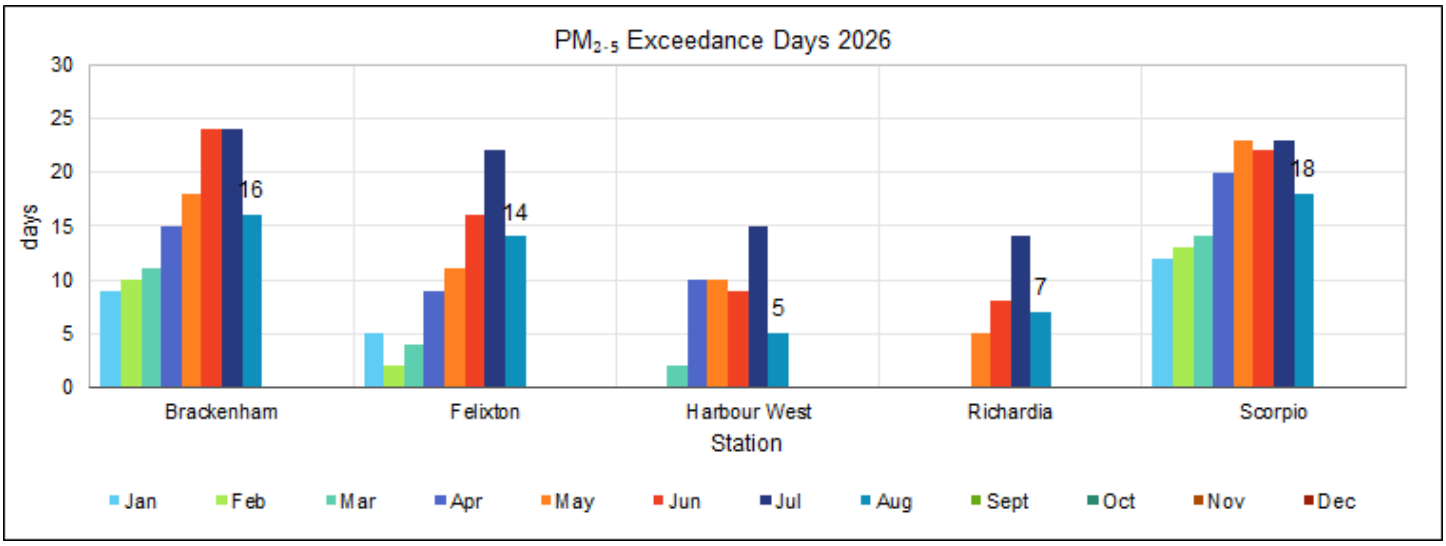


Figure 4.10: $PM_{2.5}$ exceedance days.

Table 4.4: PM_{10} exceedance summary.

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PM_{10} 24-hour RSA Limit (75 µg/m³)													
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	1	-	-	-	-	-	-	-	1
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	-	-	-	-	-	-	-	-	-	-	**0**
PM_{10} 24-hour WHO Limit (45 µg/m³)													
CBD	-	-	-	-	-	2	5	-	-	-	-	-	7
eSikhaleni	-	-	-	-	1	-	-	-	-	-	-	-	1
Felixton	-	-	-	-	-	1	4	-	-	-	-	-	5
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	1	-	-	-	2	-	-	-	-	-	3

Note: Richardia PM_{10} monitoring ceased on 2 March 2026 (last valid record 2 March 2026 10:40); shaded cells indicate periods in which no PM_{10} monitoring was undertaken, and the Richardia total is therefore a partial-year total. Brackenham does not operate a PM_{10} channel and is not listed.

Table 4.5: $PM_{2.5}$ exceedance summary.

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
$PM_{2.5}$ 24-hour RSA Limit (40 µg/m³)													
Brackenham	-	-	-	-	2	3	7	3	-	-	-	-	**15**
Felixton	-	-	-	-	1	1	3	-	-	-	-	-	**5**
Harbour West	-	-	-	-	-	-	1	-	-	-	-	-	1
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	1	-	3	3	6	2	-	-	-	-	**15**
$PM_{2.5}$ 24-hour WHO Limit (15 µg/m³)													
Brackenham	9	10	11	15	18	24	24	16	-	-	-	-	127
Felixton	5	2	4	9	11	16	22	14	-	-	-	-	83
Harbour West	-	-	2	10	10	9	15	5	-	-	-	-	51
Richardia	-	-	-	-	5	8	14	7	-	-	-	-	34
Scorpio	12	13	14	20	23	22	23	18	-	-	-	-	145

Note: Richardia $PM_{2.5}$ monitoring was commissioned in March 2026; dashes shown for January and February 2026 indicate that no monitoring was undertaken, whereas dashes at all other stations indicate that no exceedance was recorded. Richardia year-to-date totals are derived from a partial-year record and are not directly comparable with stations reporting a full record.

4.7. Conclusion

4.7.1. Monthly air quality (August 2026)

- Data completeness: PM_{10} and $PM_{2.5}$ data capture ranged from 98.9–100.0% and 98.7–100.0%, respectively.
- Regulatory (RSA NAAQS): No (0) exceedances of the PM_{10} 24-hour standard (75 µg/m³) were recorded.
- Five (5) exceedances of the $PM_{2.5}$ 24-hour standard (40 µg/m³) were recorded across Brackenham (3) and Scorpio (2).
- Health guidance (WHO): No (0) exceedances of the WHO 24-hour guideline (45 µg/m³) were recorded.
- $PM_{2.5}$ recorded 60 exceedance-days of the WHO 24-hour guideline (15 µg/m³) across Brackenham (16), Felixton (14), Harbour West (5), Richardia (7), and Scorpio (18). Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.

4.7.2. Year-to-date (2026 calendar year)

- Regulatory (RSA NAAQS; maximum four 24-hour exceedances/year): PM_{10} remained within the annual allowable exceedance frequency at all reporting stations, with one (1) exceedance recorded at eSikhaleni year-to-date. $PM_{2.5}$ exceeded the annual allowable frequency at Brackenham (15), Felixton (5) and Scorpio (15); Harbour West (1) and Richardia (0) remained within the allowance. Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.
- Health guidance (WHO): PM_{10} WHO 24-hour guideline exceedance-days totalled CBD (7), eSikhaleni (1), Felixton (5), and Scorpio (3) year-to-date. $PM_{2.5}$ WHO 24-hour guideline exceedance-days totalled Brackenham (127), Felixton (83), Harbour West (51), Richardia (34), and Scorpio (145) year-to-date. Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.

5. SULPHUR DIOXIDE MONITORING

Sulphur dioxide (SO_2) is one of the highly reactive gases known as "oxides of sulphur." Anthropogenic sources include fossil fuel combustion (particularly coal-burning power plants), industrial processes such as wood pulping, paper manufacturing, petroleum and metal refining, and metal smelting (particularly from sulphide-containing ores, e.g., lead, silver, and zinc ores), as well as vehicle tailpipe emissions. Natural sources of SO_2 emissions include geothermal activity (including hot springs and volcanic activity) and the natural decay of vegetation on land, in wetlands, and oceans.

SO_2 is associated with adverse respiratory effects because it is highly soluble and readily absorbed by the mucous membranes of the nose and upper respiratory tract. Exposure to high concentrations may result in the following:

- Reduction in lung function (especially in asthmatics and children)
- Wheezing and coughing
- In severe cases, a decrease in life expectancy

5.1. Ambient Air Quality Standards

South African ambient air quality standards for SO_2 are listed below (Table 5.1).

Table 5.1: SO_2 ambient air quality limits.

Organisation	Limit	10-minute Average	1-hour Average	24-hour Average	Annual Average
RSA [a]	SO_2 Standard	500 µg/m³ [b]	350 µg/m³ [c]	125 µg/m³ [d]	50 µg/m³ [e]
		191 ppb [b]	134 ppb [c]	48 ppb [d]	19 ppb [e]
WHO [f]	SO_2 Guideline	500 µg/m³	-	40 µg/m³	-
		191 ppb	-	15 ppb	-

Notes:
a) SA Government Gazette 32816 (published 24 December 2009) in terms of the National Environmental Management: Air Quality Act 39 of 2004 (RSA-NEMAQA, 2009)
b) Not to be exceeded more than five hundred and twenty-six (526) times in one year.
c) Not to be exceeded more than eighty-eight (88) times in one year
d) Not to be exceeded more than four (4) times in one year
e) Not to be exceeded
f) World Health Organisation global air quality guidelines, 2021, for the 24-hour guideline value (WHO, 2021)*; the 10-minute guideline value is from the WHO air quality guidelines, global update 2005, and was not retained in the 2021 update* (WHO, 2005).
All ppb values are converted from the stated mass concentrations at 25 °C and 101.325 kPa using the molar mass of sulphur dioxide (64.07 g/mol).

5.2. Data Completeness

SO_2 data completeness for August 2026, calculated from valid 10-minute records relative to scheduled 10-minute records, is shown in Table 5.2.

Table 5.2: SO_2 data capture.

Station	SO_2 (%)
Arboretum	99.8
Brackenham	99.8
CBD	99.8
eSikhaleni	98.7
Felixton	99.8
Harbour West	87.6
Richardia	99.8
Scorpio	99.8

Notes:

1. *Red – Not acceptable for statistical purposes (<80%)*
2. *Orange – Below the RBCAA SANAS-related reporting threshold (<90%)*
3. *Yellow – Below the RBCAA operational target (<95%)*

Missing Data (SO_2):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*
- *HW – Communication failure (SO_2 analyser N100) (5 days with <80% data capture, 20–24 August 2026). The analyser stopped communicating with the station data logger at 16:50 on 20 August 2026, and no data were recorded until it was rebooted at 11:00 on 24 August 2026 (90 h 10 min), which restored communication and resolved the fault. As a reboot restored communication without any repair or component replacement, the fault was most likely a software or firmware lock-up of the analyser's communication interface rather than a hardware failure. Weekly zero and span checks either side of the outage were within the acceptance criteria, and monthly SO_2 data capture at Harbour West was 87.6% (Report 024, Section 2.2, Table 2.4).*

Zero and span checks are performed weekly. The acceptance, adjustment and invalidation criteria are set out in Appendix B (Quality Assurance) and are reported, with the August 2026 results, in Report 024, Section 2 and Table 2.3. Zero offsets falling in the adjustment band of those criteria (±2 to ±5 ppb) are applied to the affected datasets during data validation, in accordance with Appendix B; the concentrations reported in this section are therefore the validated, zero-corrected values, and no further zero-offset adjustment is applied at reporting.

5.3. Monthly Concentrations

The monthly mean SO_2 concentration was below the South African annual standard at all stations; this monthly comparison is indicative only and does not constitute an annual compliance determination (Figure 5.1). Comparisons to previous months are also provided (Figure 5.2).

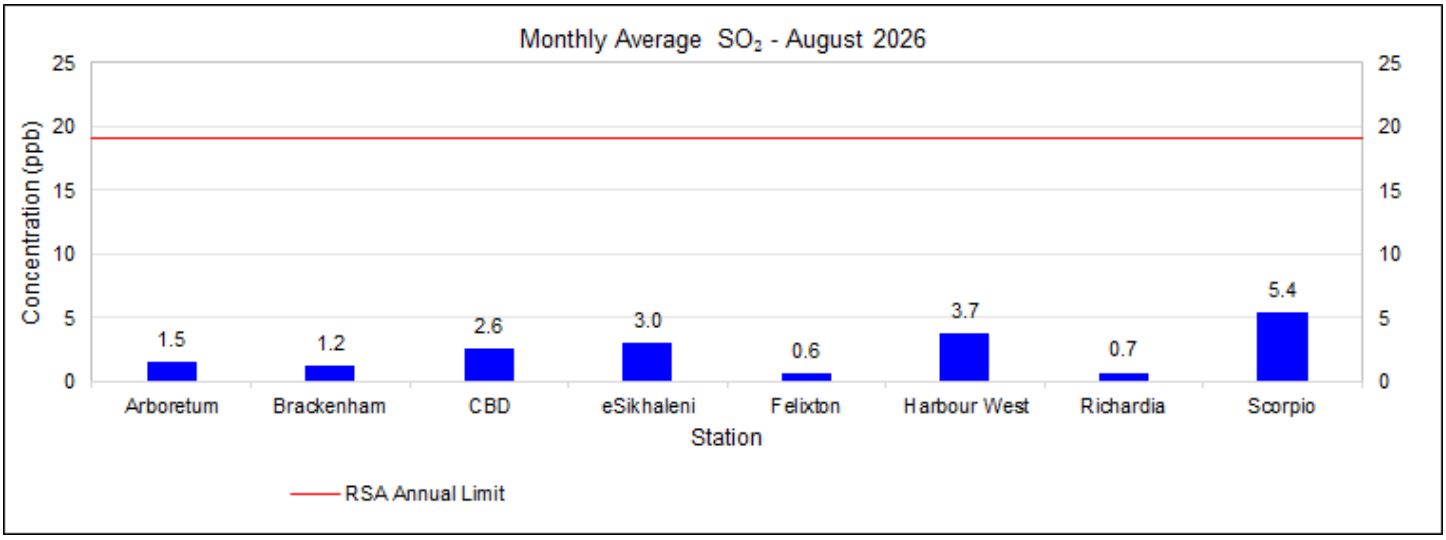


Figure 5.1: SO_2 monthly concentrations.

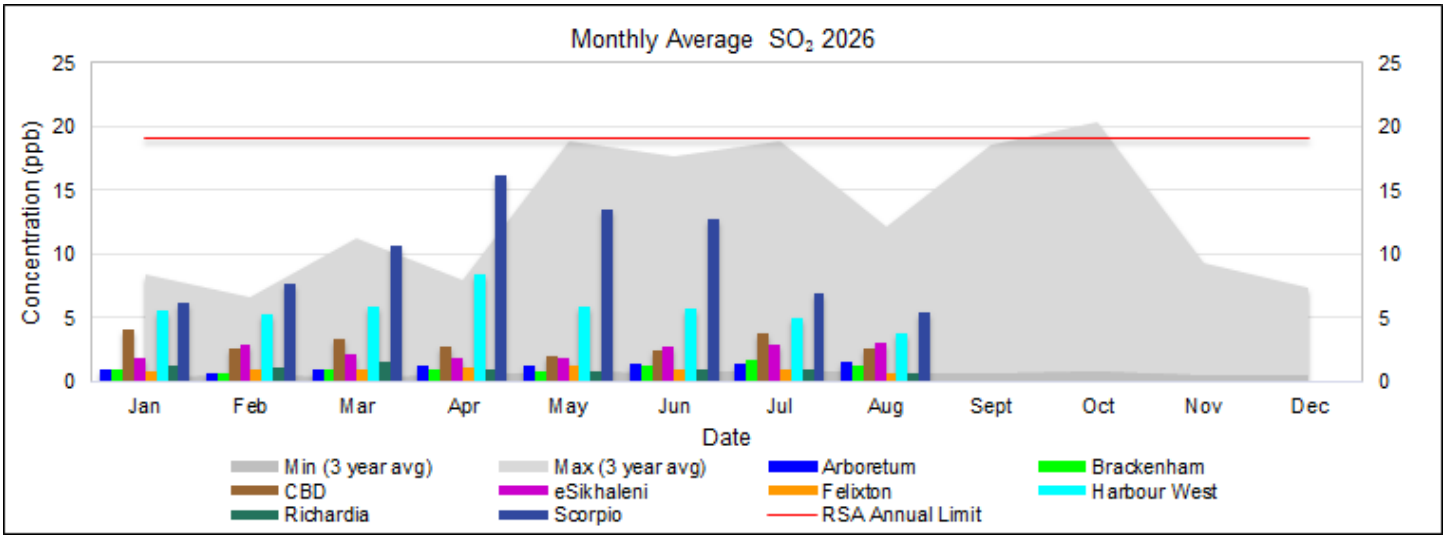


Figure 5.2: SO_2 monthly comparison.

5.4. Diurnal Concentrations

Diurnal SO_2 concentrations are shown below (Figure 5.3). The 24-hour values are included only as numerical visual references; hourly-of-day mean profiles cannot be used to determine 24-hour exceedances.

The SO_2 hourly-of-day profile remained below the numerical values of the RSA 24-hour criterion and the WHO 24-hour guideline.

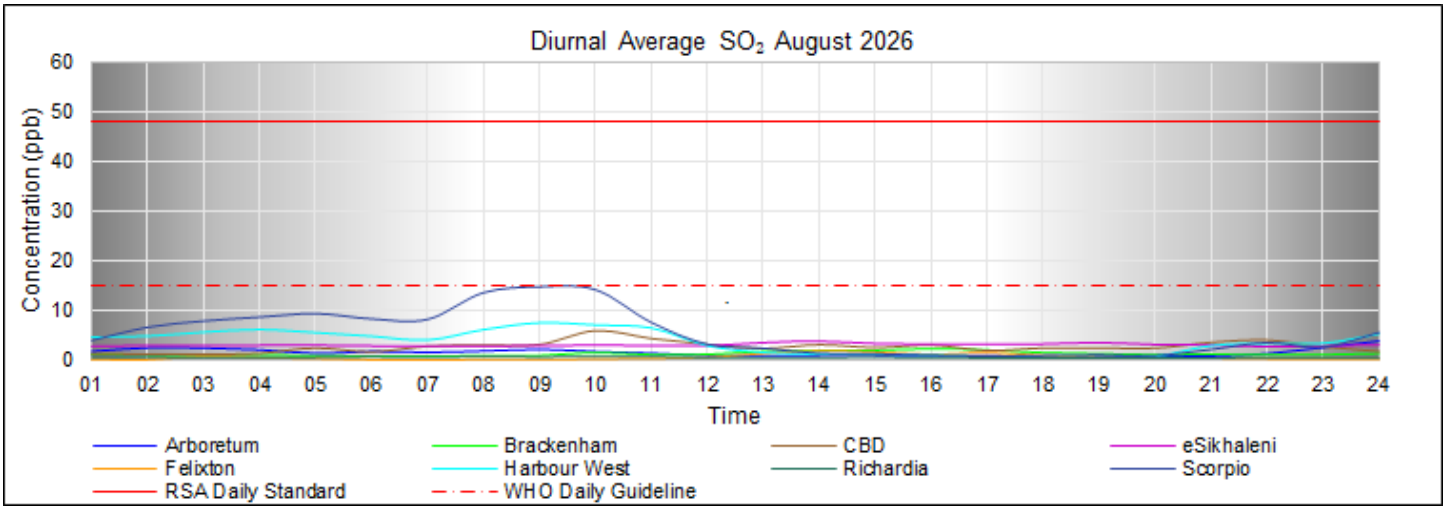


Figure 5.3: SO_2 diurnal concentrations.

5.5. 24-hour Concentrations

SO_2 daily average concentrations are shown in Figure 5.4, and exceedances are summarised in Table 5.3. There were:

- No (0) measured exceedances of the RSA 24-hour standard (48 ppb); and
- Four (4) measured exceedance-days of the WHO 24-hour guideline (15 ppb).

Table 5.3: SO_2 24-hour average exceedances.

SO_2 24-hour WHO Limit (15 ppb)	
CBD	1
Scorpio	3

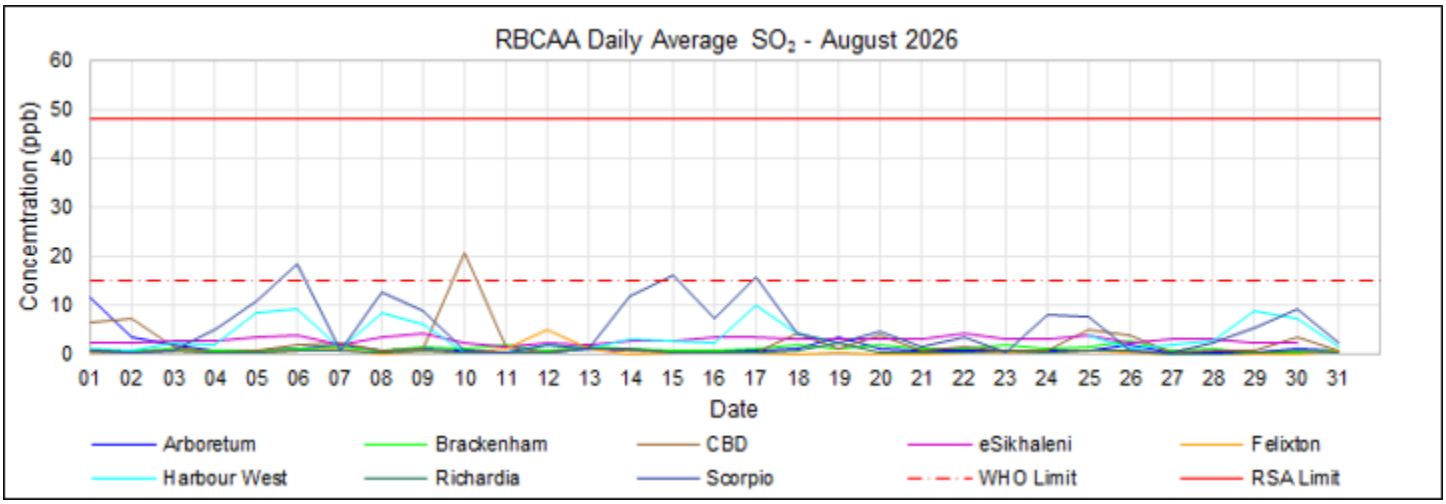


Figure 5.4: SO_2 24-hour average concentrations.

Missing Data (SO_2):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*
- *HW – Communication failure (SO_2 analyser N100) (5 days with <80% data capture, 20–24 August 2026). Refer to section 5.2 and Report 024, Section 2.2, Table 2.4 for the description of this outage.*

5.6. 1-hour Concentrations

SO_2 hourly average concentrations are shown in Figure 5.5. No (0) measured exceedances of the RSA 1-hour limit (134 ppb) were recorded.

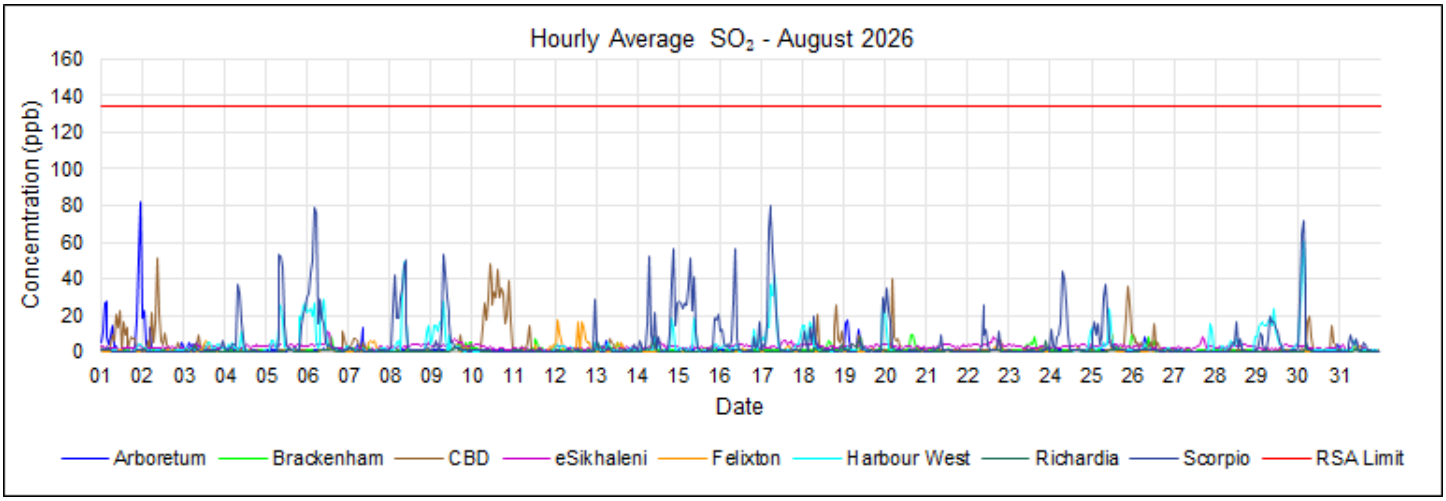


Figure 5.5: SO_2 1-hour average concentrations.

5.7. 10-minute Concentrations

SO_2 10-minute average concentrations are shown in Figure 5.6. No (0) measured exceedances of the RSA 10-minute standard and the WHO 10-minute guideline (191 ppb) were recorded.

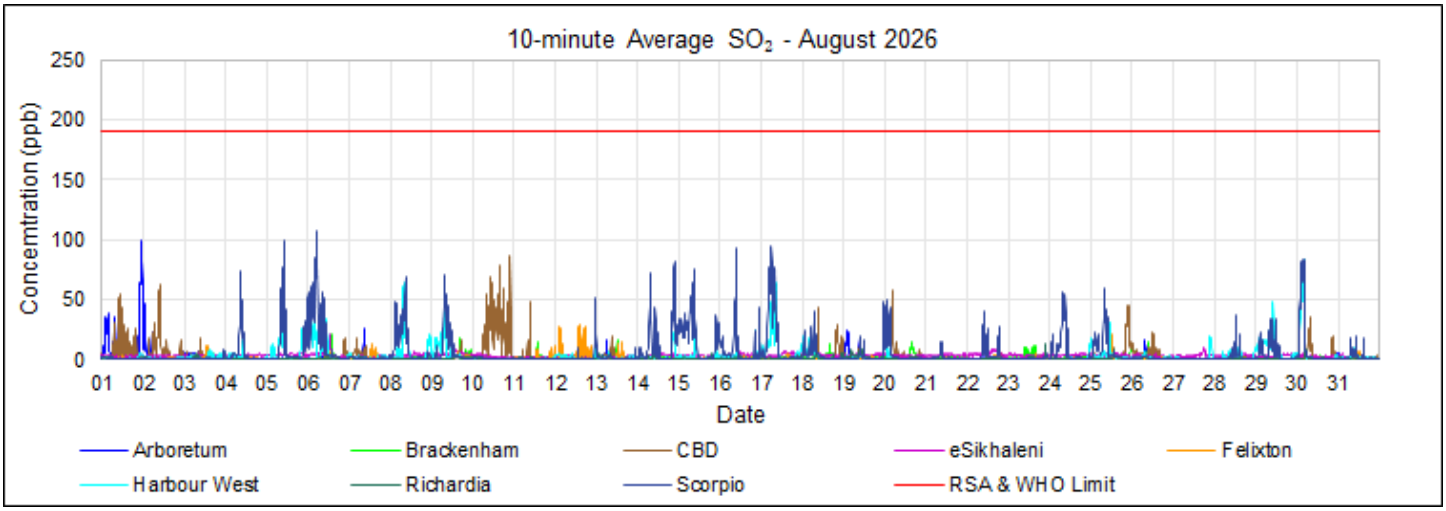


Figure 5.6: SO_2 10-minute average concentrations.

5.8. Exceedances

SO_2 exceedance days, together with comparisons to previous months, are shown in Figure 5.7. The SO_2 exceedance log is provided in Appendix I. A summary of SO_2 exceedances by station is presented in Table 5.4. SO_2 exceedances may be associated with emissions resulting from process upsets (e.g., planned maintenance, plant shutdowns, or start-ups), equipment leaks, fugitive emissions, fires, or emergency shutdowns. Where no exceedances were measured, no exceedance of the assessed criterion was identified for the reported averaging period and monitoring locations; this does not exclude unmonitored localised or shorter-duration impacts.

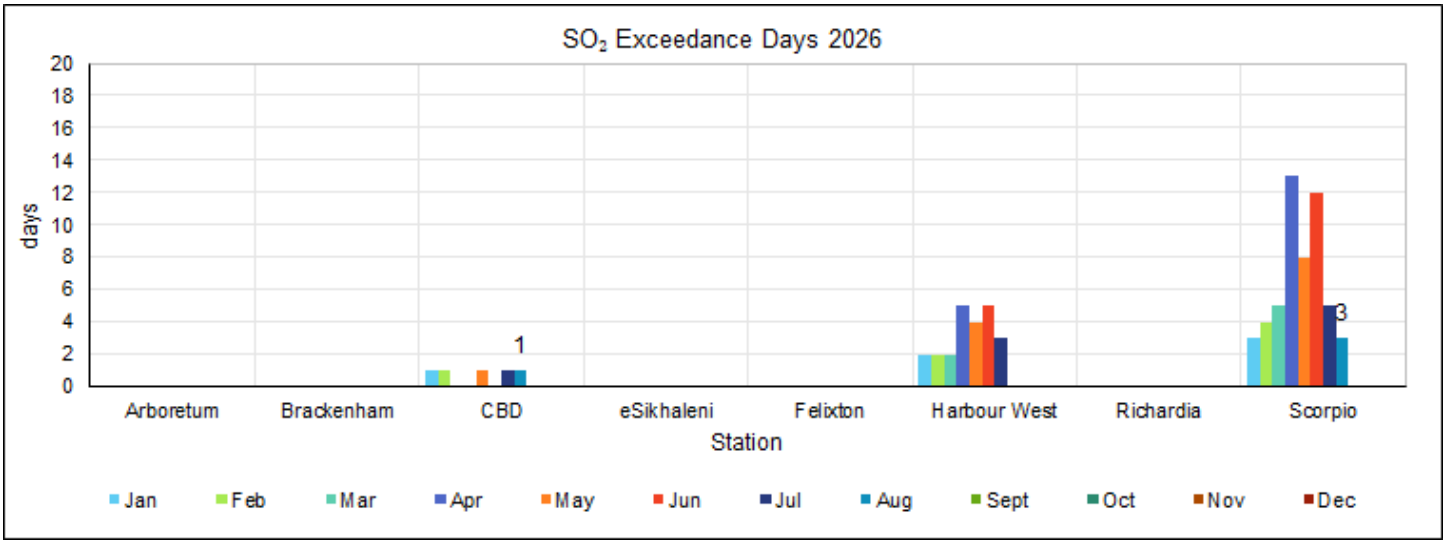


Figure 5.7: SO_2 exceedance days.

Table 5.4: SO_2 exceedance summary.

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SO_2 24-hour RSA Limit (48 ppb)													
Arboretum	-	-	-	-	-	-	-	-	-	-	-	-	0
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	2	-	1	-	-	-	-	-	-	-	3
SO_2 24-hour WHO Limit (15 ppb)													
Arboretum	-	-	-	-	-	-	-	-	-	-	-	-	0
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	1	1	-	-	-	-	1	1	-	-	-	-	4
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	2	2	2	5	4	5	3	-	-	-	-	-	23
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	3	4	5	13	8	12	5	3	-	-	-	-	53

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SO_2 1-hour RSA Limit (134 ppb)													
Arboretum	-	-	-	-	-	-	-	-	-	-	-	-	0
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	1	-	-	-	-	-	-	-	-	-	1
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	2	6	-	-	-	-	-	-	-	-	8
SO_2 10-minute RSA & WHO Limit (191 ppb)													
Arboretum	-	-	-	-	-	-	-	-	-	-	-	-	0
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	1	-	-	-	-	-	-	-	1
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	3	-	-	-	-	-	-	-	-	-	3
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	-	-	6	2	-	-	-	-	-	-	-	-	8

5.9. Conclusion

5.9.1. Monthly air quality (August 2026)

- Data completeness: SO_2 data capture ranged from 87.6–99.8% across the monitoring network.
- Regulatory (RSA NAAQS): No (0) exceedances of the SO_2 24-hour standard (48 ppb), SO_2 1-hour standard (134 ppb), or SO_2 10-minute standard (191 ppb) were recorded.
- Health guidance (WHO): Four (4) exceedance-days of the WHO 24-hour guideline (15 ppb) were recorded across CBD (1) and Scorpio (3).

5.9.2. Year-to-date (2026 calendar year)

- Regulatory (RSA NAAQS): SO_2 remained within the annual allowable exceedance frequencies year-to-date at all reporting stations. Year-to-date exceedances comprised 24-hour exceedance-days at Scorpio (3) against the annual allowance of four (4), 1-hour exceedances at Harbour West (1) and Scorpio (8) against the annual allowance of 88, and 10-minute exceedances at CBD (1), Harbour West (3), and Scorpio (8) against the annual allowance of 526.
- Health guidance (WHO): WHO 24-hour guideline exceedance-days totalled CBD (4), Harbour West (23), and Scorpio (53); all other stations recorded 0 exceedance-days year-to-date.

6. TOTAL REDUCED SULPHUR MONITORING

Total reduced sulphur compounds (TRS), often associated with rotten egg or cooked cabbage odour, comprise a gaseous mixture consisting mainly of hydrogen sulphide (H_2S), methyl mercaptan (CH_3S-H), dimethyl sulphide (CH_3-S-CH_3) and dimethyl disulphide (CH_3-S-S-CH_3). While there are other ambient TRS compounds, these four are the most common, abundant, and generally referred to in TRS discussions. Once released into the atmosphere, oxidation products of TRS compounds, such as sulphuric acid, contribute to environmental acidity. The most commonly reported health concerns related to TRS substances are nausea and headaches, although each component has its own characteristics and effects.

6.1. Ambient Air Quality Standards

There are no South African standards for TRS; however, the World Health Organisation (WHO) and the Ontario Ministry of the Environment (OME) have derived guidance values. (Table 6.1).

Table 6.1: TRS ambient air quality limits.

Organisation	Limit	10-minute Average	30-minute Average	24-hour Average	Annual Average
WHO	Guideline	-	7 µg/m³ [a]	-	-
		-	5 ppb [a]	-	-
OME	Standard (pulp and paper)	13 µg/m³ [b]	10 µg/m³ [c]	14 µg/m³ [d]	-
		9.3 ppb [b]	7.2 ppb [c]	10.1 ppb [d]	-
OME	Standard (other industries)	13 µg/m³ [b]	10 µg/m³ [c]	7 µg/m³ [d]	-
		9.3 ppb [b]	7.2 ppb [c]	5.0 ppb [d]	-

Notes:
a) World Health Organisation recommendation to avoid substantial complaints about odour annoyance among the exposed population (WHO, 2000).
b) Based on odour effects (OME, 1999).
c) Based on the odour and health effects (OME, 1999).
d) Based on the adverse effects on the respiratory system (nasal lesions). All ppb values are converted from the stated mass concentrations at 25 °C and 101.325 kPa using the molar mass of hydrogen sulphide (34.08 g/mol); TRS is a mixture, so the conversion is exact only where H_2S dominates the measured signal. (OME, 1999).

RBCAA applies the following criteria:

- 30-minute WHO H_2S guideline; and
- 24-hour and 10-minute OME criteria for the pulp and paper sector.

6.2. Data Completeness

TRS data completeness for August 2026, calculated from valid 10-minute records relative to scheduled 10-minute records, is shown in Table 6.2.

Table 6.2: TRS data capture.

Station	TRS (%)
Brackenham	99.8
CBD	99.7
eSikhaleni	98.7
Felixton	86.7
Richardia	99.8

Notes:

1. *Red – Not acceptable for statistical purposes (<80%)*
2. *Orange – Below the RBCAA SANAS-related reporting threshold (<90%)*
3. *Yellow – Below the RBCAA operational target (<95%)*

Missing Data (TRS):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*
- *Felixton – TRS data invalidated following the power interruption of 26 August 2026 (analyser T102 SN 0165 reading high with Dark Cal and PMT warnings); 4 days with <80% data capture, 27–30 August 2026 (Report 024, section 2).*

6.3. Monthly Concentrations

Monthly average TRS concentrations are shown in Figure 6.1. Comparisons with previous months are also provided in Figure 6.2.

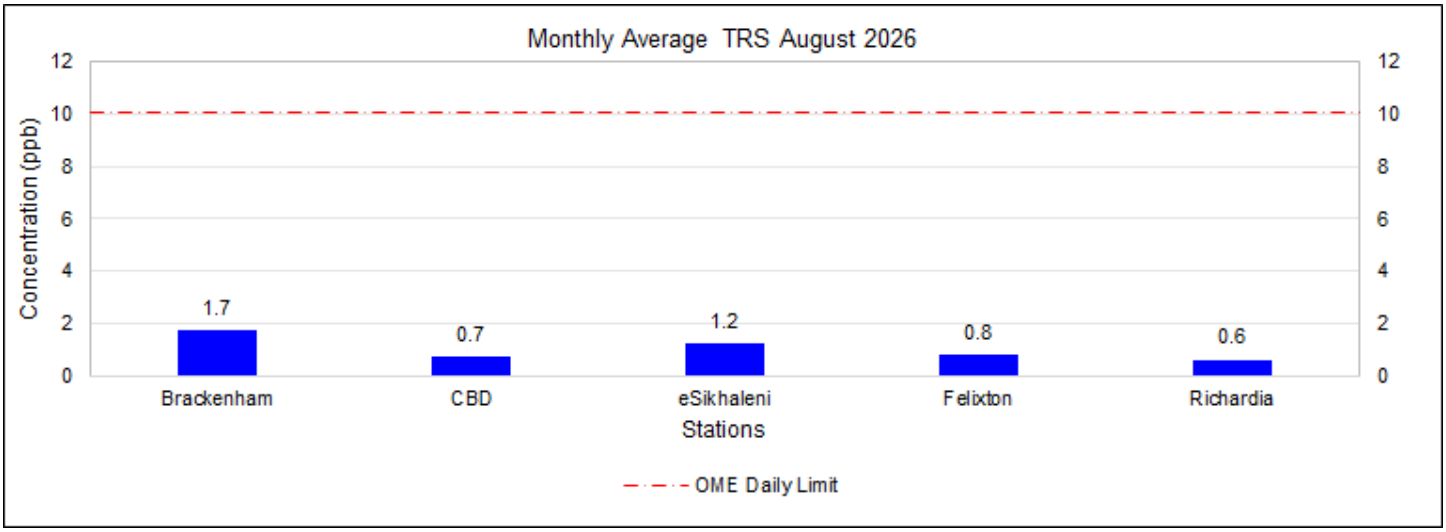


Figure 6.1: TRS monthly concentrations.

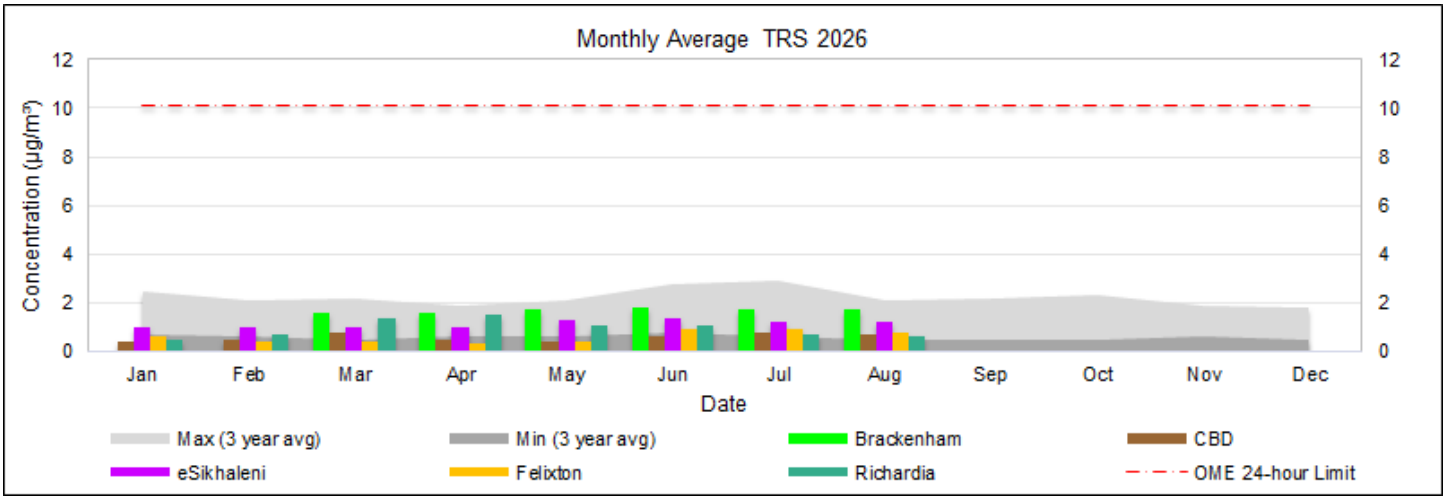


Figure 6.2: TRS monthly comparison.

6.4. Diurnal Concentrations

The diurnal TRS concentrations are shown below (Figure 6.3). The OME 24-hour value is included only as a numerical visual reference; hourly-of-day mean profiles cannot be used to determine 24-hour exceedances. The hourly-of-day profile remained below the numerical value of the OME 24-hour criterion.

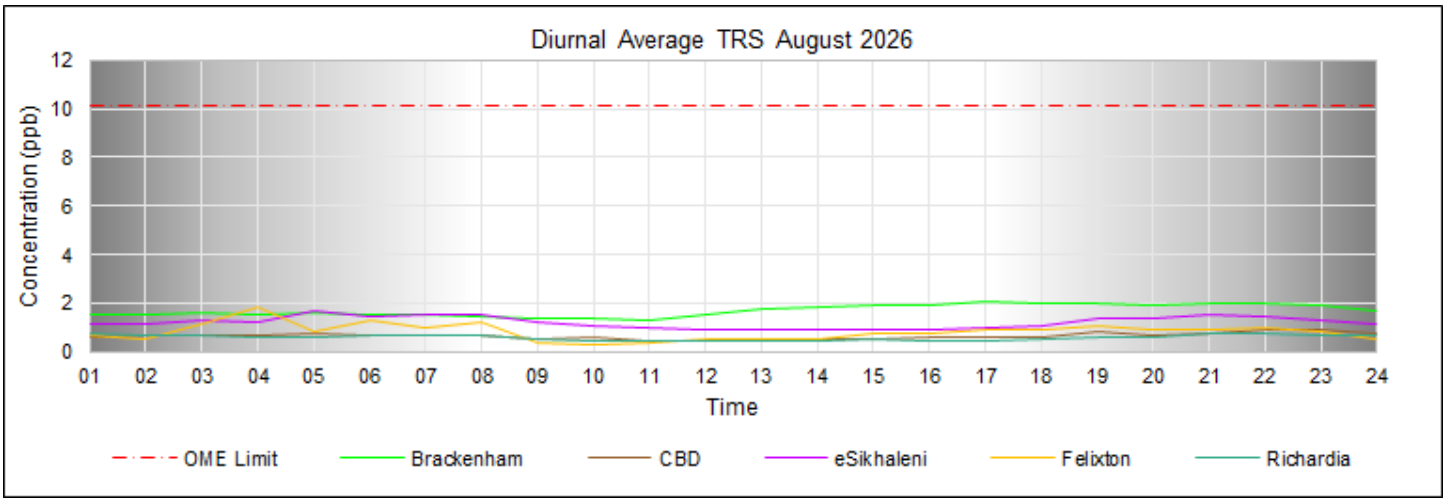


Figure 6.3: TRS diurnal concentrations.

6.5. 24-hour Concentrations

The TRS daily average concentrations are shown in Figure 6.4. No (0) exceedances of the OME 24-hour criterion (10.1 ppb) were measured.

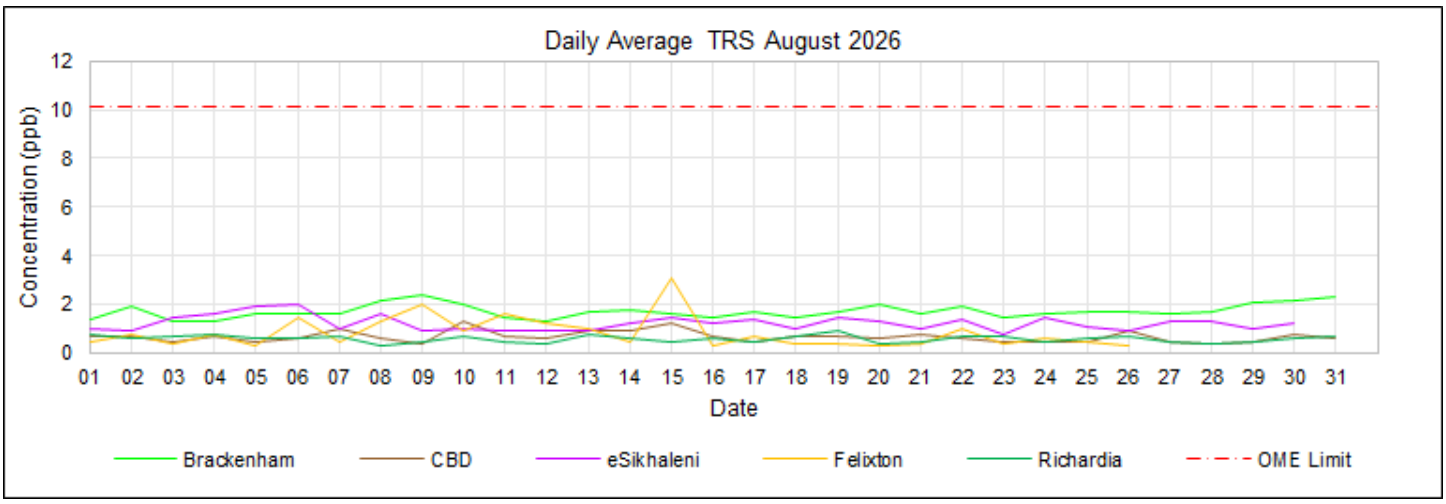


Figure 6.4: TRS daily average concentrations.

Missing Data (TRS):

- *eSk – Power outage (1 day with <80% data capture, 31 August 2026).*
- *Felixton – TRS data invalidated following the power interruption of 26 August 2026 (analyser T102 SN 0165 reading high with Dark Cal and PMT warnings); 4 days with <80% data capture, 27–30 August 2026 (Report 024, section 2).*

6.6. 30-minute Concentrations

TRS 30-minute average concentrations are shown in Figure 6.5. Fifty-six (56) exceedances of the WHO 30-minute guideline (5.0 ppb) were measured (Table 6.3).

Table 6.3: TRS 30-minute average exceedances (WHO).

TRS 30-minute WHO H_2S Limit (5.0 ppb)	
Industry response required - Refer to the notification.	
Responded: Mondi, Mpact & THS	
eSikhaleni	3
Mondi	
SETP	10
CBD	1
eSikhaleni	9
Meteorology	5
eSikhaleni	1
Brackenham	4
Methanol release	2
Richardia	1
Brackenham	1
Process activities	1
CBD	1
Mondi (Meteorology)	
Meteorology	2
Felixton	2
THS	
Smut plant	25
Felixton	25
Clarifiers not circulating	8
Felixton	8

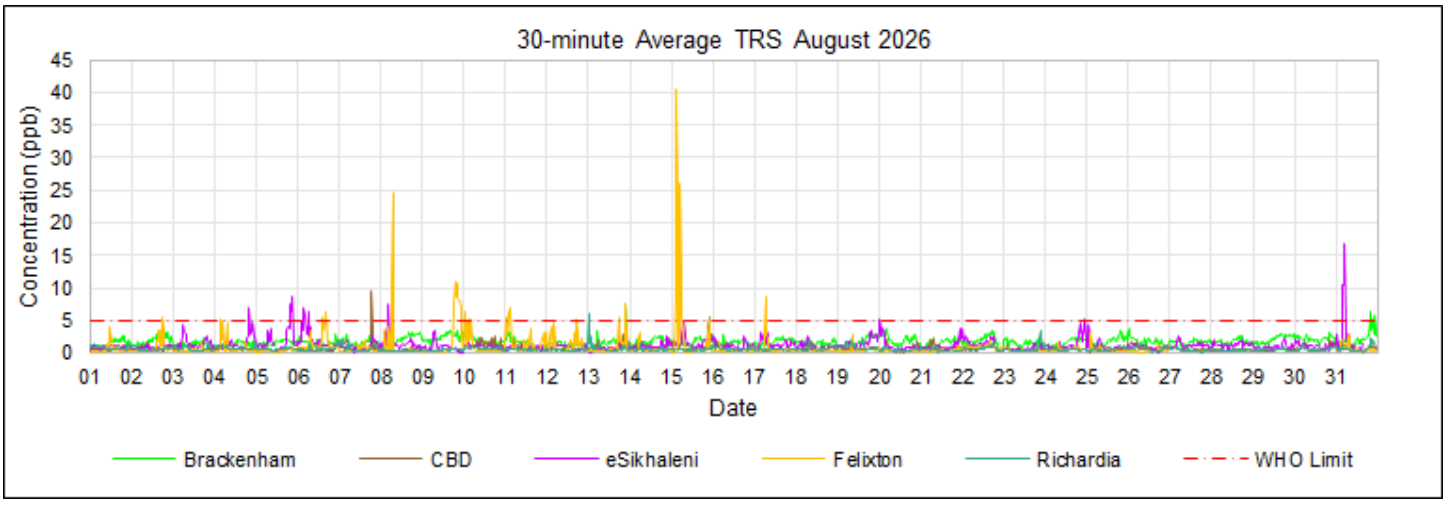


Figure 6.5: TRS 30-minute average concentrations.

6.7. 10-minute Concentrations

TRS 10-minute average concentrations are shown in Figure 6.6. Thirty-eight (38) exceedances of the OME 10-minute criterion (9.3 ppb) were measured (Table 6.4).

Table 6.4: TRS 10-minute exceedances.

TRS 10-minute OME Limit (9.3 ppb)	
Industry response required - Refer to the notification.	
Responded: Mondi, Mpact & THS	
eSikhaleni	6
Mondi	
SETP	2
eSikhaleni	2
Methanol release	1
Brackenham	1
Process activities	2
CBD	2
Mondi (Meteorology)	
Meteorology	2
Felixton	2
THS	
Smut plant	12
Felixton	12
Clarifiers not circulating	13
Felixton	13

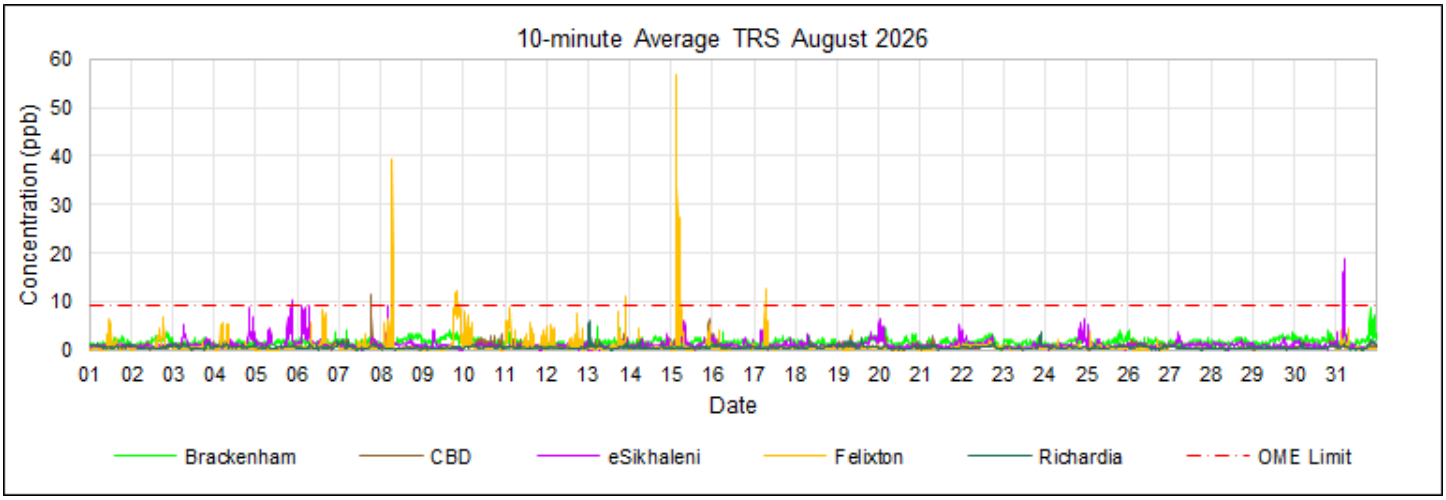


Figure 6.6: TRS 10-minute average concentrations.

6.8. Exceedances

TRS exceedance days, together with comparisons to previous months, are shown in Figure 6.7. The TRS exceedance log is provided in Appendix J. A summary of TRS exceedances by station is presented in Table 6.5. TRS exceedances may be associated with emissions resulting from process upsets (e.g., planned maintenance, plant shutdowns, or start-ups), equipment leaks, fugitive emissions, fires, or emergency shutdowns. Where no exceedances were measured, no exceedance of the assessed criterion was identified for the reported averaging period and monitoring locations; this does not exclude unmonitored localised or shorter-duration impacts.

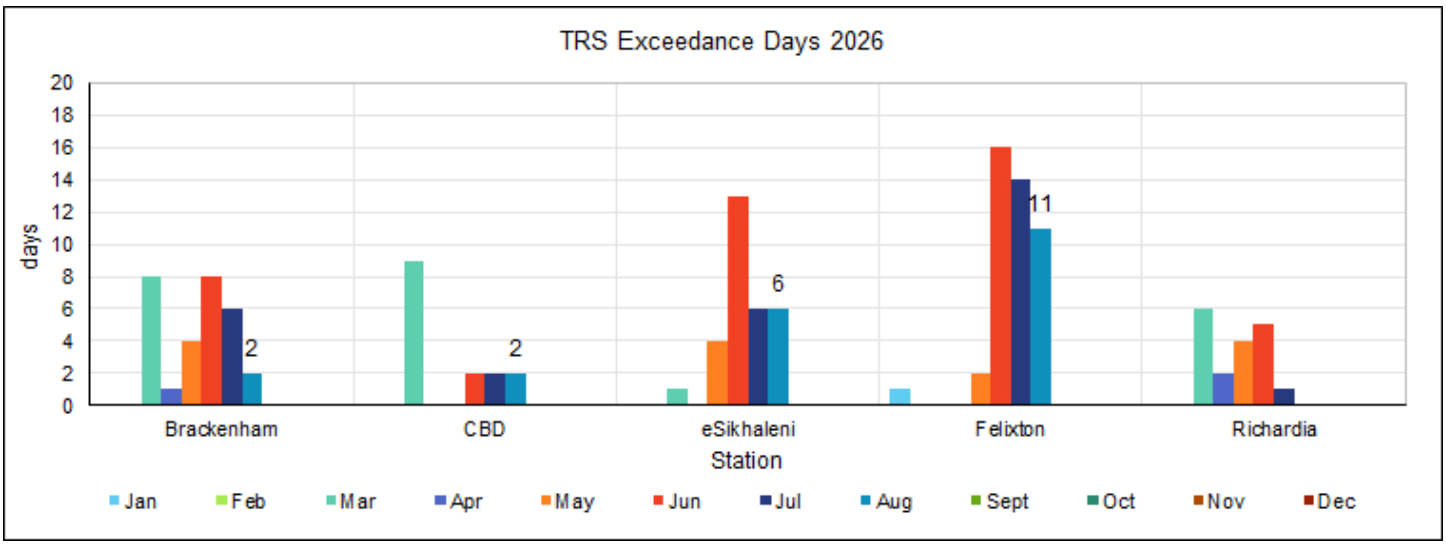


Figure 6.7: TRS exceedance days.

Table 6.5: TRS exceedance summary.

2026	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
TRS 24-hour OME Limit (10.1 ppb)													
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
TRS 30-minute WHO H_2S Limit (5.0 ppb)													
Brackenham	-	-	26	1	9	15	11	5	-	-	-	-	67
CBD	-	-	25	-	-	4	2	2	-	-	-	-	33
eSikhaleni	-	-	1	-	10	47	16	13	-	-	-	-	87
Felixton	1	-	-	-	4	43	54	35	-	-	-	-	137
Richardia	-	-	13	2	5	11	1	1	-	-	-	-	33
TRS 10-minute OME Limit (9.3 ppb)													
Brackenham	-	-	16	-	12	10	4	1	-	-	-	-	43
CBD	-	-	8	-	-	-	-	2	-	-	-	-	10
eSikhaleni	-	-	1	-	3	28	3	8	-	-	-	-	43
Felixton	2	-	-	-	10	70	55	27	-	-	-	-	164
Richardia	-	-	-	-	-	4	-	-	-	-	-	-	4

6.9. Conclusion

6.9.1. Monthly air quality (August 2026)

- Data completeness: TRS data capture ranged from 86.7–99.8% across the monitoring network.
- No South African ambient air quality standard exists for TRS/H_2S; therefore, no regulatory compliance determination applies.
- Health/odour guidance (WHO + RBCAA-adopted OME criteria): No (0) exceedances of the OME 24-hour criterion (10.1 ppb) were recorded. Fifty-six (56) exceedances of the WHO 30-minute guideline (5.0 ppb) were recorded across Brackenham (5), CBD (2), eSikhaleni (13), Felixton (35), and Richardia (1).
- Thirty-eight (38) exceedances of the OME 10-minute criterion (9.3 ppb) were recorded across Brackenham (1), CBD (2), eSikhaleni (8), and Felixton (27).

6.9.2. Year-to-date (2026 calendar year)

- Regulatory (RSA NAAQS): No South African ambient air quality standard exists for TRS/H_2S.
- Health/odour guidance (2026): OME 24-hour exceedances were 0 at all stations year-to-date.
- WHO 30-minute exceedances totalled Brackenham (67), CBD (33), eSikhaleni (87), Felixton (137), and Richardia (33).
- OME 10-minute exceedances totalled Brackenham (43), CBD (10), eSikhaleni (43), Felixton (164), and Richardia (4).

7. MONTHLY AIR QUALITY

Where possible, the RBCAA assesses data collected by its network against national standards, international guidelines, and local targets. WHO air quality guidelines (AQGs) are intended for global use and support actions to protect public health in different contexts. By contrast, air quality standards and local targets are set by individual countries or regions and are essential components of national risk management and environmental policy. They vary according to how health risks, technological feasibility, economic considerations, and political and social factors are balanced; these factors are influenced by the level of development and national air-quality management capability (WHO, 2005).

7.1. Conclusion

Regulatory assessment is based on comparison to the South African National Ambient Air Quality Standards (NAAQS). Health/odour assessment is based on WHO guidelines and RBCAA-adopted TRS/H_2S reference criteria; exceedances of these criteria do not constitute NAAQS non-compliance, but they indicate potential short-term exposure or odour-annoyance conditions requiring attention.

7.1.1. August 2026 – Monthly Conclusion

7.1.1.1. Regulatory (RSA NAAQS)

- PM_{10}: No (0) PM_{10} 24-hour NAAQS exceedances (75 µg/m³) were recorded.
- $PM_{2.5}$: Five (5) 24-hour NAAQS exceedances (40 µg/m³) were recorded across Brackenham (3) and Scorpio (2). Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.
- SO_2: No (0) 24-hour NAAQS exceedances (48 ppb) were recorded. No (0) 1-hour NAAQS exceedances (134 ppb) were recorded. No (0) 10-minute NAAQS exceedances (191 ppb) were recorded.
- TRS/H_2S has no South African NAAQS standard; therefore, no regulatory compliance determination applies for TRS/H_2S.

7.1.1.2. Health/odour guidance (WHO + RBCAA-adopted TRS/H_2S criteria)

- PM_{10}: No (0) exceedances of the WHO 24-hour guideline (45 µg/m³) were recorded.
- $PM_{2.5}$: Sixty (60) exceedance-days of the WHO 24-hour guideline (15 µg/m³) were recorded across Brackenham (16), Felixton (14), Harbour West (5), Richardia (7), and Scorpio (18). Scorpio $PM_{2.5}$ values are subject to the data qualification in Section 4.2.
- SO_2: Four (4) exceedance-days of the WHO 24-hour guideline (15 ppb) were recorded across CBD (1) and Scorpio (3). No (0) exceedances of the WHO 10-minute guideline (191 ppb) were recorded.
- TRS/H_2S: No (0) exceedances of the OME 24-hour criterion (10.1 ppb), fifty-six (56) exceedances of the WHO 30-minute guideline (5.0 ppb), and thirty-eight (38) exceedances of the OME 10-minute criterion (9.3 ppb) were recorded during August 2026.

7.1.2. 2026 Calendar-Year Conclusion

7.1.2.1. Regulatory (RSA NAAQS)

- PM_{10} (24-hour NAAQS; max 4 exceedances/year): within the annual allowable exceedance frequency at all stations reporting PM_{10}; one (1) exceedance has been recorded at eSikhaleni year-to-date.
- $PM_{2.5}$ (24-hour NAAQS; max 4 exceedances/year): Brackenham (15), Felixton (5), and Scorpio (15) exceeded the annual allowable frequency of four (4) 24-hour exceedances; Harbour West (1) remained within the allowance. Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.
- SO_2 remained within the annual allowable exceedance frequencies year-to-date at all reporting stations: Scorpio recorded three (3) 24-hour exceedance-days against the annual allowance of four (4); Harbour West (1) and Scorpio

(8) recorded hourly exceedances against the annual allowance of 88; and CBD (1), Harbour West (3), and Scorpio (8) recorded 10-minute exceedances against the annual allowance of 526.

7.1.2.2. Health/odour guidance (WHO + RBCAA-adopted TRS/H_2S criteria)

- PM_{10} (WHO 24-hour guideline: 45 µg/m³): exceedance-days during 2026 year-to-date totalled CBD (7), eSikhaleni (1), Felixton (5), and Scorpio (3).
- $PM_{2.5}$ (WHO 24-hour guideline: 15 µg/m³): exceedance-days during 2026 year-to-date totalled Brackenham (127), Felixton (83), Harbour West (51), Richardia (34), and Scorpio (145). Scorpio $PM_{2.5}$ values are subject to the data qualification in section 4.2.
- SO_2 (WHO 24-hour guideline: 15 ppb): exceedance-days during 2026 year-to-date totalled CBD (4), Harbour West (23), and Scorpio (53); all other stations recorded 0 exceedance-days.
- TRS/H_2S: exceedances of RBCAA-adopted criteria during 2026 year-to-date comprised 0 OME 24-hour exceedances at all stations, WHO 30-minute exceedances at Brackenham (67), CBD (33), eSikhaleni (87), Felixton (137), and Richardia (33), and OME 10-minute exceedances at Brackenham (43), CBD (10), eSikhaleni (43), Felixton (164), and Richardia (4).

APPENDIX A
ABBREVIATIONS AND TERMS

List of Abbreviations and Terms	
Chemical Formulae	
CH_3-S-CH_3	Dimethyl Sulphide
CH_3S-H	Methyl Mercaptan
CH_3-S-S-CH_3	Dimethyl Disulphide
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
FPM	Fine Particulate Matter
H_2S	Hydrogen Sulphide
H_2SO_3	Sulphurous Acid
H_2SO_4	Sulphuric Acid
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
O_3	Ozone
PM_{10}	Particulates with an aerodynamic diameter of less than 10 µm
$PM_{2.5}$	Particulates with an aerodynamic diameter of less than 2.5 µm
SO_2	Sulphur Dioxide
SO_3	Sulphur Trioxide
TRS	Total Reduced Sulphur
TSP	Total Suspended Particulates
TVOCs	Total Volatile Organic Compounds

List of Abbreviations and Terms	
Countries	
EU	European Union
RSA	Republic of South Africa
UK	United Kingdom
US	United States

List of Abbreviations and Terms	
Direction	
N	North
NNE	North-North-East
NE	North-East
ENE	East-North-East
E	East
ESE	East-South-East
SE	South-East
SSE	South-South-East
S	South
SSW	South-South-West
SW	South-West
WSW	West-South-West
W	West
WNW	West-North-West
NW	North-West
NNW	North-North-West

List of Abbreviations and Terms	
Measurement	
°	Degrees
°C	Degrees Celsius
µg	Microgram
µg/m³	Micrograms per cubic meter
BMC	Best Measurement Capabilities
g/s	Grams per second
K	Kelvin
km	Kilometre
km/h	Kilometres per hour
m	Metres
m/s	Metres per second
mg	Milligrams
mg/m²/day	Milligrams per meter squared per day
mg/m³	Milligrams per cubic meter
ppb	Parts per billion
ppm	Parts per million
t/day	Tons per day
t/hr	Tons per hour
tpa	Tons per annum

List of Abbreviations and Terms	
Organisations	
AIMS	Air Impact Measurement Specialists
CASCO	Conformity Assessment Committee
DEFF	Department of Environment, Forestry and Fisheries
EA-NPI	Environment Australia - National Pollutant Inventory
EC	European Commission
EU-EA	European Union - Environmental Agency
IEC	International Electrotechnical Commission
IFC	International Finance Corporation
ISO	International Standard Organisation
RBCAA	Richards Bay Clean Air Association
SANAS	South African National Accreditation System
SANS	South African National Standard
UK-EA	United Kingdom - Environmental Agency
US-EPA	United States - Environmental Protection Agency
WHO	World Health Organisation

List of Abbreviations and Terms	
Terms	
Analyser	A mechanical-electrical-optical device used to measure the concentration of trace gas pollutants or particulate concentrations.
Calibration	Calibration is a procedure that compares sensor responses to known standards or reference values. Deviations between the expected and known concentrations are corrected and reported.
Database	The data structures and attendant software that organise, store, and allow users access to data.
Environment	The organisation's surroundings include air, water, land, natural resources, flora, fauna, humans, and their interactions and relations.
Meteorological Station	A monitoring station capable of monitoring wind speed, direction, and temperature.
Model	The model implements dispersion modelling mathematics software that calculates ambient pollution concentrations based on emission figures and meteorological data.
Network	The network comprises hardware (sensors, data loggers, telemetry, and computers) and software (data handling, storage programs, models, and databases).
Precision Check	The precision check is a procedure in which a sensor is challenged with a gas of known concentration within the operating range of the measurement.
Source	A point, line, or area from which pollution would be released
Station	A station is a data capture point used for measuring pollutants, meteorological conditions, or consolidating data.
System	The system represents all network components, including the procedures for marshalling and reporting data.

APPENDIX B
QUALITY ASSURANCE

The SO_2 concentrations reported are determined by the United States Environmental Protection Agency (US EPA) equivalent method, EQSA-0193-092. SO_2 and TRS measurements allow a maximum precision error of 10% of the reported value. A tolerance around the zero-point of plus or minus 5 ppb is permitted. Every effort is made to minimise the error. The minimum threshold for statistical analyses is at least 80% valid data to maintain reliability and minimise bias; the South African National Accreditation Standard requires 90%. (SANAS, 2012)

Table 1: Quality Assurance

Test	Range	Action
Zero	Zero 0 to 2 ppb	Leave it as is.
	Zero value -2 to 0 ppb	Set to zero.
	Zero value -5 to -2 ppb and 2 to 5 ppb	Adjust the data set to reset all data to zero.
	Zero value outside the above limits, invalidate and recalibrate.	Data can be adjusted if a specific reason for the deviation can be identified.
Span	Span value plus or minus a 3% deviation.	Leave it as is.
	Span value -10 to -3% and 3 to 10% deviation.	Scale the data set by the opposite, corresponding percentage.
	Span value outside the above limits, invalidate and recalibrate.	Data can be adjusted if a specific reason for the deviation can be identified.

APPENDIX C
EMISSION INVENTORY

Table 1: Emission Inventory – 2026.

Industry	Description	SO_2 Emission 2025 (t)	SO_2 Emission 2025 (t)	SO_2 Contribution (%)
Foskor	Acid Plant	2390	2401	13%
	Boiler	11		
Tongaat Hulett	Boiler	185	185	1%
Mondi	Flume 1	1417	3080	17%
	Flume 2	836		
	Power Boiler	795		
	Incinerator	8		
	Bleach Plant	24		
Mpact	Babcock	281	805	5%
	JT Boiler	524		
	Oil Burner	0		
RBM	Char Plant	468	542	3%
	Miscellaneous	34		
	MSP (Drier)	38		
	Smokers	1		
South32	FTC	1885	10561	59%
	GTC 1	1955		
	GTC 2	1680		
	GTC 3	1579		
	GTC 4	1579		
	GTC 5	1630		
	Potrooms	254		
Tronox	Tank 1	251	251	1%
Total		17825	17825	100%
Note: Tongaat Hullet shut down during the year's 1st quarter and last month.				

APPENDIX D
OPERATIONAL REPORT

Table 1: Maximum concentrations for PM_{10} and $PM_{2.5}$.

RBCAA: Monthly Report						
PM_{10} daily averages						
Station	*Concentration (µg/m³)*	*% of the RSA Standard (75 µg/m³)*	*% of WHO Guideline (45 µg/m³)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
CBD ES1	40.0	53%	89%	2026/08/22 00:00	3.9	31
eSikhaleni	26.0	35%	58%	2026/08/22 00:00	4.3	25
Felixton ES1	42.0	56%	93%	2026/08/06 00:00	2.5	226
Richardia	34.0	45%	76%	2026/08/31 00:00	1.5	201
Scorpio ES1	40.0	53%	89%	2026/08/22 00:00	3.9	31
$PM_{2.5}$ daily averages						
Station	*Concentration (µg/m³)*	*% of the RSA Standard (40 µg/m³)*	*% of WHO Guideline (15 µg/m³)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
Brackenham ES2	46.0	**115%**	**307%**	2026/08/22 00:00	3.9	14
Felixton ES2	39.0	98%	**260%**	2026/08/06 00:00	2.5	226
Harbour West ES2	37.0	93%	**247%**	2026/08/06 00:00	2.6	285
Scorpio ES2	22.0	55%	**147%**	2026/08/06 00:00	3.1	314

LEGEND
Yellow: = 50% of the guideline/standard
Red: >= 100% of the guideline/standard (i.e. exceedance)
Turquoise: = 10% of the guideline/standard

NOTES
Dates used for time intervals are the time beginning.
Wind speeds of < 1 m/s are considered calm; wind directions measured under these conditions cannot be used for incident investigations.
This report is an interim report regarding AIMS' quality system classification. The final data will be published in the system's monthly report.

STATUS
Meteorology
Airport, Arboretum, Brackenham, CBD, eSikhaleni, and Harbour West have meteorology.
Scorpio uses meteorology from Harbour West, and Felixton uses meteorology from eSikhaleni.

MISSING DATA
"Data < 80%" - data capture less than 80% (not suitable for statistical analysis)
"No Data" – no data available.

Table 2: Maximum concentrations for SO_2.

RBCAA: Monthly Report						
SO_2 10-minute averages						
Station	*Concentration (ppb)*	*% of RSA Standard & WHO Guideline (500 µg/m³ / 191 ppb)*		*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
Arboretum	99.5	52%		2026/08/01 23:20	4.1	253
Brackenham	21.4	11%		2026/08/06 14:00	4.3	196
CBD	87.4	46%		2026/08/10 21:50	5.1	243
eSikhaleni	21.7	11%		2026/08/06 13:00	1.5	103
Felixton	28.9	15%		2026/08/12 14:30	3.9	208
Harbour West	83.3	44%		2026/08/30 04:00	5.1	4
Richardia	13.7	7%		2026/08/23 21:30	2.4	283
Scorpio	107.5	56%		2026/08/06 05:00	0.9	272
SO_2 hourly averages						
Station	*Concentration (ppb)*	*% of the RSA Standard (350 µg/m³ / 134 ppb)*	*No WHO Guideline*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
Arboretum	81.7	61%	-	2026/08/01 23:00	5.0	249
Brackenham	9.9	7%	-	2026/08/20 15:00	6.3	200
CBD	51.2	38%	-	2026/08/02 09:00	5.6	239
eSikhaleni	11.9	9%	-	2026/08/06 12:00	1.8	47
Felixton	17.1	13%	-	2026/08/12 02:00	2.7	178
Harbour West	60.3	45%	-	2026/08/30 03:00	6.2	11
Richardia	8.7	6%	-	2026/08/19 10:00	2.1	50
Scorpio	79.6	59%	-	2026/08/17 05:00	2.2	358
SO_2 daily averages						
Station	*Concentration (ppb)*	*% of the RSA Standard (125 µg/m³ / 48 ppb)*	*% of WHO Guideline (40 µg/m³ / 15 ppb)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
Arboretum	11.5	24%	77%	2026/08/01 00:00	4.9	236
Brackenham	2.6	5%	17%	2026/08/26 00:00	1.2	240
CBD	20.9	44%	**139%**	2026/08/10 00:00	6.1	236
eSikhaleni	4.4	9%	29%	2026/08/22 00:00	4.3	25
Felixton	5.2	11%	35%	2026/08/12 00:00	2.3	186
Harbour West	10.2	21%	68%	2026/08/17 00:00	3.3	20
Richardia	2.3	5%	15%	2026/08/19 00:00	3.0	13
Scorpio	18.3	38%	**122%**	2026/08/06 00:00	2.6	285

Table 3: Maximum concentrations for TRS.

RBCAA: Monthly Report						
TRS 10-minute averages						
Station	*Concentration (ppb)*	*No RSA Standard*	*% of OME TRS Guideline (13.0 µg/m³ / 9.3 ppb)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
CBD	10.2	-	**110%**	2026/08/13 21:30	0.3	113
eSikhaleni	11.6	-	**125%**	2026/08/07 18:40	0.2	334
Felixton	18.8	-	**202%**	2026/08/31 05:10	0.2	15
Richardia	56.7	-	**610%**	2026/08/15 03:20	1.1	237
TRS 30-minute averages						
Station	*Concentration (ppb)*	*No RSA Standard*	*% of WHO H_2S Guideline (7.0 µg/m³ / 5.0 ppb)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
CBD	7.5	-	**150%**	2026/08/13 21:30	0.3	344
eSikhaleni	9.5	-	**190%**	2026/08/07 18:30	0.3	335
Felixton	16.7	-	**334%**	2026/08/31 05:00	0.3	340
Richardia	40.5	-	**810%**	2026/08/15 03:00	0.7	219
TRS daily averages						
Station	*Concentration (ppb)*	*No RSA Standard*	*% of OME TRS Guideline (14.0 µg/m³ / 10.1 ppb)*	*Time*	*Wind Direction (°)*	*Wind Speed (m/s)*
CBD	2.4	-	24%	2026/08/09 00:00	3.7	8
eSikhaleni	1.3	-	13%	2026/08/10 00:00	6.1	236
Felixton	2.0	-	20%	2026/08/06 00:00	2.7	350
Richardia	3.1	-	31%	2026/08/15 00:00	1.9	17

APPENDIX E
RAINFALL

Table 1: Daily Rainfall

Date	Richards Bay (mm)	Felixton (mm)	RBCT (mm)	Meerensee (mm)	South32 (mm)
2026/08/01	3	3	4	4	1
2026/08/02	10	3	15	11	15
2026/08/03	0	0	0	0	0
2026/08/04	0	0	0	0	0
2026/08/05	0	0	0	0	0
2026/08/06	0	0	0	0	0
2026/08/07	0	0	0	0	0
2026/08/08	0	0	0	0	0
2026/08/09	0	0	0	0	0
2026/08/10	31	44	53	45	7
2026/08/11	43	28	9	32	17
2026/08/12	1	0	4	2	0
2026/08/13	0	0	1	1	0
2026/08/14	0	0	0	0	0
2026/08/15	0	0	0	0	0
2026/08/16	0	0	0	0	0
2026/08/17	0	0	0	0	0
2026/08/18	0	0	0	0	0
2026/08/19	0	0	0	0	0
2026/08/20	0	0	0	0	0
2026/08/21	0	0	0	0	0
2026/08/22	1	0	0	0	0
2026/08/23	0	0	0	0	0
2026/08/24	0	0	0	0	0
2026/08/25	0	0	0	0	0
2026/08/26	2	4	12	4	2
2026/08/27	1	0	0	1	0
2026/08/28	0	0	0	0	0
2026/08/29	0	0	0	0	0
2026/08/30	0	0	0	0	0
2026/08/31	-	0	0	-	0
Total	92	81	100	99	43

Table 2: Monthly Rainfall, Richards Bay

Month	Richards Bay (mm)							
	2019	2020	2021	2022	2023	2024	2025	2026
Jan	182	47	305	127	167	271	371	138
Feb	195	377	229	193	410	118	390	36
Mar	78	139	217	62	141	192	165	202
Apr	214	141	96	647	87	101	479	49
May	9	53	165	130	356	22	41	89
Jun	78	114	140	60	33	89	27	46
Jul	16	48	57	20	196	57	220	70
Aug	160	107	59	77	20	97	17	92
Sep	43	144	216	93	23	186	203	
Oct	260	171	214	101	345	250	96	
Nov	296	122	72	131	61	103	176	
Dec	320	77	464	253	195	145	211	
Minimum	9	47	57	20	20	22	17	36
Average	154	128	186	158	169	136	200	90
Maximum	320	377	464	647	410	271	479	202
Total	1850	1540	2234	1893	2034	1630	2396	722

Table 3: Monthly Felixton

Month	Felixton (mm)							
	2019	2020	2021	2022	2023	2024	2025	2026
Jan	138	71	207	68	57	146	117	81
Feb	138	214	231	78	188	82	303	65
Mar	70	89	126	95	80	113	148	112
Apr	143	106	135	368	58	49	287	73
May	9	42	57	120	245	17	16	106
Jun	53	44	98	20	14	53	29	28
Jul	17	37	39	15	146	2.5	157	78
Aug	39	67	55	37	18	54	3	81
Sep	79	84	191	51	43	137	127	
Oct	144	67	145	98	318	187	79	
Nov	121	106	35	174	34	78	131	
Dec	311	64	212	163	146	74	193	
Minimum	9	37	35	15	14	3	3	28
Average	105	82	127	107	112	83	133	78
Maximum	311	214	231	368	318	187	303	112
Total	1261	987	1530	1288	1347	992	1590	624

Table 4: RBCT

Month	RBCT (mm)							
	2019	2020	2021	2022	2023	2024	2025	2026
Jan	110	33	215	54	136	154	229	130
Feb	124	166	146	131	344	72	249	53
Mar	172	109	194	161	69	161	145	118
Apr	174	111	69	642	30	98	450	60
May	14	69	171	268	442	23	66	141
Jun	24	52	124	30	34	104	27	81
Jul	5	39	64	30	162	56	155	35
Aug	68	64	56	25	30	86	17	100
Sep	59	104	187	115	30	177	164	
Oct	164	121	156	71	293	121	65	
Nov	186	77	43	129	42	89	166	
Dec	216	104	245	279	127	65	178	
Minimum	5	33	43	25	30	23	17	35
Average	110	87	139	161	145	100	159	90
Maximum	216	166	245	642	442	177	450	141
Total	1317	1049	1669	1934	1740	1205	1911	718

Table 5: South32

Month	South32 (mm)							
	2019	2020	2021	2022	2023	2024	2025	2026
Jan	-	-	-	-	91	120	232	117
Feb	-	-	-	115	256	-	241	30
Mar	-	-	-	149	51	144	137	105
Apr	-	-	-	505	43	-	363	40
May	-	-	-	106	230	-	23	27
Jun	-	-	-	25	11	-	16	26
Jul	-	-	-	12	165	-	98	25
Aug	-	-	-	30	13	-	8	43
Sep	-	-	-	64	18	129	35	
Oct	-	-	-	64	271	-	30	
Nov	-	-	-	101	36	-	112	
Dec	-	-	-	163	95	92	132	
Minimum	-	-	-	12	11	92	8	25
Average	-	-	-	121	107	121	119	52
Maximum	-	-	-	505	271	144	363	117
Total	-	-	-	1336	1280	485	1427	413

Please note that the South32 missing rain data for 2024 was due to a faulty rain gauge.

Table 6: Meerensee

Month	Meerensee (mm)							
	2019	2020	2021	2022	2023	2024	2025	2026
Jan	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	31
Mar	-	-	-	-	-	-	-	80
Apr	-	-	-	-	-	-	-	56
May	-	-	-	-	-	-	-	101
Jun	-	-	-	-	-	-	-	51
Jul	-	-	-	-	-	-	-	49
Aug	-	-	-	-	-	-	-	99
Sep	-	-	-	-	-	-	-	
Oct	-	-	-	-	-	-	-	
Nov	-	-	-	-	-	-	-	
Dec	-	-	-	-	-	-	-	
Minimum	-	-	-	-	-	-	-	31
Average	-	-	-	-	-	-	-	67
Maximum	-	-	-	-	-	-	-	101
Total	-	-	-	-	-	-	-	467

APPENDIX F
COMPLAINTS LOG

Note: Complainant descriptions (Table 1) and industry feedback (Table 2) are reproduced verbatim from the complaints log; spelling, grammar and punctuation are as submitted.

Table 1: Complaints

No	Date	Region	Type	Source	Description	Response
1	2026/08/06 12:20	Richards Bay	Dust	IDZ	significant dust emanating from the wind turbine storage area.	421, 425, 429
2	2026/08/07 06:00	Meerensee	Odour	Mondi	"Mondi Odour"	422
3	2026/08/10 21:00	Brackenham	Odour	Mondi	“Cabbage smell”	425
4	2026/08/11 07:30	Brackenham	Odour	Mondi	“Cat urine odour”	425
5	2026/08/12 00:00	Arboretum	Clinical + Odour	Mondi	12 to13 Aug, “Rancid smell from around midnight and still lingering in the house this morning. Best way to describe it is if a tomcat sprayed to mark its territory. Headache and blocked sinuses this morning.”	424
6	2026/08/12 23:50	Arboretum	Clinical + Odour	Mondi	“Terribly strong smell like cat urine. Unable to breathe, headache and sinus pain.”	424
7	2026/08/12 23:55	Arboretum	Clinical + Odour	Mondi	until about 03h15 on the 13th, “The most terrible smell. Headache and nausea.”	424
8	2026/08/13 00:00	Arboretum	Clinical + Odour	Mondi	“The pollution was very bad this morning, just after midnight. Myself, my husband and 8-year-old daughter was having chest pains, headache, and stomachs with smell. The smell consumed our entire household. And it remained like that for hours. Only after 6am did it settle. I actually wanted to go to casualty as the chest pains was very bad.”	424
9	2026/08/13 00:00	Arboretum	Clinical + Odour	Mondi	early hours, “I live in Arboretum near the primary school and boy oh boy did a smell wake me up during the night! It was really bad and my head actually feels quite thick this morning.”	424
10	2026/08/13 00:00	Arboretum Ext	Clinical + Odour	Mondi	just after midnight, “One of the worst gases we have had come through our windows for years and years. Had to close windows. We have headaches and burning throats this morning.”	424
11	2026/08/13 00:00	Arboretum	Clinical + Odour	Mondi	from around midnight , “Bad smell like cat pee so strong it burns our noises. Me ,my hubby and 12-year-old daughter started with runny noses and extreme headaches.”	424
12	2026/08/13 00:00	Arboretum	Clinical + Odour	Mondi	early hours, “Bad gas smell. My wife’s chest closed and I also had difficulty.”	424
13	2026/08/13 00:00	Meerensee	Clinical + Odour	Mondi	early hours, “Cat pee smell woke me up. Terrible headache.”	424
14	2026/08/13 00:03	Arboretum	Clinical + Odour	Mondi	“Woken by a very strong unpleasant smell, like cat urine. Burning nose, eyes, and throat. It has been a very unpleasant night.”	424
15	2026/08/13 00:08	Meerensee	Odour	Mondi	“Terrible smell in the air. Smells like old oil or cabbage.”	424
16	2026/08/13 00:14	Meerensee	Clinical + Odour	Mondi	“Terrible strong smell. Guava and cat urine kind of a smell, but very strong. Causing burning nose, itching eyes, and headache. My daughter started coughing.”	424

No	Date	Region	Type	Source	Description	Response
17	2026/08/13 00:18	Meerensee	Clinical + Odour	Mondi	“Very strong smell. I can hardly breathe.”	424
18	2026/08/13 00:29	Meerensee	Clinical + Odour	Mondi	“Terrible smell, Started about 50 mins ago and smells like rotten onions, giving me a headache and feel a bit nauseas.”	424
19	2026/08/13 00:30	Arboretum Ext	Clinical + Odour	Mondi	“Very strong odour which got stronger as the night progressed. The smell was so strong that my husband and I struggled to breathe and used the oximeter to check our oxygen levels.”	424
20	2026/08/13 00:30	Meerensee	Clinical + Odour	Mondi	“Terrible cat pee smell causing headache and sinus.”	424
21	2026/08/13 00:30	Arboretum	Clinical + Odour	Mondi	“Strong acid smell. Nose burning and sneezing.”	424
22	2026/08/13 00:30	Meerensee	Clinical + Odour	Mondi	“Extremely bad smell. Tight chest and taste in my mouth.”	424
23	2026/08/13 00:41	Arboretum	Clinical + Odour	Mondi	“Very strong rotten onion smell. Me ,my wife, and kids are coughing this morning.”	424
24	2026/08/13 00:51	Arboretum Ext	Odour	Mondi	“Extremely bad smell in the air.”	424
25	2026/08/13 00:52	Arboretum	Clinical + Odour	Mondi	“Very foal smell in all of Arboretum during the early hours of Thursday Woke up from the rotten smell. Tight chest from the strong smell.”	424
26	2026/08/13 00:52	Meerensee	Clinical + Odour	Mondi	“There is a really bad, strong smell in the area at the moment. Not sure how to describe it. Maybe like a chemical or oil burning.”	424
27	2026/08/13 01:00	Arboretum	Clinical + Odour	Mondi	“Onion odour. Headache.”	424
28	2026/08/13 01:00	Arboretum	Clinical + Odour	Mondi	“Potent onion odour. Headache.”	424
29	2026/08/13 01:00	Arboretum	Clinical + Odour	Mondi	“Strong onion like odour. Headache.”	424
30	2026/08/13 01:00	Meerensee	Clinical + Odour	Mondi	01h00 hrs to 04h00 “Having lived in Richards Bay since 1972, raised here and 3rd generation Family living in Richards Bay as residents and business Owners wish to report via the RBCAA, the shocking, hazardous, putrid chemical smell that engulfed this area during the early hours of yesterday morning. Difficulty breathing, negative impact on health. Smell so strong several residents on common platforms were woken up with a smell similar to a gas leak. (putrid, noxious smell) . Unacceptable concentrated air pollution levels experienced as a result of industrial chemical emission. Subsequent 36 hours of headaches. Please can the RBCAA assist in logging a formal complaint via through the correct channels as this is absolutely unacceptable for any citizens to experience difficulty breathing. This impacted all residents in the Northern suburb of Meerensee, and all employees experienced the same side effects following the reported pollution. The numerous platforms and forums reported similar experiences.”	424
31	2026/08/13 01:05	Arboretum	Clinical + Odour	Mondi	“Pungent odour in the air. Sinus issues and mild irritation of the eyes.”	424
32	2026/08/13 01:10	Arboretum	Clinical + Odour	Mondi	“Incredibly foul smell like cat urine. Burning nose.”	424

No	Date	Region	Type	Source	Description	Response
33	2026/08/13 01:15	Arboretum	Clinical + Odour	Mondi	Very bad severe smell. Asthma attack, couldn't breathe and sinus.”	424
34	2026/08/13 01:28	Meerensee	Clinical + Odour	Mondi	“Extremely strong gas/cat urine smell to the extent that it woke us up through closed windows. Burning eyes and chests, feeling dizzy and nauseas.	424
35	2026/08/13 01:47	Meerensee	Odour	Mondi	“Strong smell.”	424
36	2026/08/13 02:00	Veldenvlei	Clinical + Odour	Mondi	“Woke up with a terrible acid smell, eyes, throat burning, coughing, and sneezing. Still very bad now at 07h40. My employee that comes from Kwambo said the smell hit him when he turned into Richards Bay.”	424
37	2026/08/13 02:30	Arboretum	Odour	Mondi	“Pungent smell in the air like cat urine.”	424
38	2026/08/13 04:00	Arboretum	Odour	Mondi	“An awful smell throughout my house. Smelled like cat urine, very strong.”	424
39	2026/08/13 04:48	Arboretum Ext	Clinical + Odour	Mondi	“Bad cat urine smell. Burning eyes and nose.”	424
40	2026/08/13 05:00	Birdswood and Alton	Odour	Mondi	“An extremely strong onion smell.”	424
41	2026/08/13 05:06	Birdswood	Clinical + Odour	Mondi	“In Birdswood bad smell like urine. Want to vomit.”	424
42	2026/08/13 05:30	Arboretum	Clinical + Odour	Mondi	“There was an exceptionally bad odour in the house. I thought that there was a sewer issue or a cat that came into the house and sprayed all over. It was extremely strong and pungent. I sneezed and had watery eyes.”	424
43	2026/08/13 05:30	Veldenvlei	Clinical + Odour	Mondi	“Woken by a pungent Mondi odour. Headache, nausea, and burning eyes.”	424
44	2026/08/13 05:35	Arboretum	Clinical + Odour	Mondi	“Very string gassy smell my husband was awake in the early morning, and he smell it inside the house so he open the doors for fresh air and the smell then was horrible. Itchy eyes.”	424
45	2026/08/13 05:58	Wildenweide	Odour	Mondi	“Air has a rotten egg smell.”	424
46	2026/08/13 06:20	Veldenvlei	Odour	Mondi	“Strange smell that smells like sulphur.”	424
47	2026/08/13 06:39	Alton	Odour	Mondi	“In Alton and smell is still in the air.”	424
48	2026/08/13 06:55	Alton	Clinical + Odour	Mondi	“Air smelling very bad causing sinus.”	424
49	2026/08/13 07:46	Brackenham	Odour	Mondi	“Air stinks again like cat pee.”	424
50	2026/08/13 10:09	Meerensee	Clinical + Odour	CoU-Sewerage	Since 2020 there has been a sewerage gas smell daily. Causing cough, headaches, asthma, shortness of breath and vomiting.”	431
51	2026/08/14 00:31	Meerensee	Clinical + Odour	Mondi	“Cat Urine/cabbage smell. Burning eyes and headache.”	428
52	2026/08/18 00:00	Meerensee	Clinical + Odour	Mondi	on waking, “There is something in the air that is blocking my nose, making my eyes itch and burn, tight chest, and I was super tired this morning. Also, a weird taste in my mouth.”	427

No	Date	Region	Type	Source	Description	Response
53	2026/08/18 06:00	Alton	Clinical + Odour	Mondi	“Bad odour. Smells like cat urine causing burning chest, dry mouth, and a taste.”	427
54	2026/08/18 07:30	Alton	Clinical + Odour	Mondi	“Rotten egg smell causing headache.”	427
55	2026/08/18 07:30	Alton	Clinical + Odour	Mondi	“Horrible strong smell once again. Headache and sinus burning with totally blocked nose.”	427
56	2026/08/18 07:44	Alton	Odour	Mondi	“Bad smell in the air, like cat urine.”	427
57	2026/08/18 07:51	Meerensee	Clinical + Odour	Mondi	“Acidy gas smell. Burning eyes and headache.”	427
58	2026/08/18 07:51	Meerensee	Clinical + Odour	Mondi	“Acidy gas smell. Nausea and headache.”	427
59	2026/08/18 07:51	Meerensee	Clinical + Odour	Mondi	“Acid, gas, cat urine smell. Burning eyes, headache and dizzy.”	427
60	2026/08/18 07:51	Meerensee	Clinical + Odour	Mondi	“Very bad smell that affects my health. Very bad headache, nausea, itchy swollen eyes, coughing, and blocked nose.”	427
61	2026/08/18 07:54	Arboretum	Clinical + Odour	Mondi	“I really can’t breathe since this morning with this smell in the air.”	427
62	2026/08/18 07:57	Arboretum	Clinical + Odour	Mondi	”There is a bad smell in the air in Richards Bay. It gives headaches.”	427
63	2026/08/18 08:00	Meerensee	Clinical + Odour	Mondi	“String sulphur smell in the air. Stinging burning sensation in the sinuses accompanied by excessive sneezing.”	427
64	2026/08/18 08:09	Meerensee	Odour	Mondi	“Smell of cat pee.”	427
65	2026/08/18 08:18	Meerensee	Clinical + Odour	Mondi	“Fouls smell in the air creating sinus problems and triggering allergy symptoms.”	427
66	2026/08/18 08:35	Meerensee	Clinical + Odour	Mondi	“I woke with itchy eyes, nose running and a bad headache.”	427
67	2026/08/25 10:45	Richards Bay	Odour	Mondi	Strange odour in the air while travelling between Empangeni and Richards Bay.	430
68	2026/08/31 11:20	Meerensee	Clinical + Odour	Mondi	“Cabbage like smell and Burning eyes”	432

Table 2: Responses

No.	Industry Feedback
421	IDZ - Langa Percy responded (2026/08/07 15:43): We will provide a Corrective Action Report soon. RBCAA Allocation- Sandy Camminga (2026/08/19 12:47): IDZ was remainded of the oustanding response. Complain has been allocated to IDZ.
422	Mondi - Candice Webb responded (2026/08/11 08:07): Source of Odour: Emissions associated with Methanol leak. "...At the time of the complaint, the mill was stable although start up of the mill was completed on 06 August 2026 after a planned shut down. Investigations identified that all non-condensable gases (NCGs) were stable within the designated burning zones at the time the complaint was received. However, based on the description of the odour and the elevated Total Reduced Sulphur (TRS) concentrations recorded at the Richardia monitoring station, it was suspected that the odour could be attributed to methanol. The Recovery and Evaps process engineers were requested to investigate. Methanol was moved to an alternative burning zone (Lime Kiln) at 09:33 and an inspection on the methanol system was undertaken. A leak was identified on the methanol collum, and a plan is in place to repair it. Until the repair is complete, Methanol will remain in the Lime Kiln for efficient incineration. 7. Corrective Actions: 1) Methanol was moved to an alternative burning zone (Lime Kiln) at 09:33 8. Preventative Measures: 1) Leak to be repaired under planned conditions.
424	Mondi - Candice Webb responded (2026/08/19 12:47): Source of Odour: Emissions associated with Methanol vapour from the CPX tank.
425	RBCAA Allocation- Sandy Camminga (2026/08/19 12:47)
427	Mondi - Candice Webb responded (2026/08/20 14:48): Source of Odour: Emissions associated with Methanol leak
428	Mondi - Candice Webb responded (2026/08/21 09:28): Source of Odour: Emissions associated with Methanol System.
429	IDZ - Sethabile Gcume responded (2026/08/24 09:12): Wind conditions on the day of the incident The wind was blowing in the northerly direction (towards John Ross highway). Immediate Action(s) Taken: The SHEQ Manager immediately notified the Site Manager responsible for the Vanguard site at Phase 1A of the complaint and requested that suitable dust-control mitigation measures be implemented without delay. The Site Manager advised that a new dust-suppression service provider will be appointed and placed on standby to suppress dust during windy conditions. Root Cause(s): 1. The dust management plan is in place. However, the water tanker used for dust suppression is out of service due to mechanical problems. 2. No alternative dust suppression measures were implemented by Lovemore and Vanguard, which is a shortcoming and led to dust conditions on the day. Corrective Actions: Another contractor has been appointed to provide dust suppression services as and when required. This week, water spraying took place on 19-20 Aug 2026. The tenant has been requested to ensure that alternative solutions are always place to avoid a repeat incident.. Key Learnings: Dust control measures should be implemented proactively.
430	Mondi - Candice Webb responded (2026/08/26 11:24): Source of Odour: Emissions associated with switching Non-Condensable Gases between burning zones.
431	RBCAA Allocation- Sandy Camminga (2026/09/01 14:14)
432	Mondi - Candice Webb responded (2026/09/02 15:12): Source of Odour: Emissions associated with switching Non-Condensable Gases between burning zones.

APPENDIX G
PM_{10} EXCEEDANCE LOG

Note: PM_{10} exceedances were not reported during August 2026.

APPENDIX H
$PM_{2.5}$ EXCEEDANCE LOG

Table 1:$PM_{2.5}$ Exceedances

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
1	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/04 00:00	18.0	11	2.4	No response required	None	2
2	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/05 00:00	21.0	18	2.6	No response required	None	2
3	**$PM_{2.5}$ Daily RSA Limit (40 µg/m³)**	**Brackenham**	**2026/08/06 00:00**	**45.0**	**308**	**3**	**Industry response required - Refer to notification**	**Responded: Mondi & Grindrod**	**85, 96, 1**
4	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/06 00:00	45.0	308	3	No response required	None	2
5	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/07 00:00	34.0	239	1.4	No response required	None	2
6	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/08 00:00	38.0	7	3.3	No response required	None	2
7	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/09 00:00	36.0	8	3.7	No response required	None	2
8	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/18 00:00	26.0	245	2.9	No response required	None	2
9	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/19 00:00	32.0	354	2.2	No response required	None	2
10	**$PM_{2.5}$ Daily RSA Limit (40 µg/m³)**	**Brackenham**	**2026/08/20 00:00**	**45.0**	**230**	**3.9**	CoU	Municipal (CoU) wildfire	**87, 89**
11	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/20 00:00	45.0	230	3.9	No response required	None	2
12	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/21 00:00	29.0	29	1.6	No response required	None	2
13	**$PM_{2.5}$ Daily RSA Limit (40 µg/m³)**	**Brackenham**	**2026/08/22 00:00**	**46.0**	**13**	**3.9**	CoU	Municipal (CoU) wildfire	**88, 90**
14	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/22 00:00	46.0	13	3.9	No response required	None	2
15	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/23 00:00	25.0	215	4.2	No response required	None	2
16	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/24 00:00	20.0	8	2.3	No response required	None	2
17	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/25 00:00	32.0	284	2.2	No response required	None	2
18	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/30 00:00	34.0	236	3.4	No response required	None	2

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
19	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Brackenham	2026/08/31 00:00	34.0	351	1.3	No response required	None	2
20	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/05 00:00	18.0	52	1.9	No response required	None	2
21	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/06 00:00	39.0	222	2.5	No response required	None	2
22	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/07 00:00	21.0	234	2.4	No response required	None	2
23	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/08 00:00	24.0	52	3.3	No response required	None	2
24	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/09 00:00	26.0	334	3.5	No response required	None	2
25	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/18 00:00	17.0	256	3	No response required	None	2
26	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/19 00:00	19.0	358	2.5	No response required	None	2
27	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/21 00:00	18.0	24	1.7	No response required	None	2
28	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/22 00:00	30.0	33	4.6	No response required	None	2
29	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/23 00:00	17.0	227	4.5	No response required	None	2
30	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/24 00:00	17.0	22	2.3	No response required	None	2
31	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/25 00:00	26.0	242	2.2	No response required	None	2
32	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/30 00:00	16.0	239	4.3	No response required	None	2
33	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Felixton	2026/08/31 00:00	22.0	213	1.3	No response required	None	2
34	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Harbour West	2026/08/06 00:00	37.0	288	2.6	No response required	None	2
35	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Harbour West	2026/08/07 00:00	23.0	226	2	No response required	None	2
36	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Harbour West	2026/08/08 00:00	25.0	7	3.4	No response required	None	2
37	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Harbour West	2026/08/09 00:00	22.0	6	4.1	No response required	None	2
38	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Harbour West	2026/08/31 00:00	19.0	204	1.5	No response required	None	2
39	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/06 00:00	22.0	315	3.1	No response required	None	2

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
40	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/08 00:00	17.0	17	3.6	No response required	None	2
41	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/09 00:00	20.0	17	4.1	No response required	None	2
42	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/21 00:00	16.0	36	1.8	No response required	None	2
43	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/22 00:00	20.0	32	4.3	No response required	None	2
44	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/25 00:00	18.0	277	2.7	No response required	None	2
45	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Richardia	2026/08/31 00:00	17.0	317	1.9	No response required	None	2
46	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/04 00:00	22.0	2	2.1	No response required	None	2
47	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/05 00:00	18.0	26	2.9	No response required	None	2
48	**$PM_{2.5}$ Daily RSA Limit (40 µg/m³)**	**Scorpio**	**2026/08/06 00:00**	**41.0**	**288**	**2.6**	**Industry response required - Refer to notification**	**Responded: Mondi, Grindrod & South32**	**85, 96, 97, 1**
49	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/06 00:00	41.0	288	2.6	No response required	None	2
50	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/07 00:00	28.0	226	2	No response required	None	2
51	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/08 00:00	35.0	7	3.4	No response required	None	2
52	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/09 00:00	28.0	6	4.1	No response required	None	2
53	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/14 00:00	19.0	347	1.8	No response required	None	2
54	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/15 00:00	18.0	3	2	No response required	None	2
55	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/18 00:00	21.0	230	3.4	No response required	None	2
56	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/19 00:00	21.0	356	2.6	No response required	None	2
57	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/20 00:00	24.0	217	4.4	No response required	None	2
58	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/21 00:00	27.0	33	1.6	No response required	None	2
59	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/22 00:00	35.0	31	4.4	No response required	None	2

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
60	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/23 00:00	20.0	207	4.5	No response required	None	2
61	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/24 00:00	24.0	5	2.4	No response required	None	2
62	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/25 00:00	30.0	238	2.3	No response required	None	2
63	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/30 00:00	27.0	225	4.2	No response required	None	2
64	**$PM_{2.5}$ Daily RSA Limit (40 µg/m³)**	**Scorpio**	**2026/08/31 00:00**	**41.0**	**204**	**1.5**	**Industry response required - Refer to notification**	**Responded: Mondi, Grindrod & South32**	**91, 95, 97, 1**
65	$PM_{2.5}$ Daily WHO Limit (15 µg/m³)	Scorpio	2026/08/31 00:00	41.0	204	1.5	No response required	None	2

Table 2: PM 2.5 Responses

Response	Industry Feedback
1	Unresolved / No Response
2	No response required
85	Mondi - Candice Webb responded, (2026/08/07 12:06): "...based on wind direction, it is unlikely that Mondi is the source of these exceedances. "
87	Mondi - Candice Webb responded, (2026/08/21 09:44): Mondi has investigated the exceedance below. All Particulate Matter emissions from point source stacks were within compliance. All dust suppression measures for stockpiles were also in operation both prior and during the time of the exceedance.
88	RBCAA Allocation -Sandy Camminga (2026/08/24 21:12): This exceedance can be attributed to a Municipal (CoU) wildfire.
89	RBCAA Allocation -Sandy Camminga (2026/08/24 21:16): This exceedance can be attributed to a Municipal (CoU) wildfire.
90	Mondi - Candice Webb responded, (2026/08/24 14:53): Mondi has investigated the PM2.5 exceedance recorded at the Brakenham station. Based on wind direction it is unlikely that Mondi contributed to the exceedance. In addition, all point source emissions were well within specification.
91	Mondi - Candice Webb responded, (2026/09/02 15:19): Mondi has investigated the exceedance below. Based on stable operating conditions, and prevailing wind direction. It is unlikely that Mondi is the source.
95	Grindrod - Nontokozo Dhlamini responded (2026/09/04 12:42): ROOT CAUSE OF EXCEEDANCE a) Meteorological conditions sourced from Scorpio station on the date and time of the exceedance may support the movement of dust from either Kusasa or Navitrade towards the station where the exceedance was observed. The wind direction during the reported day was South south-westerly on the 31st of August 2026 at 1,5 m/s. South south-westerly from our terminals points towards North north-easterly, which heads towards the central business district, thus passes through the station Scorpio. b) Operational activities on the date and time of exceedance: -At Navitrade, offloading activities were in enclosed tipplers, thus less dust would have generated from them. The water tanker was also consistently suppressing dust on site. - At Kusasa, there were vessel loading activities. The commodity loaded on the day is not very dusty. CONCLUSION Upon conducting investigation, it is unlikely that the exceedance was caused by Grindrod terminals given the activities and commodities handled that day, also considering the low wind speed. However, the following corrective actions will be taken following the exceedance: A sprinkler system will be installed at Kusasa and Navitrade. The required resources have been delivered. There is a PO for a sweeper for the roads at Kusasa to reduce silt/spiHage accumulation that serves as a secondary dust source during loading activities. This will be done monthly. Consistent dust suppression by the water tanker will be enforced and the purchased dust suppressant chemical will continue to be added for the roads. Proper housekeeping will be emphasised to minimise spillages becoming airborne
96	Grindrod - Nontokozo Dhlamini responded (2026/09/04 12:45): ROOT CAUSE OF EXCEEDANCE a) Meteorological conditions sourced from Scorpio station on the date and time of the exceedance do not support the movement of dust from either Kusasa or Navitrade towards the station where the exceedance was observed. The wind direction during the reported day was West north-westerly on the 06th of August 2026 at 2,6 m/s. West north-westerly from our terminals points towards East south¬ easterly, which heads towards the harbour and port areas. b) Operational activities on the date and time of exceedance: -At Navitrade, offloading activities were in enclosed tipplers, thus less dust would have generated from them. - At Kusasa, there was receiving of tankers during the day which was complete before the time of the exceedance. On the 06th of August the wind was blowing 2.6 m/s West North-westerly. 1. CONCLUSION Upon conducting investigation, it is unlikely that the exceedance was caused by Grindrod terminals
97	South32 - Molebale, Londiwe responded, (2026/09/07 13:58): "...Investigation: The dust leak trend per GTC was investigated and none was found to be exceeding 30% detection as per the graph below. The FTC's were investigated however there were no trips on the 6th nor the 31st of August that could have led to dust. The investigation also included the conveyors and silo's and no plant upsets were noted on the two respective days..."

APPENDIX I
SO_2 EXCEEDANCE LOG

Table 1: SO_2 Exceedances.

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
1	SO_2 Daily WHO Limit (15 ppb)	CBD	2026/08/10 00:00	20.9	236	6.1	No response required	None	2
2	SO_2 Daily WHO Limit (15 ppb)	Scorpio	2026/08/06 00:00	18.3	288	2.6	No response required	None	2
3	SO_2 Daily WHO Limit (15 ppb)	Scorpio	2026/08/15 00:00	16.1	3	2	No response required	None	2
4	SO_2 Daily WHO Limit (15 ppb)	Scorpio	2026/08/17 00:00	15.7	20	3.3	No response required	None	2
1	SO_2 Daily WHO Limit (15 ppb)	CBD	2026/08/10 00:00	20.9	236	6.1	No response required	None	2

Table 2: SO_2 Responses.

Response	Industry Feedback
2	No response required

APPENDIX J
TRS EXCEEDANCE LOG

Table 1: TRS Exceedances.

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
1	TRS 10-minute OME Limit (9.3 ppb)	Brackenham	2026/08/13 21:30	10.2	113	0.3	Mondi	Methanol release	1030, 1
2	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Brackenham	2026/08/13 21:30	7.5	344	0.3	Mondi	Methanol release	1030, 1
3	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Brackenham	2026/08/31 19:30	5.5	233	0.7	Mondi	Meteorology	1039, 1
4	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Brackenham	2026/08/31 20:00	6.5	241	0.3	Mondi	Meteorology	1039, 1
5	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Brackenham	2026/08/31 21:00	5.3	205	0.4	Mondi	Meteorology	1039, 1
6	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Brackenham	2026/08/31 22:30	5.8	225	1.0	Mondi	Meteorology	1039, 1
7	TRS 30-minute WHO H_2S Limit (5.0 ppb)	CBD	2026/08/07 18:30	9.5	335	0.3	Mondi	Process activities	1026, 1
8	TRS 10-minute OME Limit (9.3 ppb)	CBD	2026/08/07 18:40	11.6	334	0.2	Mondi	Process activities	1026, 1
9	TRS 10-minute OME Limit (9.3 ppb)	CBD	2026/08/07 18:50	11.0	322	0.3	Mondi	Process activities	1026, 1
10	TRS 30-minute WHO H_2S Limit (5.0 ppb)	CBD	2026/08/15 22:00	5.5	1	0.2	Mondi	SETP	1031, 1
11	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/04 20:00	6.9	10	0.8	Mondi	Meteorology	1017, 1
12	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/05 20:00	7.5	26	1.4	Mondi	SETP	1016, 1019, 1
13	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/05 20:30	6.5	37	1.6	Mondi	SETP	1016, 1019, 1
14	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/05 21:00	10.5	27	1.5	Mondi	SETP	1016, 1019, 1
15	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/05 21:00	8.8	25	1.7	Mondi	SETP	1016, 1019, 1
16	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/05 21:10	10.6	29	1.6	Mondi	SETP	1016, 1019, 1
17	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/06 03:30	6.9	39	1.6	Mondi	SETP	1015, 1020, 1
18	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/06 04:00	5.7	51	1.6	Mondi	SETP	1015, 1020, 1
19	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/06 04:30	5.9	64	0.9	Mondi	SETP	1015, 1020, 1
20	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/06 06:30	6.3	356	2.1	Mondi	SETP	1015, 1020, 1
21	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/08 04:30	7.4	332	1.3	Mondi	SETP	1021, **1028**,1
22	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/20 00:30	5.3	359	1.5	Mondi	SETP	**1036**, 1037, 1
23	**TRS 30-minute WHO H_2S Limit (5.0 ppb)**	**eSikhaleni**	**2026/08/31 04:00**	**10.4**	**18**	**0.4**	**Industry response**	**Responded: Mondi, Mpact & THS**	**1039, 1040, 1044**

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
							required - Refer to notification		
24	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 04:10	9.7	32	0.5	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
25	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 04:20	16.1	37	0.2	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
26	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 04:30	13.3	230	0.5	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
27	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/31 04:30	10.3	178	0.6	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
28	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 05:00	14.8	1	0.5	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
29	TRS 30-minute WHO H_2S Limit (5.0 ppb)	eSikhaleni	2026/08/31 05:00	16.7	340	0.3	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
30	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 05:10	18.8	15	0.2	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
31	TRS 10-minute OME Limit (9.3 ppb)	eSikhaleni	2026/08/31 05:20	16.5	272	0.3	Industry response required - Refer to notification	Responded: Mondi, Mpact & THS	1039, 1040, 1044
32	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/02 18:00	5.6	214	3.6	THS	Smut plant	1006, 1011, **1018**
33	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/04 03:30	5.1	194	1.4	THS	Smut plant	1014, 1017, **1018**
34	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/06 14:30	5.5	216	5.5	THS	Smut plant	1015, 1020, **1038**

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
35	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/06 16:00	6.5	217	4.4	THS	Smut plant	1015, 1020, **1038**
36	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/06 16:30	5.7	219	4.0	THS	Smut plant	1015, 1020, **1038**
37	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/08 06:30	12.0	127	0.8	THS	Smut plant	1021, 1028, **1038**
38	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/08 06:50	29.7	70	1.1	THS	Smut plant	1021, 1028, **1038**
39	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/08 07:00	39.4	77	1.0	THS	Smut plant	1021, 1028, **1038**
40	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/08 07:00	24.6	123	0.8	THS	Smut plant	1021, 1028, **1038**
41	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/08 07:10	19.4	161	0.8	THS	Smut plant	1021, 1028, **1038**
42	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/08 07:20	14.8	118	0.5	THS	Smut plant	1021, 1028, **1038**
43	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 18:00	6.1	215	4.9	THS	Smut plant	1022, 1027, **1038**
44	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 18:30	7.7	214	4.7	THS	Smut plant	1022, 1027, **1038**
45	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 19:00	10.0	213	4.6	THS	Smut plant	1022, 1027, **1038**
46	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 19:00	10.9	210	5.0	THS	Smut plant	1022, 1027, **1038**
47	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 19:10	12.0	207	5.4	THS	Smut plant	1022, 1027, **1038**
48	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 19:20	10.8	208	5.0	THS	Smut plant	1022, 1027, **1038**
49	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 19:30	8.8	214	4.6	THS	Smut plant	1022, 1027, **1038**
50	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 19:40	10.0	214	4.5	THS	Smut plant	1022, 1027, **1038**
51	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 20:00	10.6	211	4.9	THS	Smut plant	1022, 1027, **1038**
52	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 20:10	11.0	211	4.6	THS	Smut plant	1022, 1027, **1038**
53	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 20:20	12.3	211	5.0	THS	Smut plant	1022, 1027, **1038**

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
54	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 20:30	10.0	215	5.8	THS	Smut plant	1022, 1027, **1038**
55	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 20:30	8.5	216	6.1	THS	Smut plant	1022, 1027, **1038**
56	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/09 21:00	9.5	216	6.8	THS	Smut plant	1022, 1027, **1038**
57	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 21:00	8.5	217	6.4	THS	Smut plant	1022, 1027, **1038**
58	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 21:30	8.2	214	5.7	THS	Smut plant	1022, 1027, **1038**
59	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 22:00	8.0	215	5.9	THS	Smut plant	1022, 1027, **1038**
60	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/09 22:30	6.9	215	6.0	THS	Smut plant	1022, 1027, **1038**
61	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/10 00:30	6.4	215	5.8	THS	Smut plant	1028, **1038**, 1
62	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/10 02:30	5.3	216	6.5	THS	Smut plant	1028, **1038**, 1
63	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/10 04:30	5.2	213	7.9	THS	Smut plant	1028, **1038**, 1
64	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/11 00:30	5.5	216	6.1	THS	Smut plant	1023, 1025, **1038**
65	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/11 02:00	6.0	214	5.3	THS	Smut plant	1023, 1025, **1038**
66	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/11 02:30	6.9	211	6.2	THS	Smut plant	1023, 1025, **1038**
67	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/11 03:00	5.9	223	4.3	THS	Smut plant	1023, 1025, **1038**
68	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/12 17:30	5.2	189	1.3	THS	Smut plant	1023, 1025, **1038**
69	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/13 17:30	5.6	201	0.3	Mondi (Meteorology)	Meteorology	1030, 1032, 1
70	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/13 21:30	7.6	349	1.7	Mondi (Meteorology)	Meteorology	1030, 1032, 1
71	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/13 21:40	10.8	31	1.8	Mondi (Meteorology)	Meteorology	1030, 1032, 1
72	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/13 21:50	11.4	58	1.2	Mondi (Meteorology)	Meteorology	1030, 1032, 1
73	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 02:30	8.9	190	0.5	THS	Clarifiers not circulating	1031, 1033, **1038**
74	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 02:50	26.6	188	0.3	THS	Clarifiers not circulating	1031, 1033, **1038**

No	Target / Guideline / Standard	Station	Date	Value (ppb)	Wind Direction (°)	Wind Speed (m/s)	Source	Comment	Response
75	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 03:00	23.1	192	0.3	THS	Clarifiers not circulating	1031, 1033, **1038**
76	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 03:00	40.5	219	0.7	THS	Clarifiers not circulating	1031, 1033, **1038**
77	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 03:10	41.7	226	0.9	THS	Clarifiers not circulating	1031, 1033, **1038**
78	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 03:20	56.7	237	1.1	THS	Clarifiers not circulating	1031, 1033, **1038**
79	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 03:30	33.7	254	1.2	THS	Clarifiers not circulating	1031, 1033, **1038**
80	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 03:30	22.2	252	1.3	THS	Clarifiers not circulating	1031, 1033, **1038**
81	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 03:40	27.8	253	1.5	THS	Clarifiers not circulating	1031, 1033, **1038**
82	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 05:00	25.6	243	1.3	THS	Clarifiers not circulating	1031, 1033, **1038**
83	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 05:00	26.1	232	1.0	THS	Clarifiers not circulating	1031, 1033, **1038**
84	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 05:10	27.4	229	0.9	THS	Clarifiers not circulating	1031, 1033, **1038**
85	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 05:20	25.4	225	0.9	THS	Clarifiers not circulating	1031, 1033, **1038**
86	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 05:30	17.7	184	0.4	THS	Clarifiers not circulating	1031, 1033, **1038**
87	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 05:30	12.0	205	0.3	THS	Clarifiers not circulating	1031, 1033, **1038**
88	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/15 05:40	10.3	201	0.3	THS	Clarifiers not circulating	1031, 1033, **1038**
89	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 06:00	5.4	18	0.3	THS	Clarifiers not circulating	1031, 1033, **1038**
90	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/15 22:00	5.2	250	0.6	THS	Clarifiers not circulating	1031, 1033, **1038**
91	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/17 06:30	10.8	268	0.9	THS	Clarifiers not circulating	1034, 1035, **1038**
92	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Felixton	2026/08/17 06:30	8.7	270	1.1	THS	Clarifiers not circulating	1034, 1035, **1038**
93	TRS 10-minute OME Limit (9.3 ppb)	Felixton	2026/08/17 06:40	12.9	279	1.1	THS	Clarifiers not circulating	1034, 1035, **1038**
94	TRS 30-minute WHO H_2S Limit (5.0 ppb)	Richardia	2026/08/13 00:30	6.0	290	1.4	Mondi	Methanol release	1030, 1

Table 2: TRS Responses

No	Industry Feedback
1	Unresolved / No Response
1006	Mondi - Candice Webb responded, (2026/08/04 08:01): Mondi has investigated the exceedances below. Based on wind direction and Mondi in shutdown conditions at the time of the exceedance, it is unlikely that Mondi was the source.
1011	Mpact -Traven Chetty responded, (2026/08/05 08:47): Mpact has conducted an investigation into the exceedance at Felixton on the 2nd August 2026. All plant process reports indicated stable operations and no upset conditions. The wind direction is also not in favour of emissions from Mpact. Based on this, it's unlikely that Mpact is the cause of this exceedance.
1014	Mpact -Traven Chetty responded, (2026/08/07 07:44): Mpact has conducted an investigation into the exceedances experienced at eSikhaleni and Felixton on the 4th August 2026. All plant process reports indicated stable operations and no upset conditions. Furthermore, the wind direction is also not in favour of emissions from Mpact. Based on this, it's unlikely that Mpact is the cause of this exceedance.
1015	Mondi - Candice Webb responded, (2026/08/07 12:05): Mondi has investigate and has the following feedback: eSikhaleni Station: Mondi is the most likely source based on wind direction. Root cause has been attributed to poor quality condensate treated through the secondary effluent treatment plant. As the mill was still on lower production rates after starting up, there were insufficient users of condensate in the mill, resulting in its diversion to effluent plant. Felixton Station: Based on wind direction, it is unlikely that Mondi is the source.
1016	Mondi - Candice Webb responded, (2026/08/07 12:09): Mondi is the most likely source based on wind direction. Root cause has been attributed to poor quality condensate treated through the secondary effluent treatment plant. As the mill was still on lower production rates after starting up, there were insufficient users of condensate in the mill, resulting in its diversion to effluent plant.
1017	Mondi - Candice Webb responded, (2026/08/07 12:10): Mondi has investigated and has the following feedback: **eSikhaleni Station:** Mondi is the most likely source based on wind direction. Root cause has been attributed to poor quality condensate treated through the secondary effluent treatment plant. As the mill was still on lower production rates after starting up, there were insufficient users of condensate in the mill, resulting in its diversion to effluent plant. **Felixton Station:** Based on wind direction, it is unlikely that Mondi is the source.
1018	Tongaat Hulett - Nicolas Govender responded (2026/08/07 11:27): The exceedances below were related to the Smuts Clarifiers due to a chemical shortage, the chemicals was delivered on the Friday 31st July 2026 late afternoon. We began dosing later that night and the clarifiers do take some time to stabilize after the dosing starts.
1019	Mpact -Traven Chetty responded, (2026/08/07 13:04): Mpact operations was on an emergency shut down on the 5th of August 2026. There were no operations active at the paper machine and boiler house during this time period. The effluent treatment plant was still in partial operation however, no abnormal activities took place during this time that could have caused this exceedance. It is therefore unlikely that Mpact is the source of this exceedance at eSikhaleni.
1020	Mpact -Traven Chetty responded, (2026/08/11 15:37): Mpact has conducted an investigation into the exceedances at eSikhaleni and Felixton on the 6th August 2026. All plant process reports indicated stable operations and no upset conditions. The wind direction is also not in favour of emissions from Mpact. It's unlikely that Mpact is the cause of this exceedance.
1021	Mpact -Traven Chetty responded, (2026/08/12 15:11): Mpact has conducted an investigation into the exceedances experienced at eSikhaleni and Felixton on the 8th of August 2026. All plant process reports were reviewed and indicated operations were stable with no abnormal conditions. It is unlikely that Mpact has caused these exceedances.
1022	Mpact -Traven Chetty responded, (2026/08/12 15:15): Mpact has reviewed all plant process reports in regards to the exceedances at Felixton on the 9th of August 2026. All processes were stable with no abnormal conditions. The wind direction is also not in favour of emissions from Mpact. Based on this, it's unlikely that Mpact is the cause of these exceedances at Felixton
1023	Mpact -Traven Chetty responded, (2026/08/13 14:34): Mpact has conducted an investigation into these exceedances at Felixton on the 11th of August 2026. Based on the plant process reports, which indicated stable operations as well as the wind direction which is not in favour of emissions from Mpact, it is unlikely that Mpact is the cause of these exceedances.

No	Industry Feedback
1025	Mondi - Candice Webb responded, (2026/08/17 08:04): Mondi has investigated the exceedances below. It is unlikely that Mondi is the source based on wind direction and wind speed.
1026	Mondi - Candice Webb responded, (2026/08/17 08:11): Mondi has investigated the exceedance below. It is most likely that the TRS was because of switching non-condensable gases from the Recovery Boiler 1 Flare to the Lime Kiln for incineration. During this switching process, the combined vent is opening as per the sequence when NCGs are moved away from the recovery boiler flare asper design. Mitigation measures have been put in place. However, a complete preventative measure will be complete once a hazop has been completed and a capital investment project scoped.
1027	Mondi - Candice Webb responded, (2026/08/17 08:29): Based on wind direction it is unlikely that Mondi was the source of the TRS exceedances.
1028	Mondi - Candice Webb responded, (2026/08/17 08:28): Mondi has investigated the exceedances below. eSikhaleni: The most likely source of the TRS exceedance was the Mondi Secondary Effluent Treatment Plant (SETP). Although the SETP was switched off at 04:00 for odour control, base on wind speed it is likely that the SETP was the source. The odour champions are currently working on identifying further improvement projects associated with the SETP. Felixton: During this time, the mill was experiencing stable operating conditions, the Non-condensable Gases were stable in the burning zones and the SETP was off for odour control. It is unlikely that Mondi was the source.
1030	Mondi - Candice Webb responded, (2026/08/17 09:54): Mondi has investigated the exceedances below. Brakenham and Richardia stations: At the time of the exceedances, methanol was being recirculated to increase its density and improve the effectiveness of incineration. However, the Pressure Regulating Valve (PRV) located on top of the CPX tank was passing. This resulted in methanol vapour being released to atmosphere while the methanol recirculation system was in operation. Mondi is disappointed to note that further investigation established that the passing PRV had in fact already been identified on 11 August. However, a replacement valve was not available at the time, and no interim mitigation measures were implemented to prevent or minimise potential odour emissions while a replacement was being sourced. Corrective Action Taken: 1) Methanol level was decreased to reduce the pressure in the tank 2) Continuous monitoring in place to mitigate risks until a replacement valve is installed. 3) Behaviour correction will be undertaken in line with Mondi's HR Policies. Felixton Station: It is possible the odour associated with the Methanol recirculation contributed to the odour at the Felixton station as wind speed was low at the time of the exceedance at 17:30 and wind direction was fluctuating prior to the 21:30 exceedance.
1031	Mondi - Candice Webb responded, (2026/08/17 15:34): Mondi has investigated the exceedances below. CBD station: Based on the station's proximity to Mondi, it is mostly likely that Mondi is the source. The exceedance aligns with restarting the Secondary Effluent Treatment Plant after it was taken offline for odour control earlier in the evening. Felixton station: It is unlikely that Mondi is the source based on wind direction and low wind speed.
1032	Mpact -Traven Chetty responded, (2026/08/18 09:45): Mpact has investigated this exceedance on the 13th of August 2026 at Felixton. All plant process reports indicated stable operations with no upset conditions. Based on this as well as the indicated wind direction, its unlikely that Mpact is the cause of these exceedances.
1033	Mpact -Traven Chetty responded, (2026/08/18 13:48): Mpact has reviewed all plant process reports in regards to the TRS exceedances at the Felixton on the 15th of August 2026. All processes were stable with no abnormal/upset conditions experienced. The wind direction was also not in favour of emissions from Mpact. Therefore, It's unlikely that Mpact is the cause of these exceedances at Felixton.
1034	Mondi - Candice Webb responded, (2026/08/20 09:23): Mondi has investigated the exceedance, based on wind direction it is unlikely that Mondi is the source.
1035	Mpact -Traven Chetty responded, (2026/08/20 09:59): Mpact has investigated this exceedance at Felixton station on the 17th of August 2026. Mpact has reviewed all plant process reports and this indicated that operations were stable with no upset conditions experienced. The wind direction is also not in favour of emissions from Mpact. Based on this, it is unlikely that Mpact is the cause of this exceedance.
1036	Mondi - Candice Webb responded, (2026/08/21 09:53): Mondi has investigated the exceedance, the TRS aligns with emissions from the Secondary Effluent Treatment Plant (SETP). An increase in A condensate overflow to the effluent plant between 21:27 and 01:22. That the increase in odorous compounds in the A-condensate is most likely from the underperformance of Stripper C system. The stripper will repaired in the next annual shut. In the interim the following corrective actions are being implemented.

No	Industry Feedback
	1. Reduce Stripper C Utilisation • Maximise flows to stripper A and B without flooding the stripper column • Continue optimisation around Stripper C/methanol column pressure and temperature control to reduce 2. Isolate SETP every day between 04:00 – 08:00 and 19:00 – 22:00. 3. Revised SETP Odour Management Plant to include above mentioned odour risk.
1037	Mpact -Traven Chetty responded, (2026/08/24 15:40): Mpact has investigated the exceedance on the 20th of August 2026 at the eSikhaleni station. All plant process reports have indicated that plant conditions were stable and no abnormal conditions experienced. Based on this, it is unlikely that Mpact is the cause of this exceedance.
1038	Tongaat Hulett - Nicolas Govender responded (2026/09/01 08:16): Lines 3868 to 3902 - We had experienced issues with chemical dosing at the Smuts plant, this may have contributed to the exceedances as the clarifiers were stabilizing. Lines 3907 to 3927 – We had shut down on the 14th August 2026 due to an industry protected strike, the clarifiers were still full and not drained for this stop. The TRS exceedances may have been triggered as the temperatures were still high in the clarifier water and it was not circulating. With very calm conditions the vapours set off the TRS exceedances.
1039	Mondi - Candice Webb responded, (2026/09/02 15:16): Mondi has investigated the exceedances below: eSikhaleni station: Both prior to and at the time of the exceedance, all odorous non-condensable gases (NCGs) were stable and being directed to their designated burning zones, with no process deviations identified that would indicate an abnormal release. The Secondary Effluent Treatment Plant (SETP) was also offline at the time, in accordance with the Mill's Odour Mitigation Plan. However, there were very low wind speeds at the time, and dispersion would have been limited. Based on stable operating conditions, yet concentrated TRS results, could it be possible that a localised source contributed to the odour? Brakenham station: Both prior to and at the time of the exceedance, all odorous non-condensable gases (NCGs) were stable and being directed to their designated burning zones, with no process deviations identified that would indicate an abnormal release. The Secondary Effluent Treatment Plant (SETP) was also offline at the time, in accordance with the Mill's Odour Mitigation Plan. However based on the proximity of the station to Mondi and poor dispersion due to low wind speeds, it is possible fugitive emissions from the mill contributed to the TRS.
1040	Mpact -Traven Chetty responded, (2026/09/04 07:32): Mpact has investigated these exceedances at eSikhaleni on the 31st of August 2026. All plant process reports have indicated stable operations with no upset conditions experienced. Based on this, it's unlikely that Mpact is the cause of these exceedances.
1044	Tongaat Hulett - Nicolas Govender responded (2026/09/08 09:04): The plant has been on a shut down since the 15 August 2026 due to a Protected labour Strike. Effluent plant has been stable with no load being produced from the plant. TH could not have contributed to these exceedances below.

8. REFERENCES

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