

Monthly Air Quality Report

April 2026

Richards Bay Clean Air Association (RBCAA)

MANCO Briefing



April did not indicate a PM NAAQS problem, but short-term SO₂ events at Scorpio and health/odour guidance exceedances require follow-up.

27

complaints received

186 in April 2025

55 mm

network rainfall average

Felixton: 73 mm

0

PM NAAQS exceedances

PM₁₀ / PM_{2.5} daily

0 / 6 / 2

SO₂ exceedances

24h / 1h / 10min at Scorpio

Particulate matter

PM₁₀ and PM_{2.5} had no RSA daily exceedances. PM_{2.5} had 54 WHO daily exceedance-days.

Sulphur dioxide

No 24-hour SO₂ exceedances; six 1-hour and two 10-minute events were recorded at Scorpio.

TRS / odour

No RSA standard applies; three WHO 30-minute exceedances and no OME 10-minute exceedances were recorded.

PRIORITY FOLLOW-UP

- Scorpio/Foskor: review six 1-hour and two 10-minute SO₂ events.
- Mondri: close out complaint and visual-emissions follow-up.
- CoU: close sewage odour / leak response actions.
- Brackenham: resolve power-outage data-capture vulnerability.



RBCAA monitoring network.

Network scope

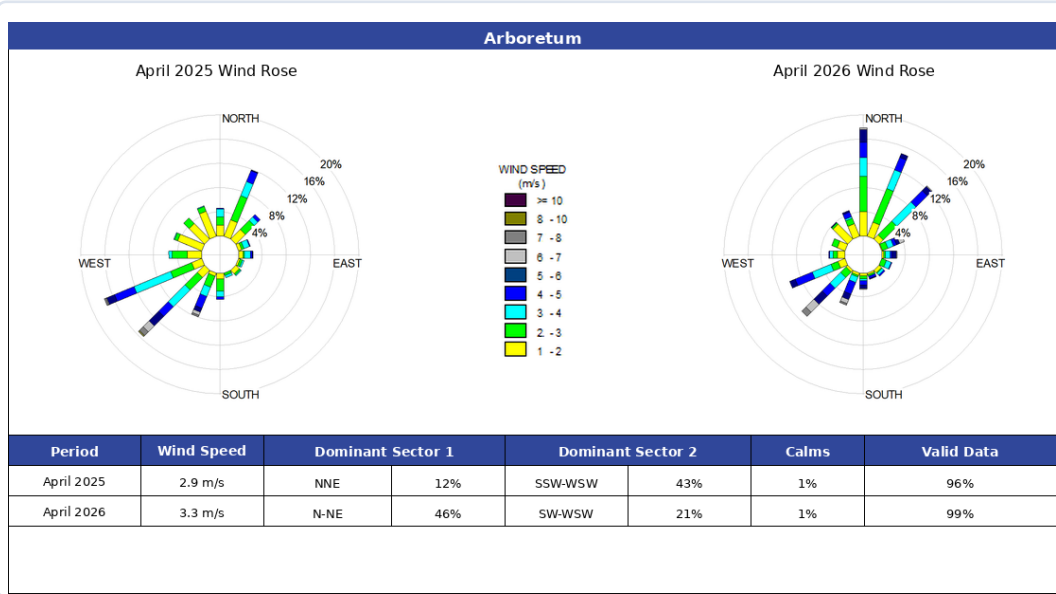
11 primary monitoring stations and 10 AirGradient screening monitors; Airport, Felixton Met and Meerensee are meteorological-only.

DATA CAPTURE STATUS

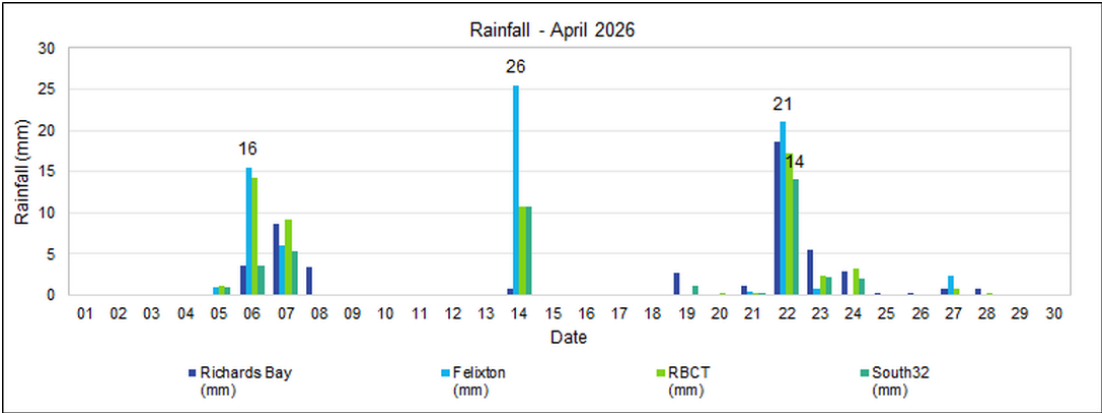
- Meteorology: 94–100% availability across reporting stations.
- PM: PM₁₀ 71–100%; PM_{2.5} 94–100% at reporting stations.
- SO₂: 93–100% data capture across the network.
- TRS: 93–100% data capture across reporting stations.

Readability caveat

Scorpio PM₁₀ capture was 71% due to a firmware upgrade; Richardia PM₁₀ was unavailable after conversion to PM_{2.5}. Brackenham capture was affected by 12–14 April power outages.



Arboretum monthly wind roses.



Daily rainfall.

Wind regime

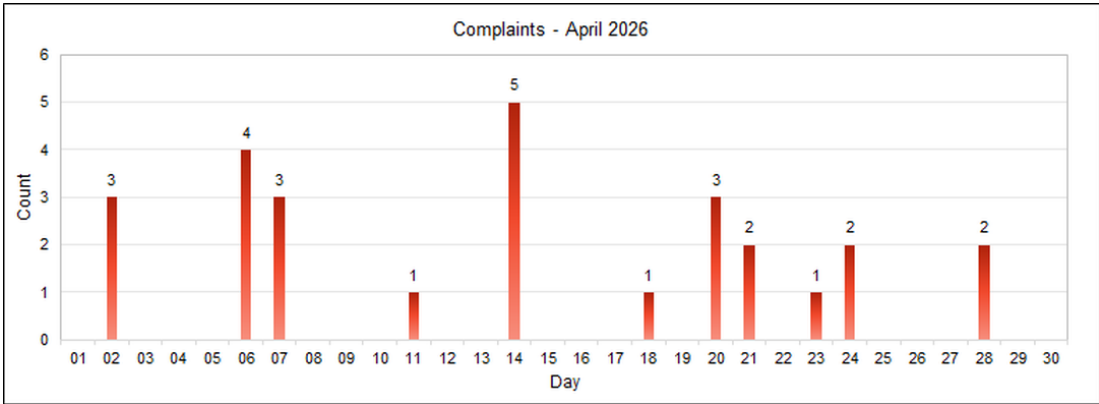
N-NE winds accounted for 46% and SW-WSW winds for 21%; mean wind speed was 3.3 m/s.

Rainfall

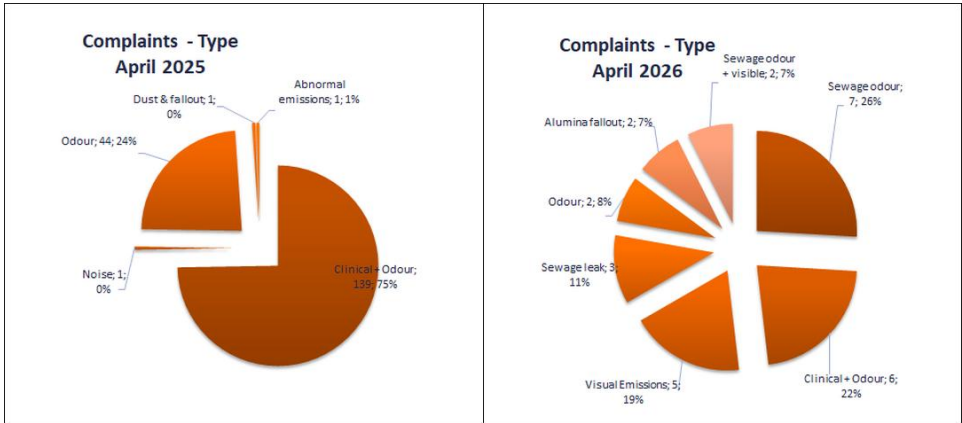
Monthly totals ranged from 40 mm at South32 to 73 mm at Felixton; network average was 55 mm.

Interpretation

The NE/SW axes remain important for source-to-receptor screening of complaints and exceedances.

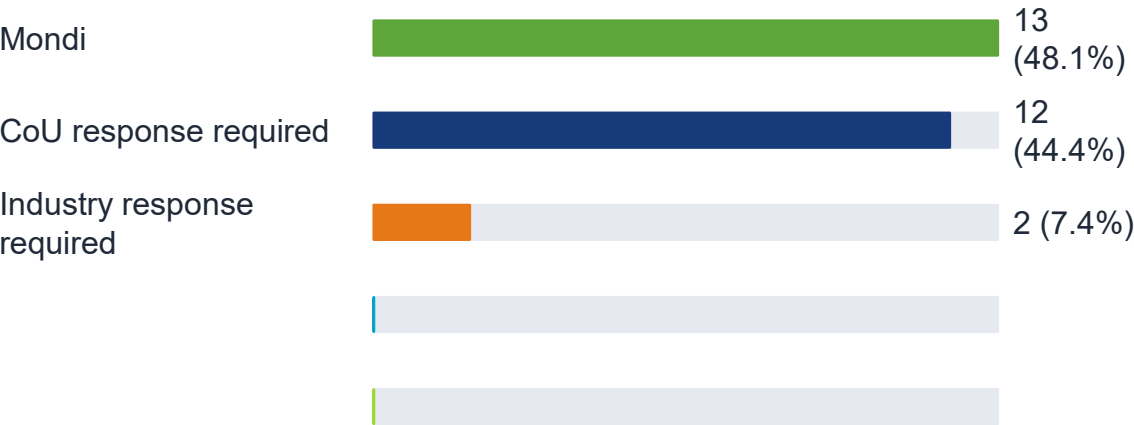


Daily complaint count.



Complaint type distribution.

SOURCE ALLOCATION

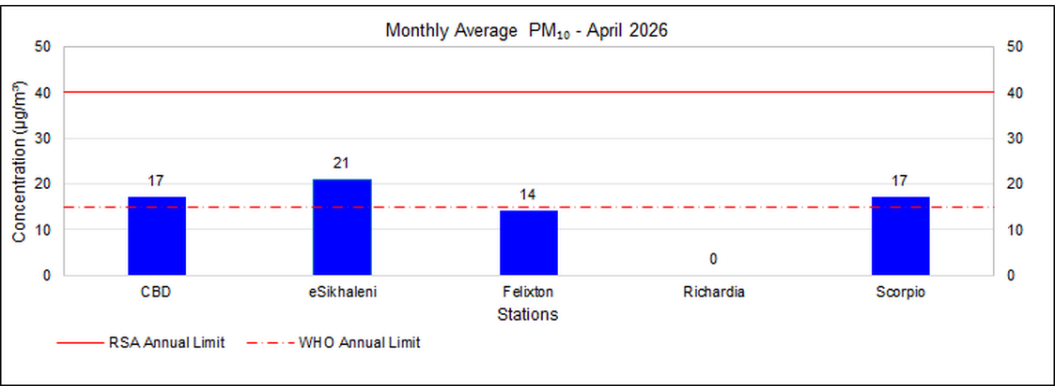


Primary signal

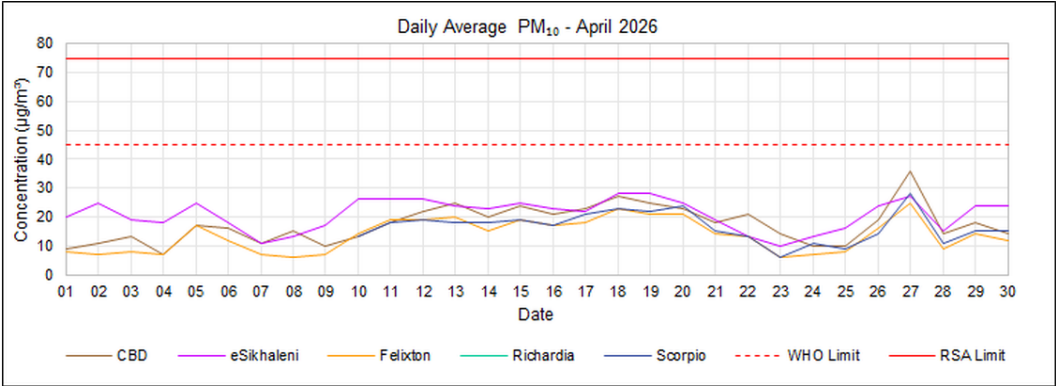
Complaints were concentrated in Mondi and CoU response categories; the highest daily count was five complaints on 14 April.

Trend context

Complaints decreased from 186 in April 2025 to 27 in April 2026; odour, sewage and visual-emission signals remain operationally relevant.



Monthly PM₁₀ averages.



Daily PM₁₀ averages.

0

RSA daily exceedances
75 µg/m³ standard

0

WHO daily exceedances
45 µg/m³ guideline

71–100%

PM₁₀ data capture
reporting stations

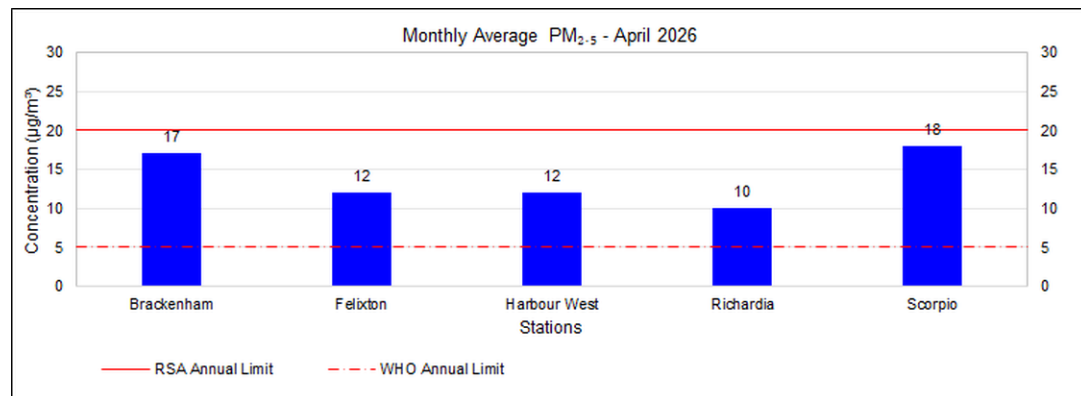
Assessment

Monthly means were below the RSA annual standard at stations with sufficient data. WHO annual guideline was exceeded at CBD, eSikhaleni and Scorpio.

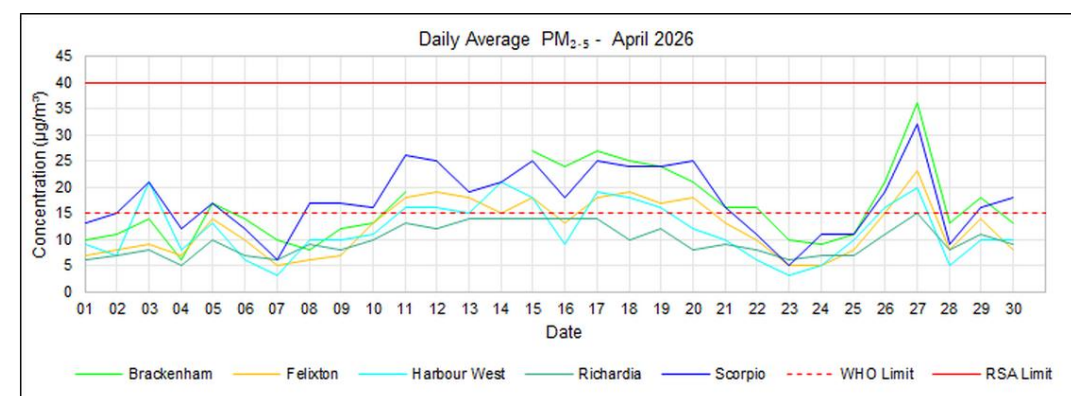
Caveat: Scorpio PM₁₀ capture was 71% due to firmware upgrade; Richardia PM₁₀ was unavailable after conversion to PM_{2.5}.

PM_{2.5}: health-guidance exceedance burden

07



Monthly PM_{2.5} averages.



Daily PM_{2.5} averages.

0

RSA daily exceedances

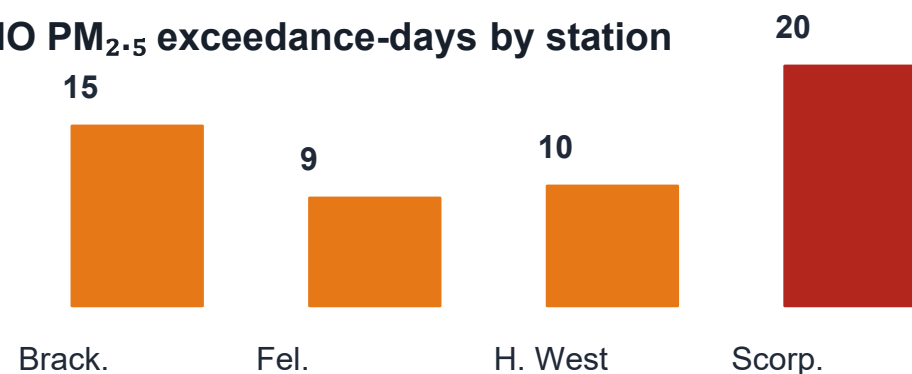
40 µg/m³ standard

54

WHO daily exceedance-days

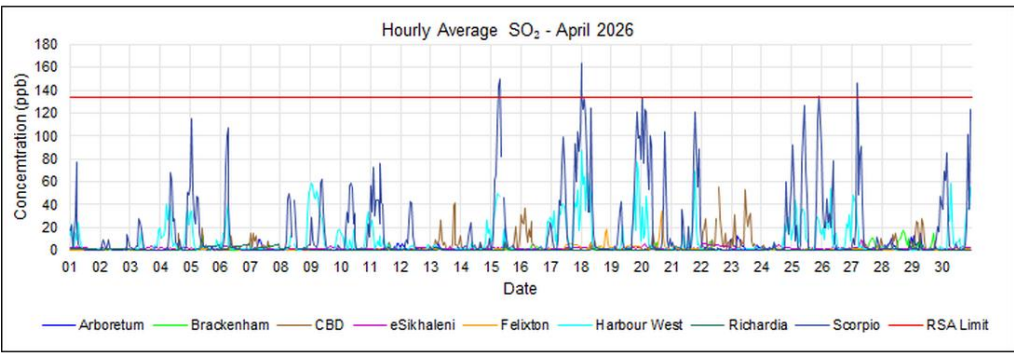
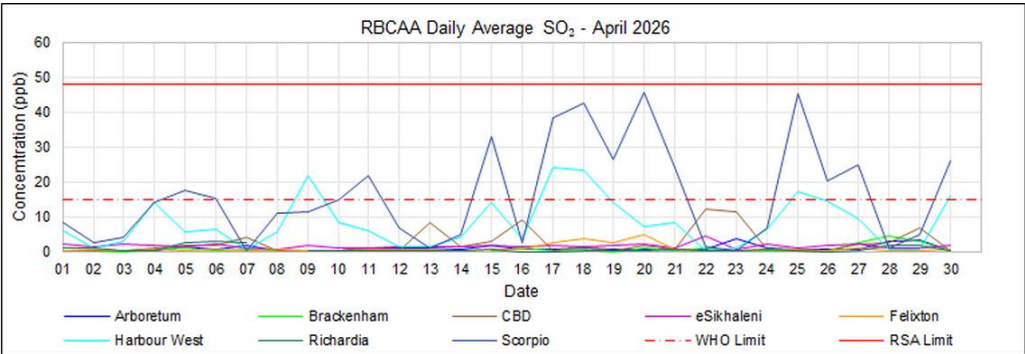
15 µg/m³ guideline

WHO PM_{2.5} exceedance-days by station

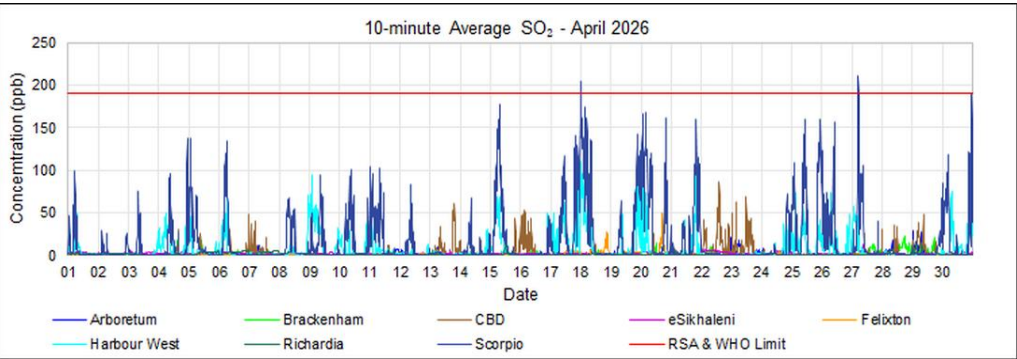


Year-to-date status: PM_{2.5} remains within the annual allowable RSA exceedance frequency, with one 24-hour NAAQS exceedance recorded at Scorpio YTD.

SO₂: short-term exceedances at Scorpio



SO₂ 24-hour averages.



SO₂ 10-minute averages.

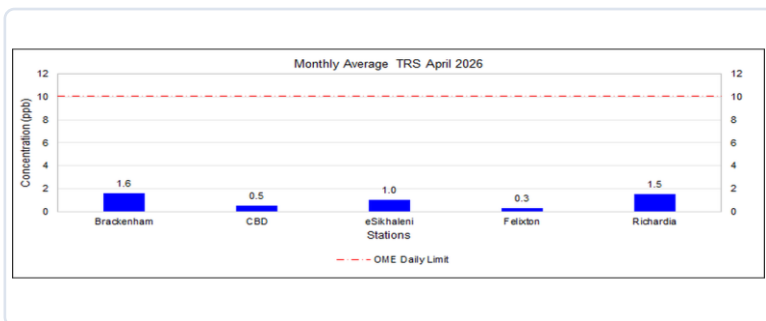
SO₂ 1-hour averages.

Averaging period	Limit	April outcome
24-hour RSA	48 ppb	0 days
1-hour RSA	134 ppb	6 exceedances at Scorpio
10-minute RSA & WHO	191 ppb	2 exceedances at Scorpio
24-hour WHO	15 ppb	18 days: Harbour West 5; Scorpio 13

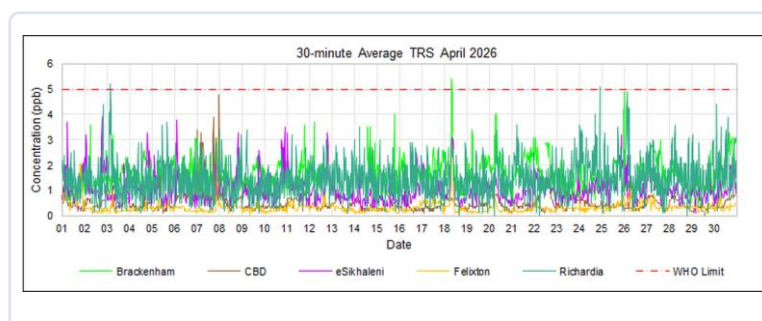
Year-to-date SO₂ remains within South African annual allowable frequencies: Scorpio has 2/4 daily, 8/88 hourly and 8/526 10-minute events.

TRS / H₂S: odour-guidance exceedances

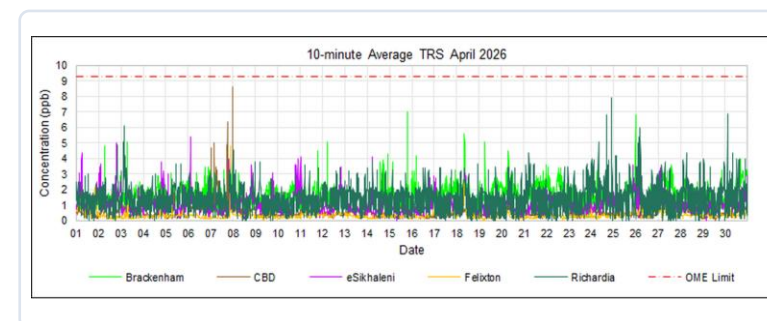
09



TRS monthly averages.



TRS 30-minute averages.



TRS 10-minute averages.

0
OME 24-hour exceedances
10.1 ppb criterion

3
WHO 30-minute exceedances
5.0 ppb guideline

0
OME 10-minute exceedances
9.3 ppb criterion

Station pattern

WHO 30-minute: Brackenham 1;
Richardia 2. No OME 10-minute
exceedances.

Interpretation

TRS/H₂S has no South African NAAQS standard; the exceedances indicate short-term odour-annoyance potential and source-control need, not NAAQS compliance.

Parameter	RSA regulatory status	Key station
PM ₁₀	Within annual allowable 24-hour NAAQS frequency; 0 RSA exceedances YTD.	Scorpio WHO-only event
PM _{2.5}	Within annual allowable 24-hour NAAQS frequency; 1 RSA exceedance YTD.	Scorpio
SO ₂	Within annual allowable frequencies: Scorpio 2/4 daily, 8/88 hourly, 8/526 10-minute.	Scorpio
TRS	No South African ambient standard; no regulatory compliance determination.	Not applicable

2026 year-to-date health / odour guidance status

12

Parameter	Guidance outcome	Main station(s)
PM₁₀	1 WHO 24-hour exceedance YTD.	Scorpio
PM_{2.5}	WHO 24-hour exceedance-days: Brackenhams 45; Felixton 20; Harbour West 12; Scorpio 59.	Scorpio; Brackenhams
SO₂	WHO 24-hour exceedance-days: CBD 2; Harbour West 11; Scorpio 25.	Scorpio; Harbour West
TRS / H₂S	0 OME 24-hour; WHO 30-minute: CBD 25, Brackenhams 27, eSikhaleni 1, Felixton 1, Richardia 15; OME 10-minute: CBD 8, Brackenhams 16, eSikhaleni 1, Felixton 2.	Brackenhams; CBD; Richardia