

RBCAA Technical Feedback – November 2025

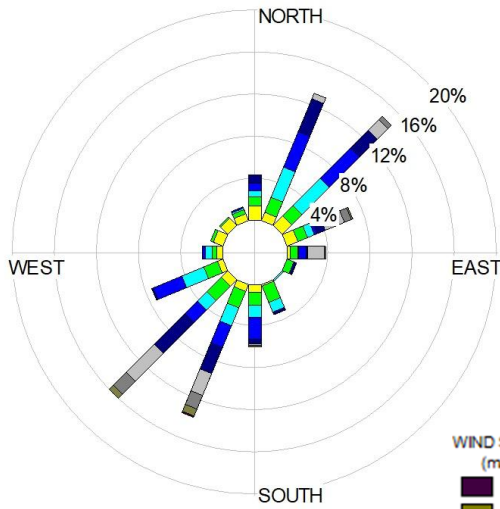


Meteorology

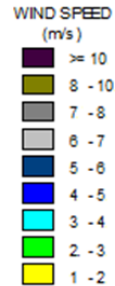
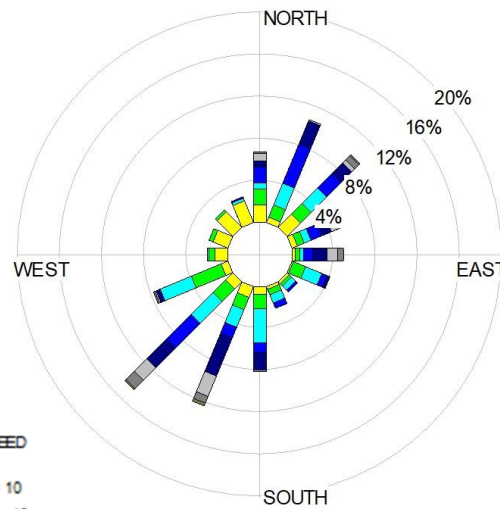
WIND



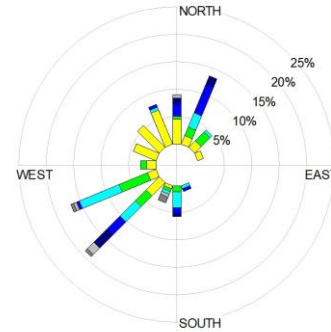
November 2024 Wind Rose



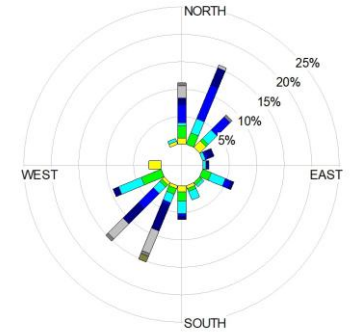
November 2025 Wind Rose



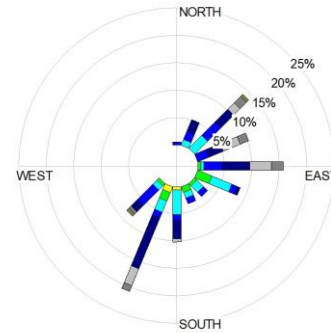
00:00 – 05:59



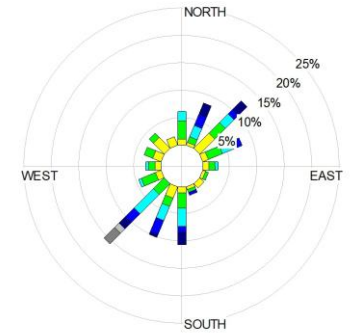
06:00 – 11:59



12:00 – 17:59



18:00 – 23:59

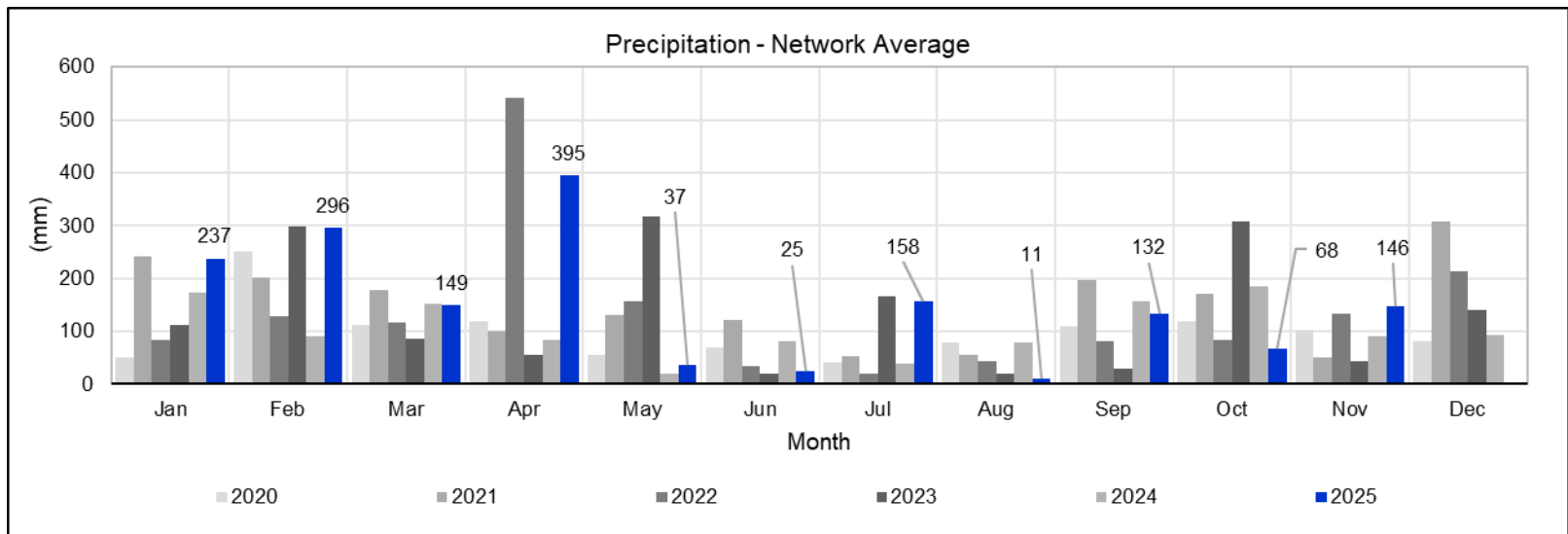
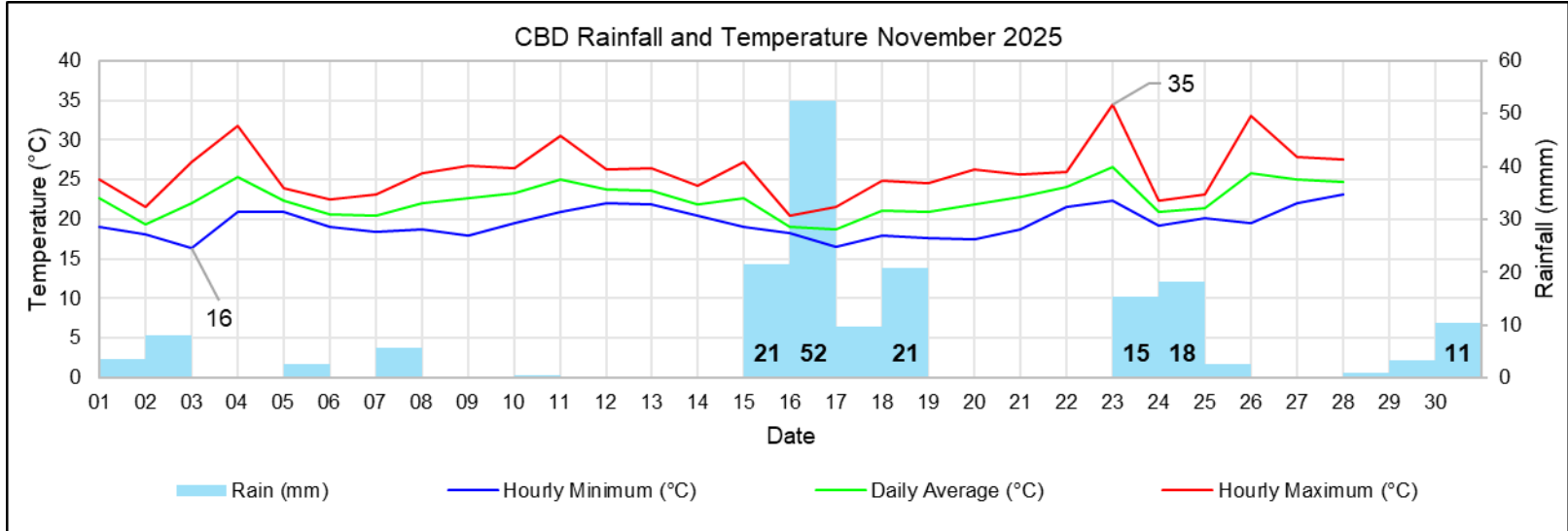


Period	Wind Speed	Dominant Sector 1		Dominant Sector 2		Calms	Valid Data
November 2024	4.2 m/s	NNE-ENE	36%	SSW-WSW	39%	0%	95%
November 2025	3.8 m/s	N-NE	28%	S-WSW	44%	0%	96%
00:00-05:59	3.0 m/s	NNW-NNE	32%	SW-WSW	38%	1%	95%
06:00-11:59	4.2 m/s	N-NE & ESE	42%	S-WSW	47%	0%	97%
12:00-17:59	4.8 m/s	NE-ESE	48%	S-SW	39%	0%	99%
18:00-23:59	3.1 m/s	N-ENE	37%	S-SW	39%	1%	94%

Meteorology

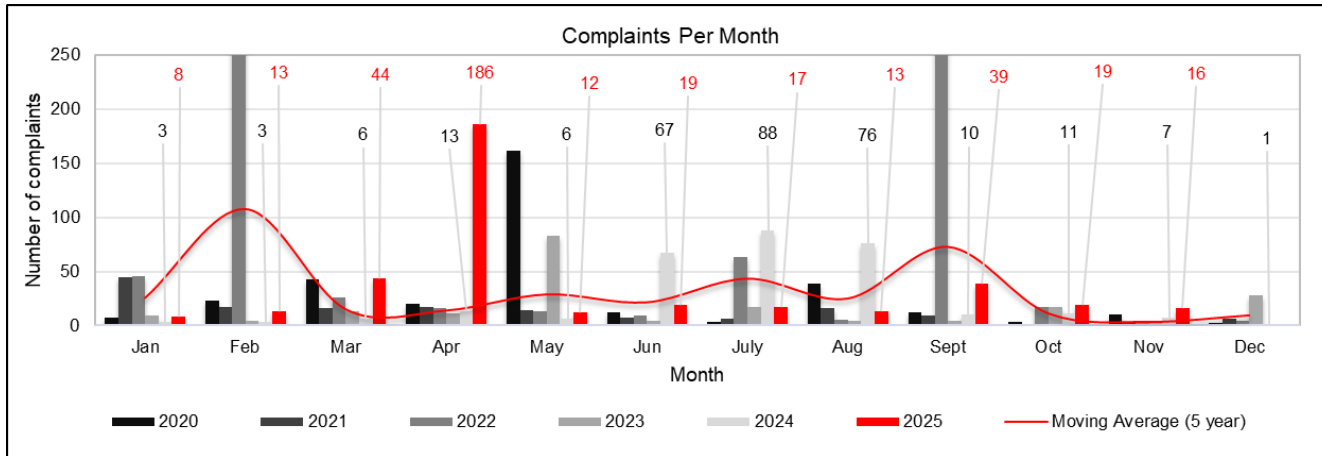
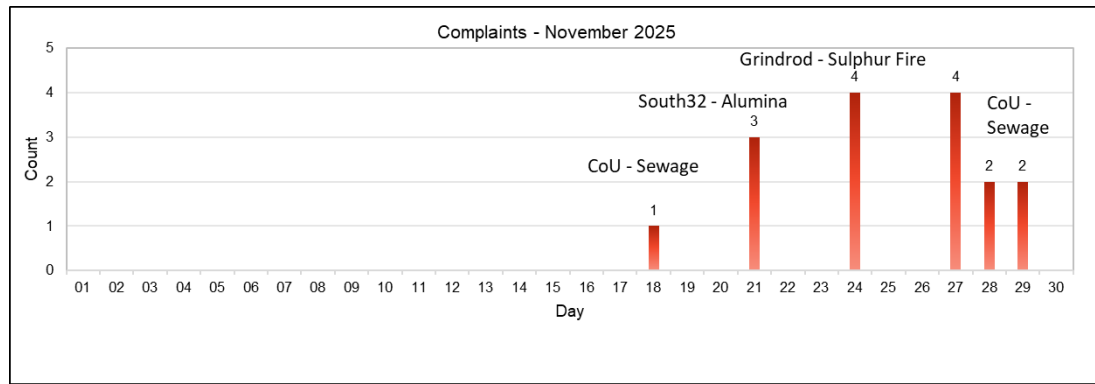
Month	Richards Bay (mm)	Felixton (mm)	RBCT (mm)	South32 (mm)	Average (mm)
November 2025	176	131	166	112	146

RAINFALL AND TEMPERATURE

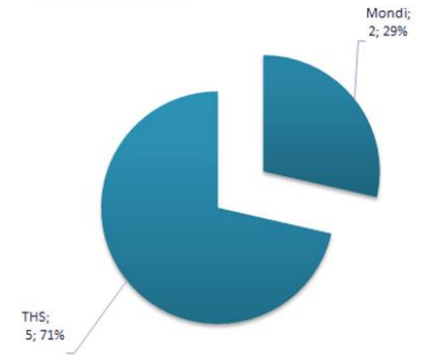


Complaints

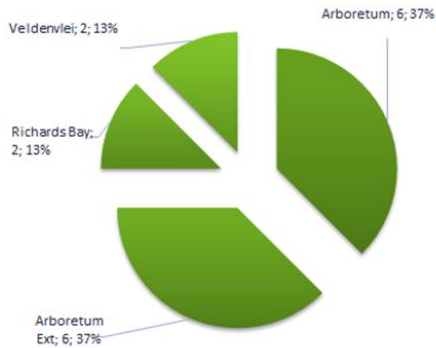
DISTRIBUTION



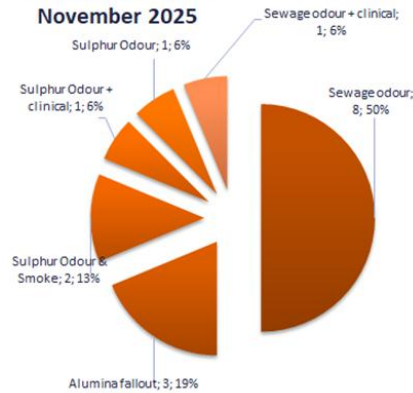
Complaints - Source November 2024



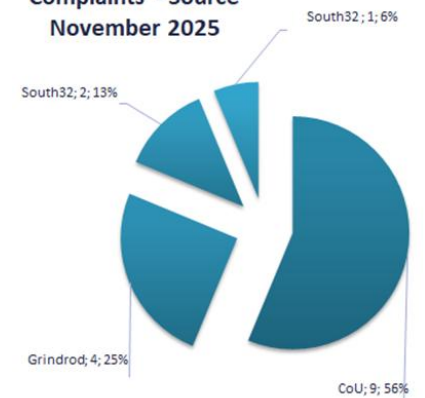
Complaints - Region November 2025



Complaints - Type November 2025

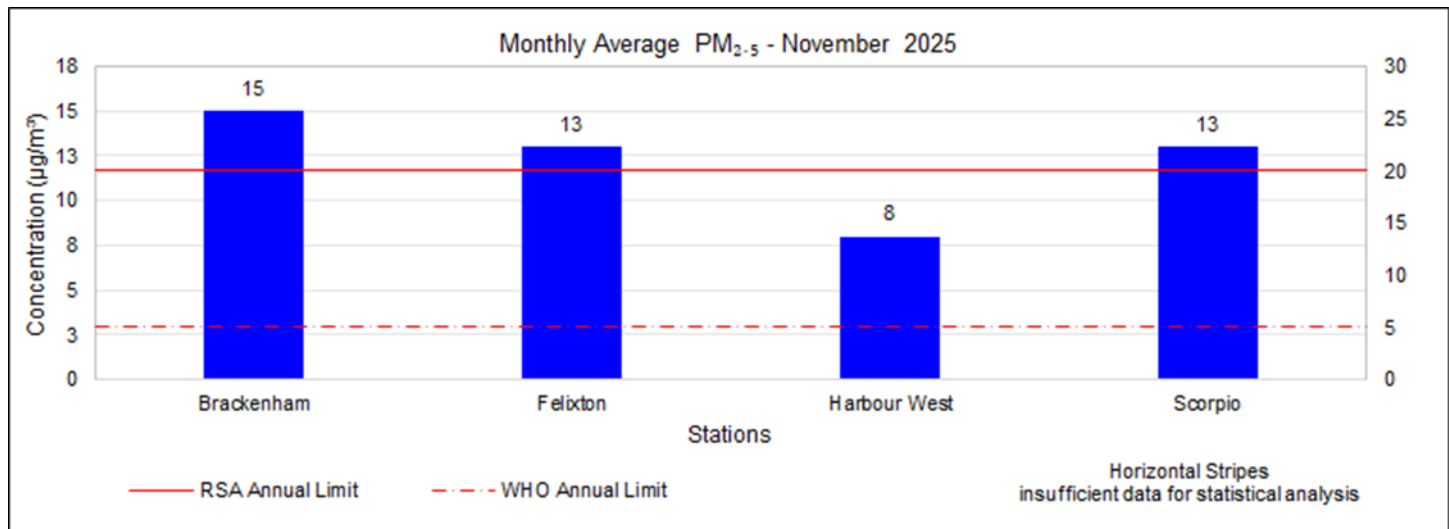
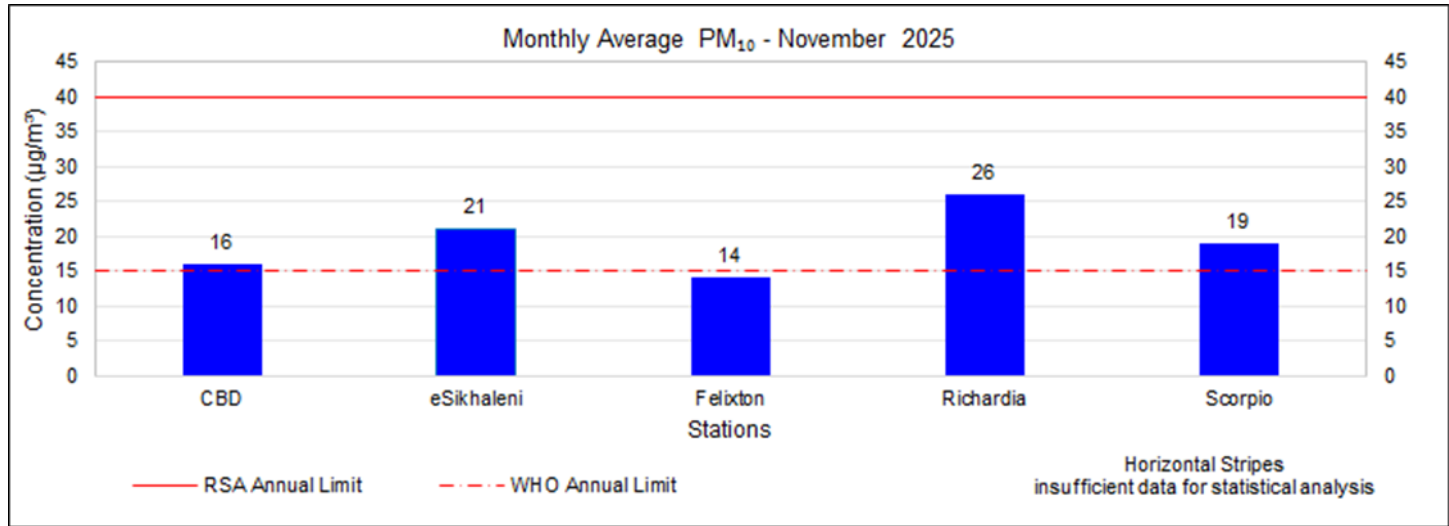


Complaints - Source November 2025



PM

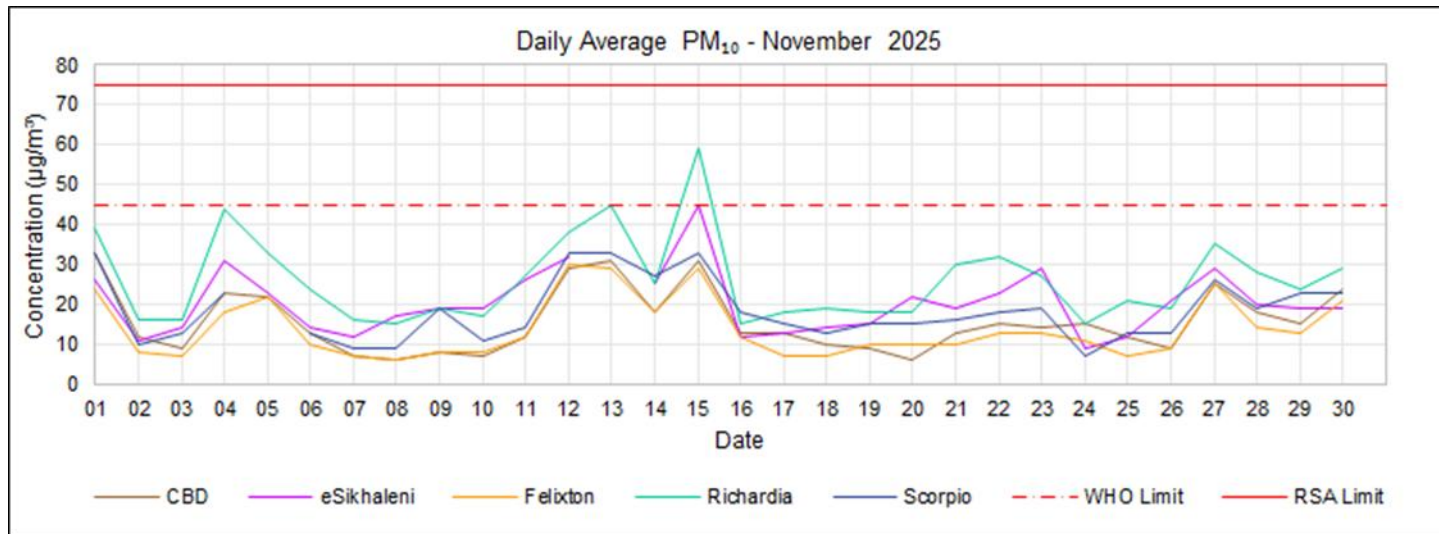
MONTHLY



PM₁₀

24-HOUR

PM ₁₀ Daily WHO Limit (45 µg/m ³)	1
No response required	1
Richardia	1
No comment	1



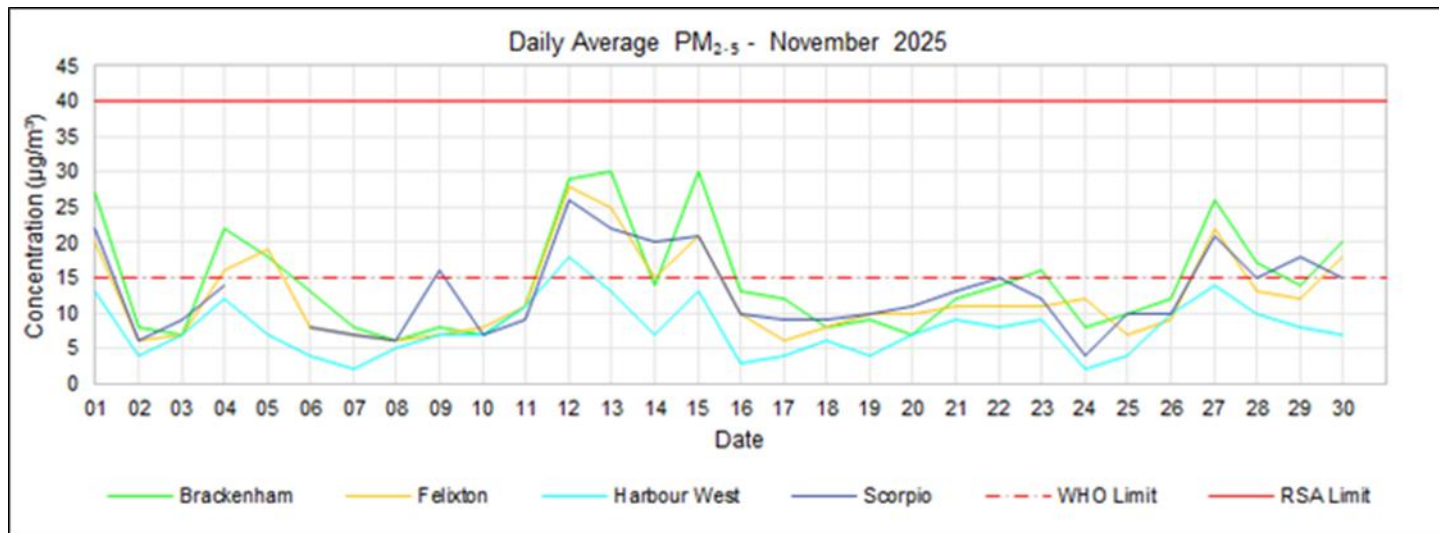
Missing Data (PM₁₀)

- eSk - Power outage, data invalidation (1 day/s with <80% data capture, 13 November 2025).
- Scr - Power outage, data invalidation (1 day/s with <80% data capture, 5 November 2025).

PM_{2.5}

24-HOUR

PM _{2.5} Daily WHO Limit (15 µg/m ³)	28
No response required	28
Brackenhams	10
No comment	10
Felixton	8
No comment	8
Scorpio	9
No comment	9
Harbour West	1
No comment	1



Missing Data (PM_{2.5})

- Scr - Power outage, data invalidation (1 day/s with <80% data capture, 5 November 2025).

PM

EXCEEDANCE SUMMARY

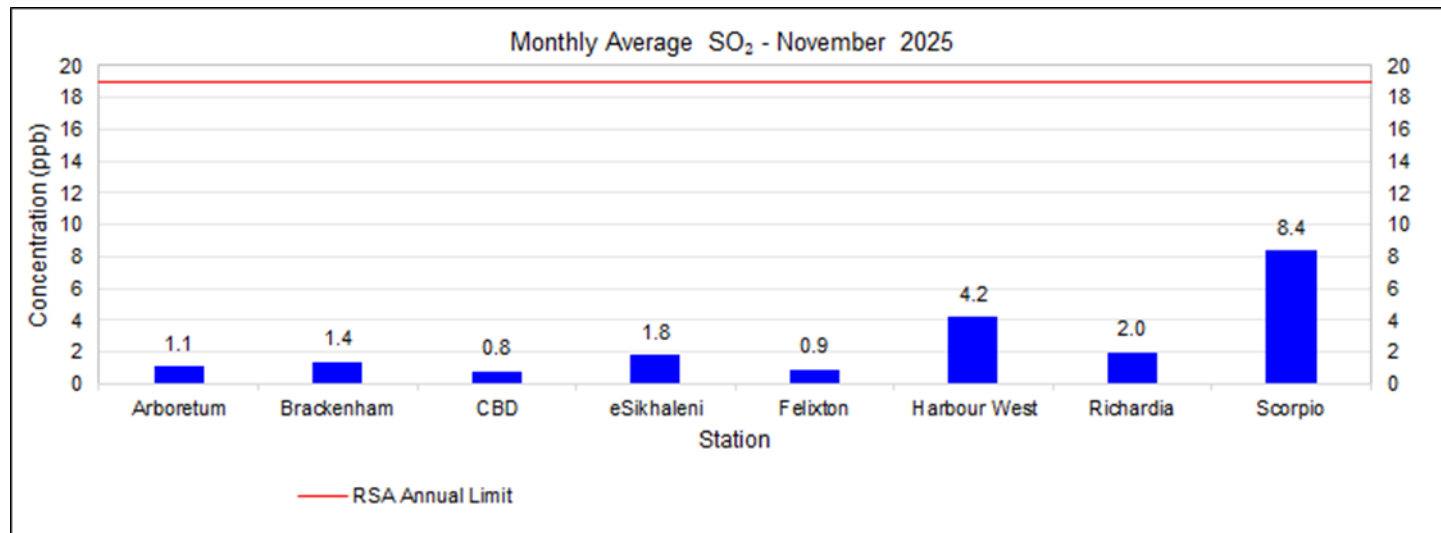
2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PM₁₀ Daily RSA Limit (75 µg/m³)													
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	1	-	-	1	-	-	-	2
Scorpio	-	-	-	-	-	-	-	1	1	-	-	-	2
PM₁₀ Daily WHO Limit (45 µg/m³)													
Brackenham	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	1	-	-	-	-	-	-	3	-	1	-	-	5
eSikhaleni	-	-	-	-	3	2	3	3	2	-	-	-	13
Felixton	-	-	-	-	-	-	1	5	-	-	-	-	6
Richardia	-	1	1	2	6	9	1	9	7	2	1	-	39
Scorpio	1	1	1	-	4	5	4	5	7	2	-	-	30

2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PM_{2.5} Daily RSA Limit (40 µg/m³)													
Brackenham	-	-	-	-	2	-	3	5	6	2	-	-	18
Felixton	-	-	-	-	-	-	1	5	-	-	-	-	6
Harbour West	-	-	-	-	-	-	-	3	-	-	-	-	3
Scorpio	-	-	-	-	-	-	1	5	2	-	-	-	8
PM_{2.5} Daily WHO Limit (15 µg/m³)													
Brackenham	-	6	8	10	25	25	18	22	23	18	-	-	155
Felixton	2	3	2	2	18	19	14	20	20	14	8	-	122
Harbour West	1	2	4	1	11	3	8	11	13	6	1	-	61
Scorpio	1	4	1	-	11	14	14	22	19	14	9	-	109

Three (3) stations, Brackenham, Felixton and Scorpio do not comply with the PM_{2.5} RSA Daily Standard. The standard allows for a maximum of 4 exceedances of the PM_{2.5} Daily WHO Limit Value (40 µg/m³).

SO₂

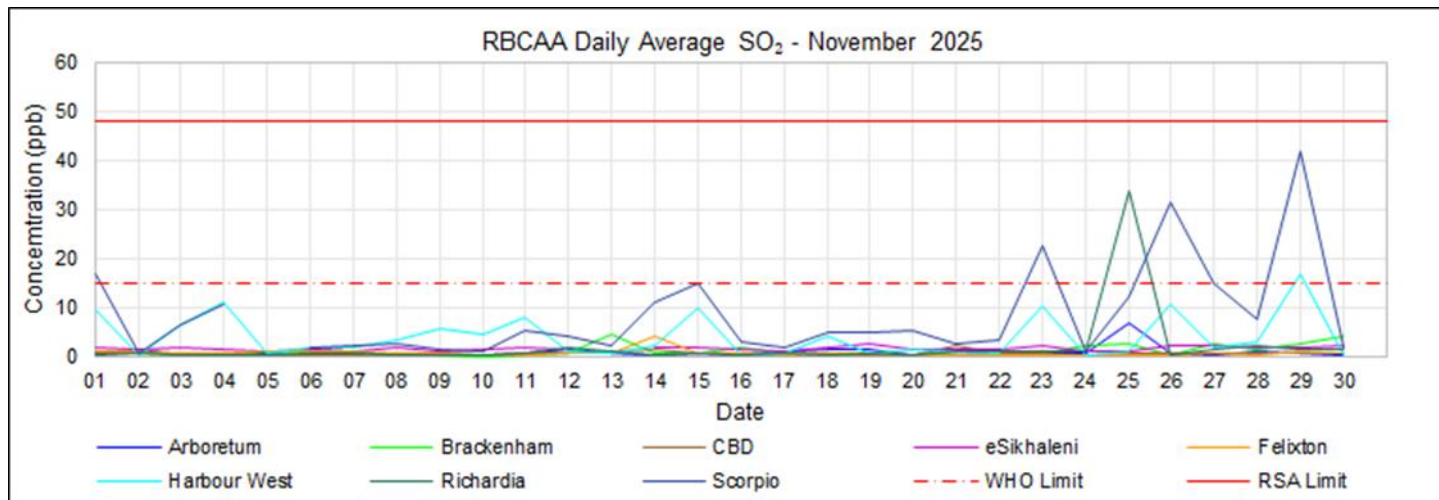
MONTHLY



SO₂

24-HOUR

SO₂ Daily WHO Limit (15 ppb)	8
No response required	7
Harbour West	1
No comment	1
Scorpio	6
No comment	6
Grindrod	1
Richardia	1
Fire at Sulphur store - Incident report pending	1



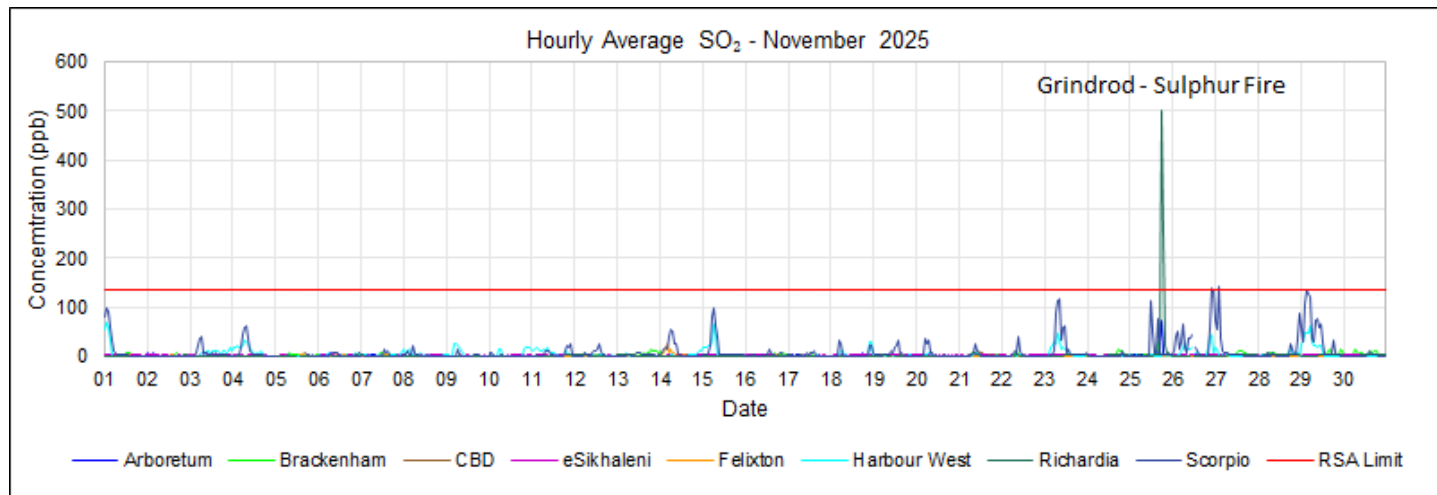
Missing Data (SO₂):

- eSk - Power outage, data invalidation (1 day/s with <80% data capture, 13 November 2025).
- Scr - Power outage, data invalidation (1 day/s with <80% data capture, 5 November 2025).

SO₂

1-HOUR

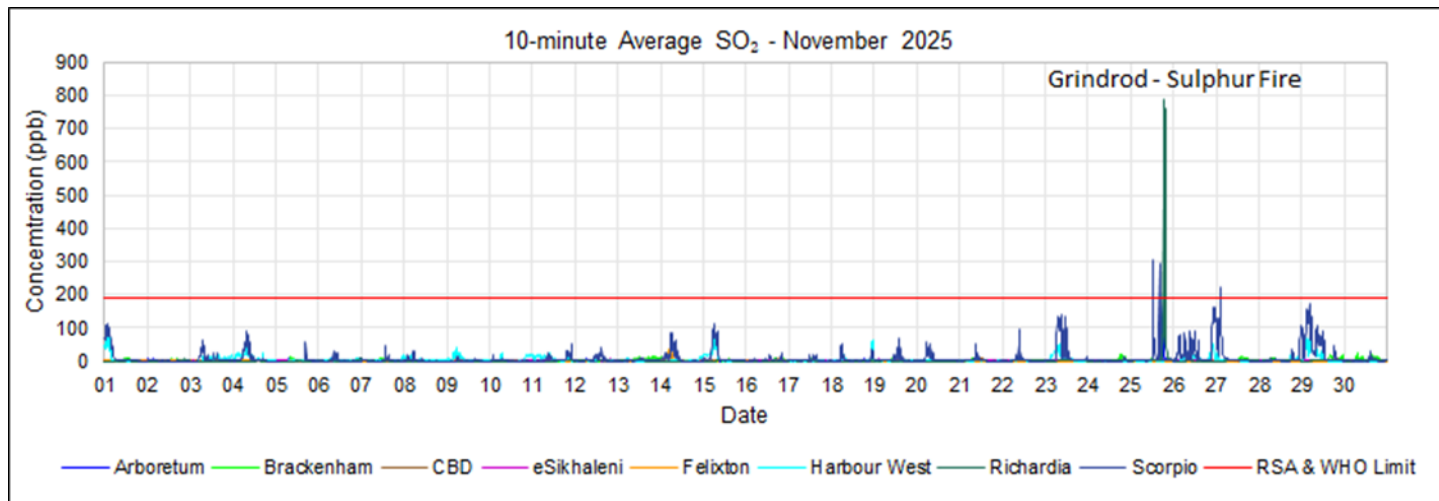
SO ₂ Hourly RSA Limit (134 ppb)		6
Foskor		3
Scorpio		3
RBCAA allocation		3
South32		1
Scorpio		1
RBCAA allocation		1
Grindrod		2
Richardia		2
Fire at Sulphur store - Incident Report pending		2



SO₂

10-MINUTE

SO ₂ 10-minute RSA & WHO Limit (191 ppb)	13
Foskor	1
Scorpio	1
RBCAA allocation	1
Grindrod	12
Arboretum	1
Fire at Sulphur store - Incident Report pending	1
Richardia	8
Fire at Sulphur store - Incident Report pending	8
Scorpio	3
Fire at Sulphur store - Incident Report pending	3



SO₂

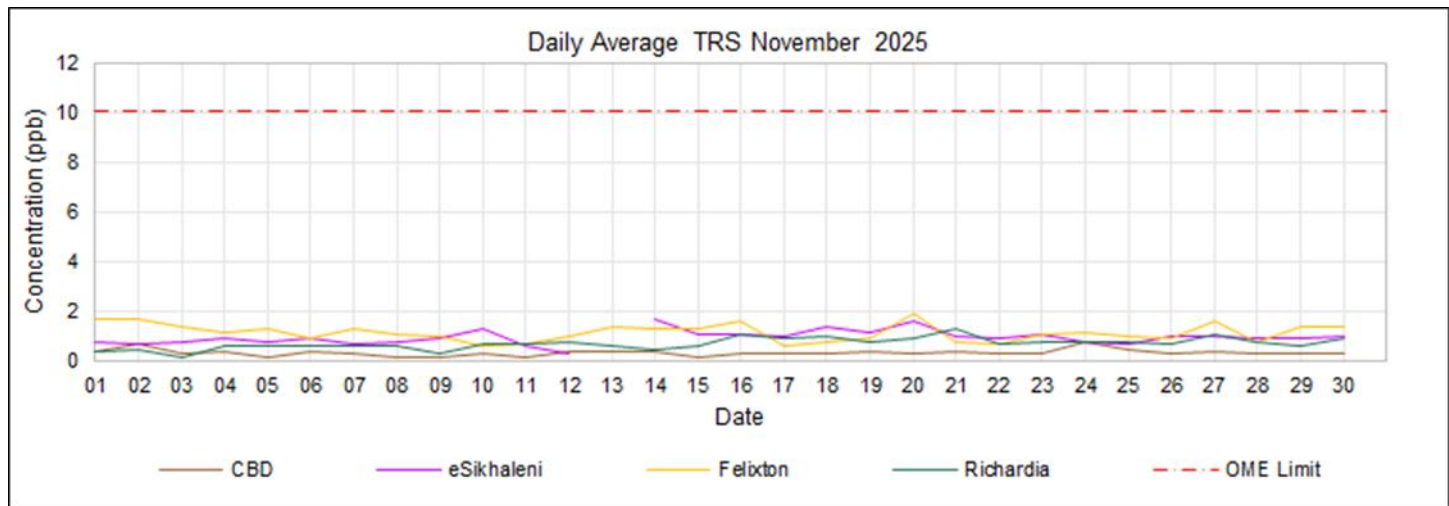
EXCEEDANCE SUMMARY

2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SO₂ Daily RSA Limit (48 ppb)													
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	1	-	-	-	2	2	1	-	1	1	-	-	8
SO₂ Daily WHO Limit (15 ppb)													
CBD	1	1	3	-	-	-	-	2	-	-	-	-	7
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	4	1	7	6	11	5	-	5	1	-	40
Richardia	-	-	-	-	-	-	-	-	-	-	1	-	1
Scorpio	3	-	1	1	12	11	15	6	7	5	6	-	67
SO₂ Hourly RSA Limit (134 ppb)													
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	1	-	-	-	-	-	-	-	-	-	-	-	1
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	4	-	3	-	1	-	2	2	-	-	-	-	12
SO₂ 10-minute RSA & WHO Limit (191 ppb)													
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Harbour West	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	8	-	8
Scorpio	18	1	-	-	-	3	3	-	-	16	4	-	45

One (1) station, Scorpio, does not comply with the SO₂ RSA Daily Standard. The standard allows for a maximum of four exceedances of the SO₂ Daily RSA Limit Value (48 µg/m³).

TRS

24-HOUR



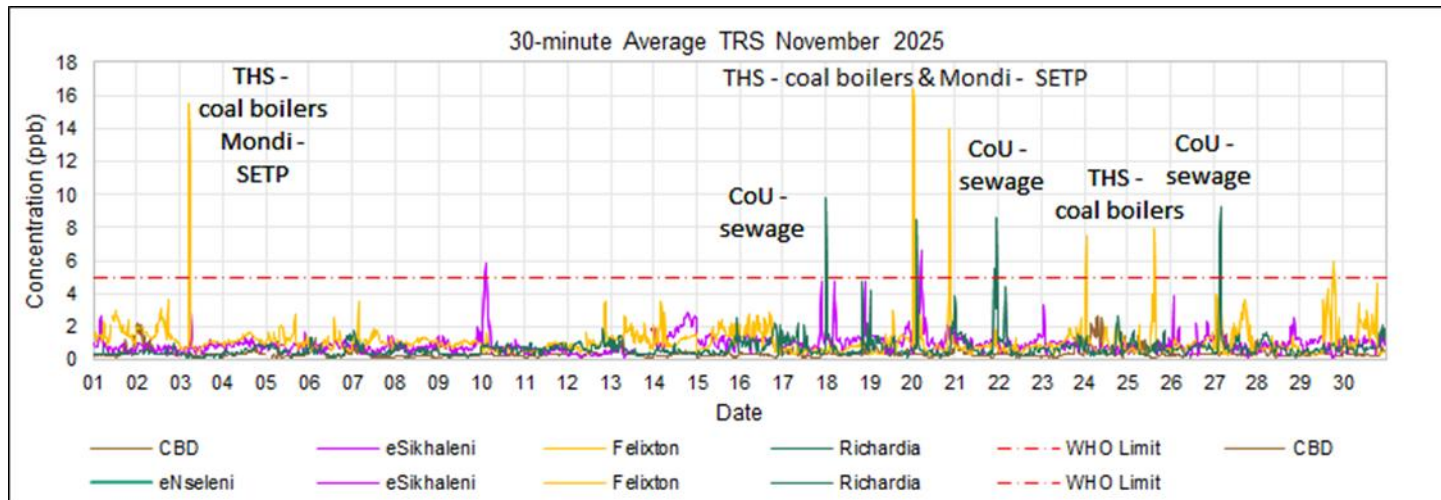
Missing Data (TRS):

- eSk - Power outage, data invalidation (1 day/s with <80% data capture, 13 November 2025).

TRS

30-MINUTE

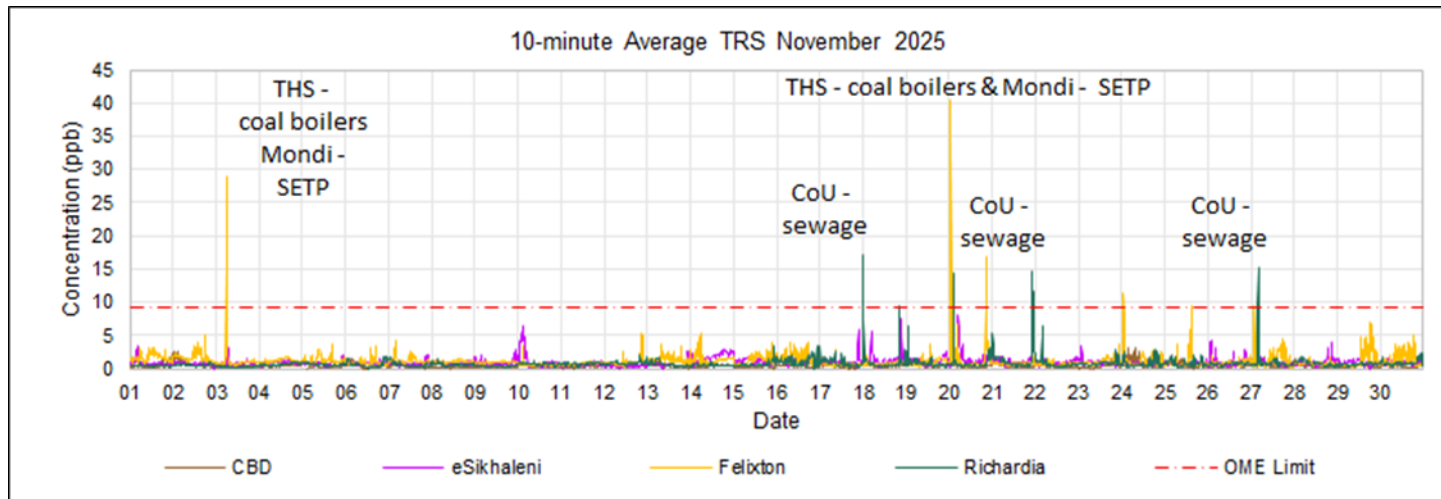
TRS 30-minute WHO H₂S Limit (5.0 ppb)	18
CoU	4
Richardia	4
Sewage discharge	4
Local source	1
eSikhaleni	1
RBCAA allocation	1
Mondi	4
eSikhaleni	1
SETP	1
Felixton	1
SETP	1
Richardia	2
SETP	2
THS	4
Felixton	4
RBCAA allocation	1
Boilers-coal operated	3
THS - Mondi	5
Felixton	5
Boilers-coal operated + Mondi SETP	5



TRS

10-MINUTE

TRS 10-minute OME Limit (9.3 ppb)	23
CoU	6
Richardia	6
Sewage discharge	6
Mondi	4
Felixton	2
SETP	2
Richardia	2
SETP	2
THS	2
Felixton	2
RBCAA allocation	1
Boilers-coal operated	1
THS - Mondi	11
Felixton	11
Boilers-coal operated + Mondi SETP	11



TRS

EXCEEDANCE SUMMARY

2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
TRS 24-hr-OME Limit (10.1 ppb)													
CBD	1	-	-	-	-	-	-	-	-	-	-	-	1
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
TRS 30-minute WHO H₂S Limit (5.0 ppb)													
CBD	34	25	15	10	2	41	3	10	3	-	-	-	143
eSikhaleni	-	-	-	-	4	19	11	4	29	5	2	-	74
Felixton	1	-	8	7	11	31	51	20	51	11	10	-	201
Richardia	5	7	3	7	3	16	3	9	19	9	6	-	87
TRS 10-minute OME Limit (9.3 ppb)													
CBD	53	10	8	7	-	27	-	-	2	-	-	-	107
eSikhaleni	-	-	-	-	4	11	8	1	10	5	-	-	39
Felixton	2	-	4	10	10	43	66	13	46	4	15	-	213
Richardia	3	1	-	9	-	13	-	19	24	12	8	-	89

Air Quality

SUMMARY

Determining air quality concerning pollutants measured and impacts simulated is based on comparison to and exceedances of short-term (10-minute, 30-minute, 1-hour and 24-hour averages) and long-term (monthly and annual averages) targets, guidelines, and standards.

AIMS concludes that during November 2025, based on the following:

- ▶ Measured long-term average concentrations (chronic exposure) and WHO health guidelines of concern are:
 - PM₁₀ at CBD, eSikhaleni, Felixton, Richardia and Scorpio - all points monitored.
 - PM_{2.5} at Brackenham, Felixton, Harbour West and Scorpio - all points monitored.

- ▶ Measured short-term average concentrations (acute exposure) and the WHO health guidelines, ambient air quality was compromised by:
 - PM₁₀ at Richardia.
 - PM_{2.5} at Brackenham, Felixton, Harbour West and Scorpio - all points monitored.
 - SO₂ at Arboretum, Harbour West, Richardia, and Scorpio; and
 - TRS at eSikhaleni, Felixton and Richardia.

Thank you

- Lance Coetzee
- lance@airimpact.co.za

- Francois Nel
- francois@airimpact.co.za

- Alicia Garnica
- alicia@airimpact.co.za

