

RBCAA Technical Feedback – October 2025



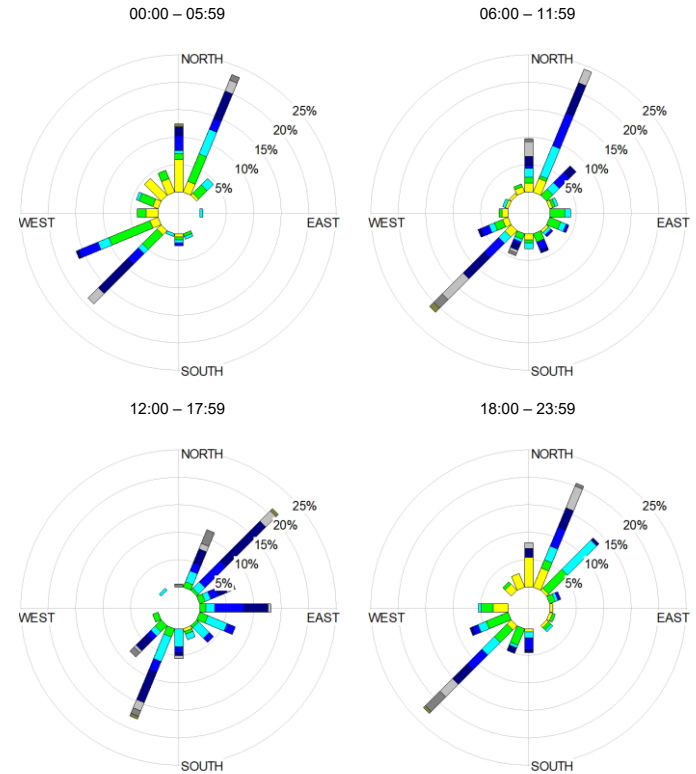
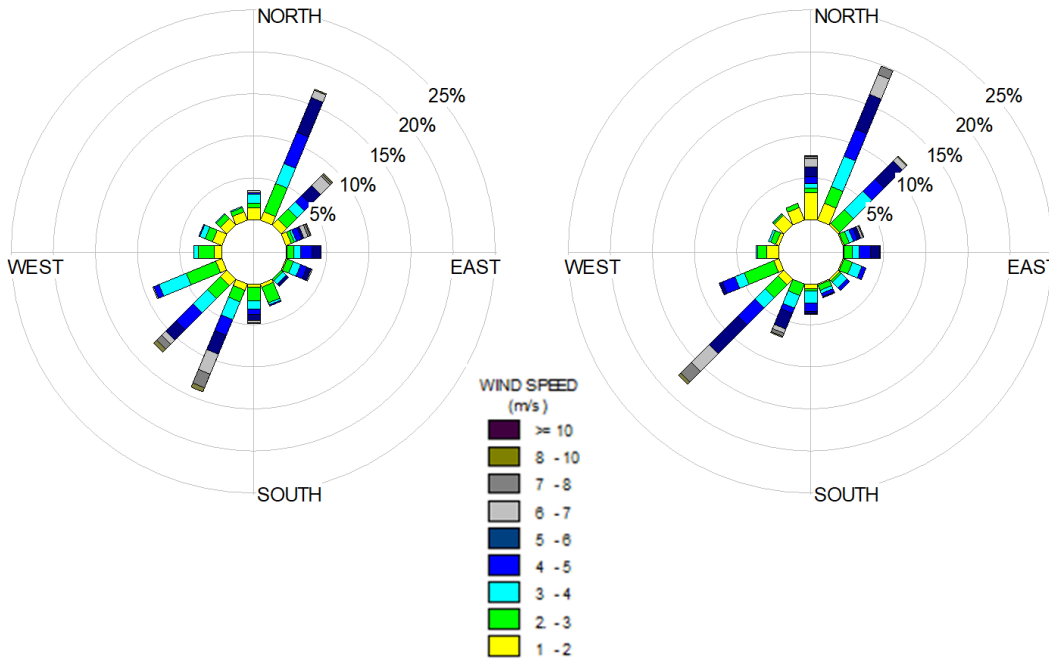
Meteorology

WIND



October 2024 Wind Rose

October 2025 Wind Rose

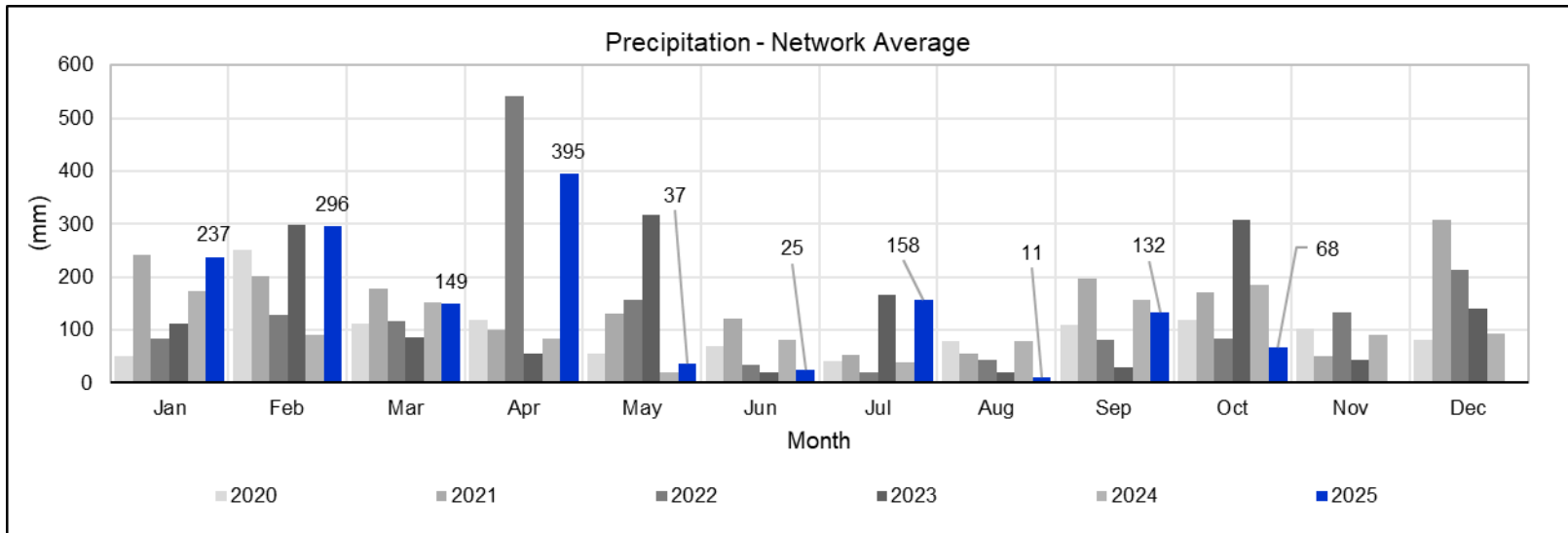
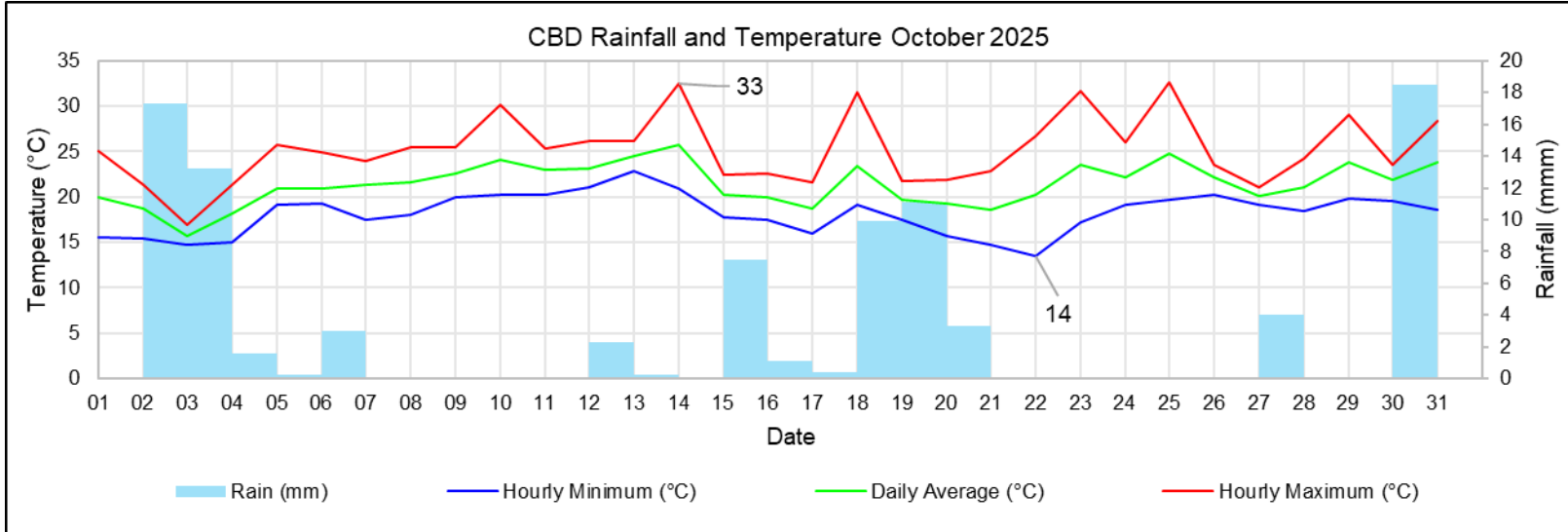


Period	Wind Speed	Dominant Sector 1		Dominant Sector 2		Calms	Valid Data
October 2024	3.8 m/s	NNE-NE	27%	SSW-WSW	37%	0%	93%
October 2025	3.9 m/s	N-NE	40%	SSW-WSW	33%	0%	97%
00:00-05:59	3.3 m/s	N-NNE	37%	SW-WSW	37%	1%	96%
06:00-11:59	4.1 m/s	N-NE	44%	SW-WSW	28%	0%	95%
12:00-17:59	4.6 m/s	NNE-ESE	60%	SSW-SW	26%	0%	99%
18:00-23:59	3.6 m/s	N-NE	43%	SW-WSW	31%	0%	97%

Meteorology

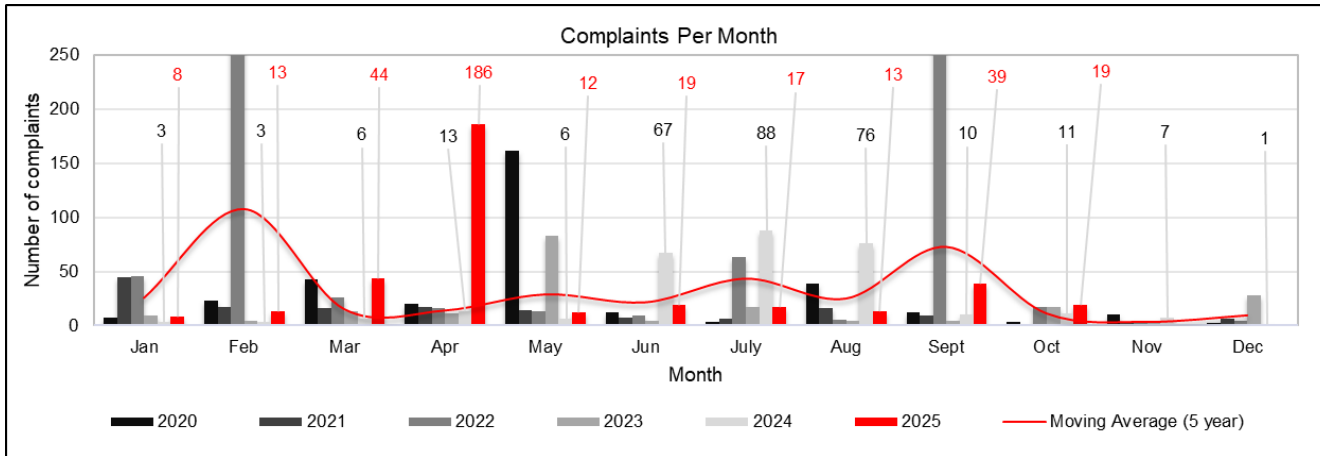
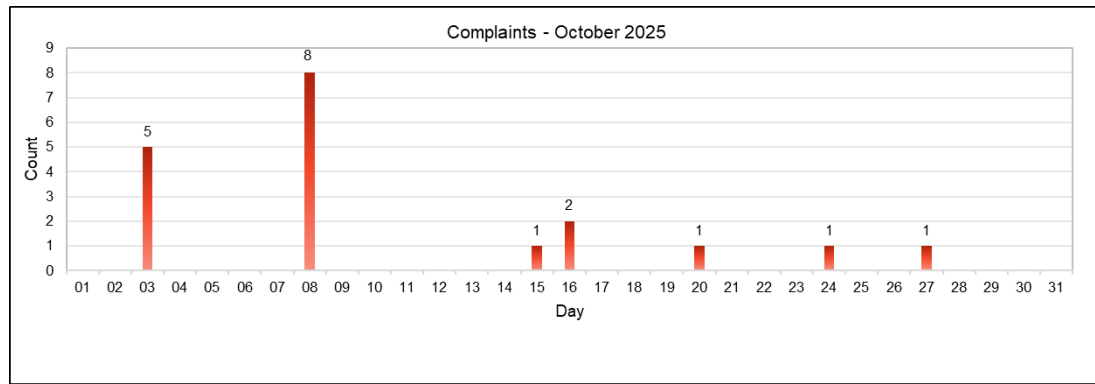
Month	Richards Bay (mm)	Felixton (mm)	RBCT (mm)	South32 (mm)	Average (mm)
October 2025	96	79	65	30	67

RAINFALL AND TEMPERATURE

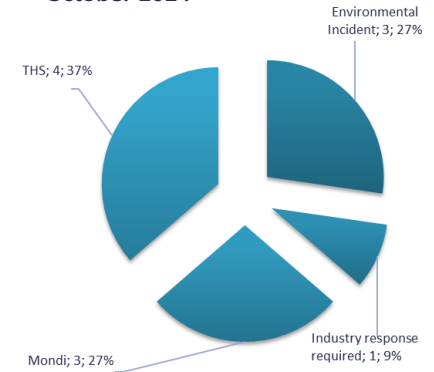


Complaints

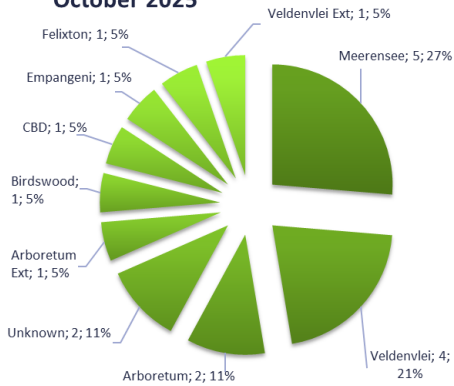
DISTRIBUTION



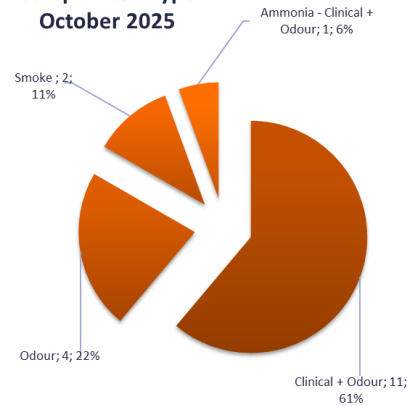
Complaints - Source October 2024



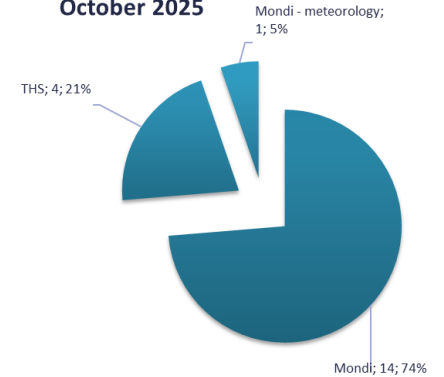
Complaints - Region October 2025



Complaints - Type October 2025

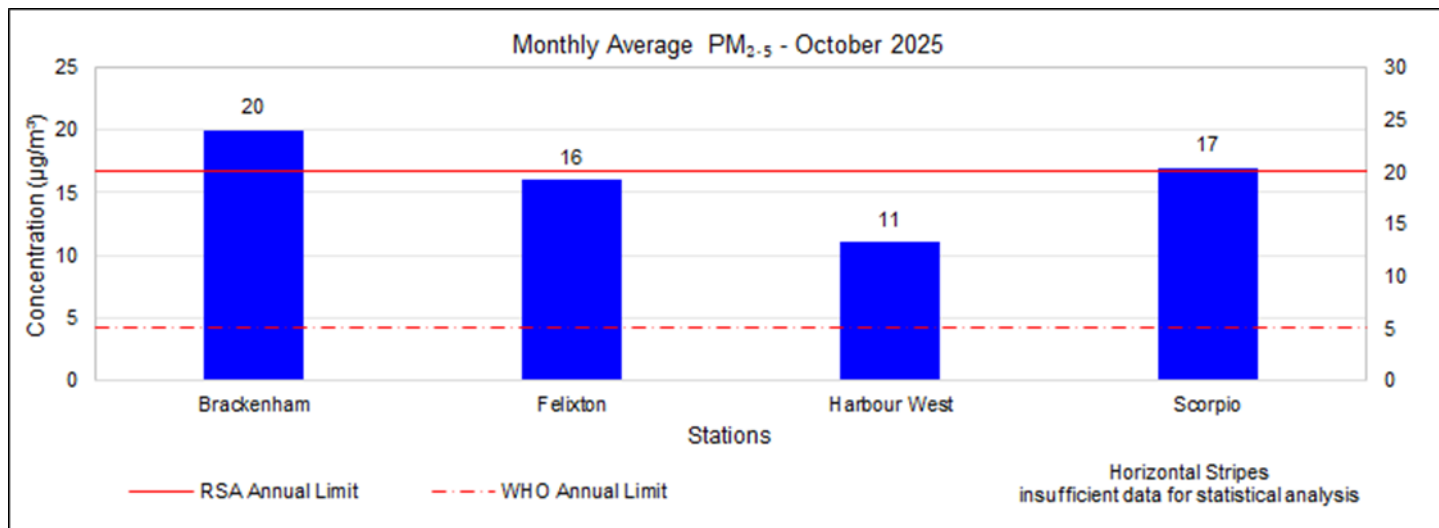
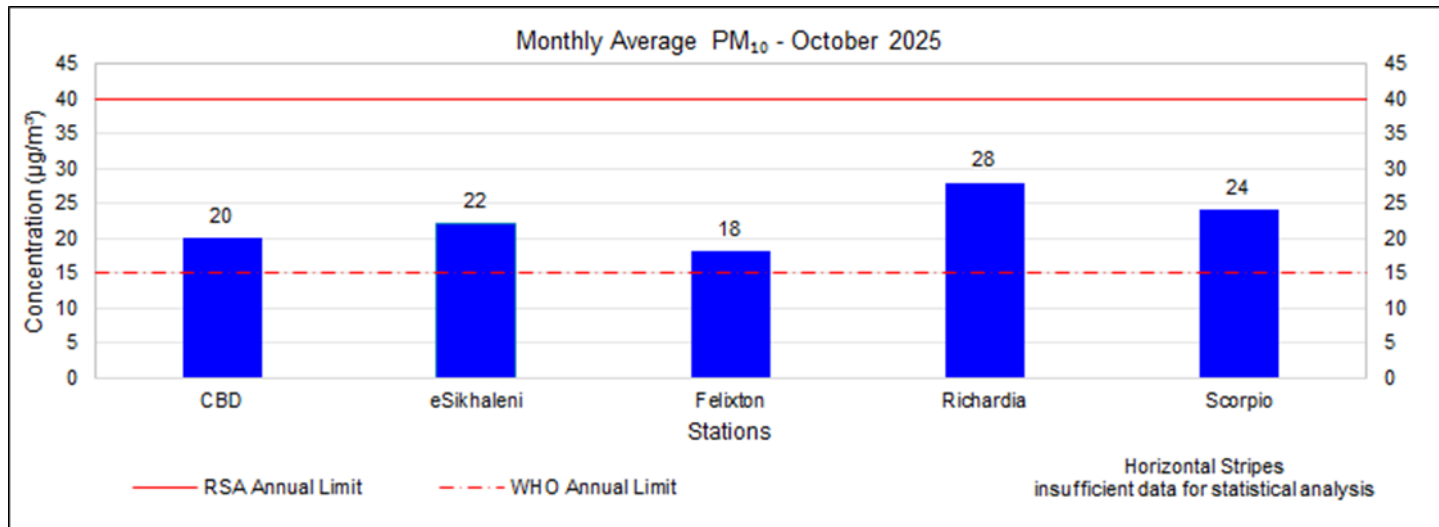


Complaints - Source October 2025



PM

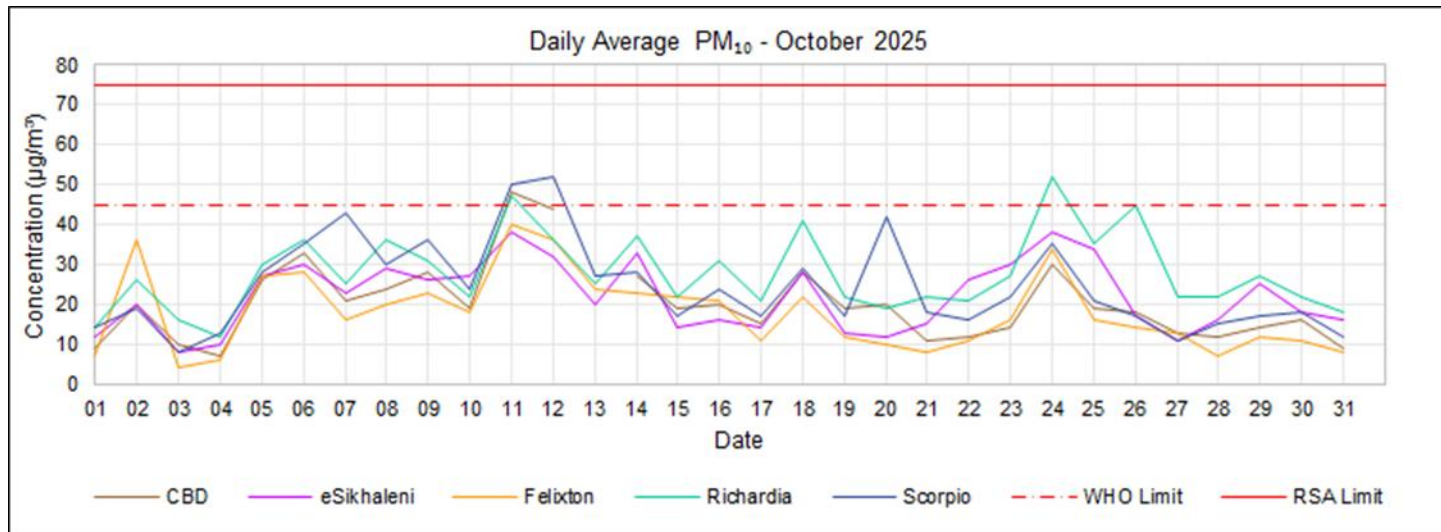
MONTHLY



PM₁₀

24-HOUR

PM ₁₀ Daily WHO Limit (45 µg/m ³)	5
No response required	5
CBD	1
No comments.	1
Richardia	2
No comments.	2
Scorpio	2
No comments.	2



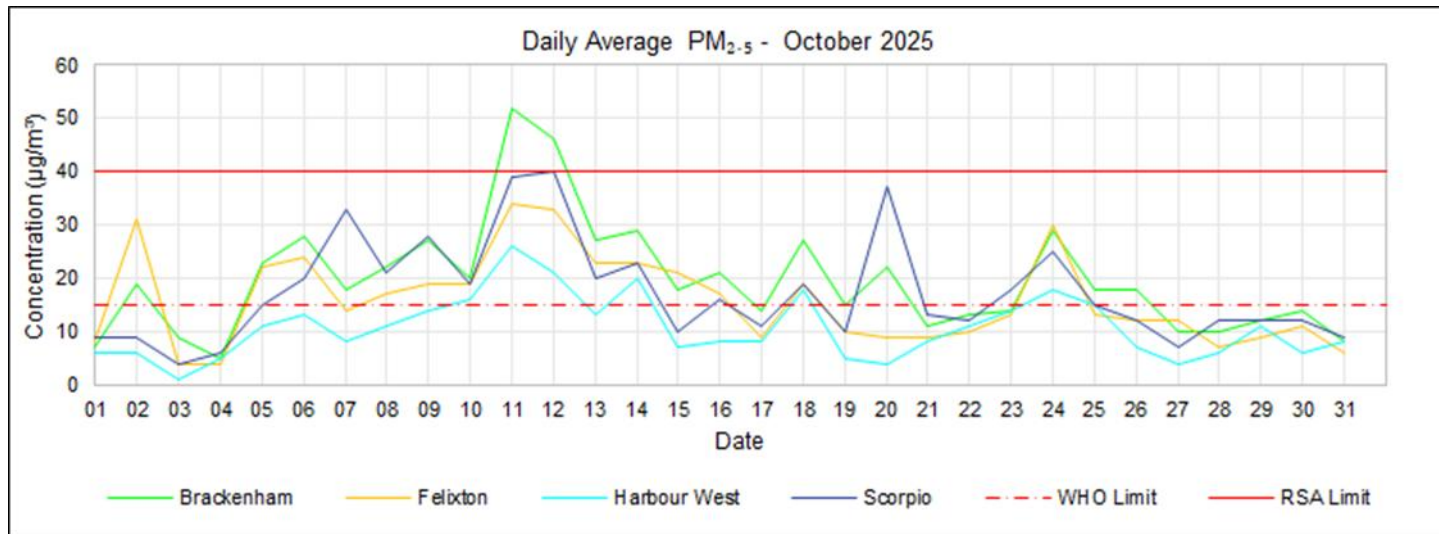
Missing Data (PM₁₀)

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

PM_{2.5}

24-HOUR

PM _{2.5} Daily RSA Limit (40 µg/m ³)	2
RBIDZ - Meteorology	2
Brackenham	2
RBCAA allocation	2
PM_{2.5} Daily WHO Limit (15 µg/m³)	52
No response required	52
Brackenham	18
None	18
Felixton	14
None	14
Scorpio	14
None	14
Harbour West	6
None	6



Missing Data (PM_{2.5})

- None.

PM

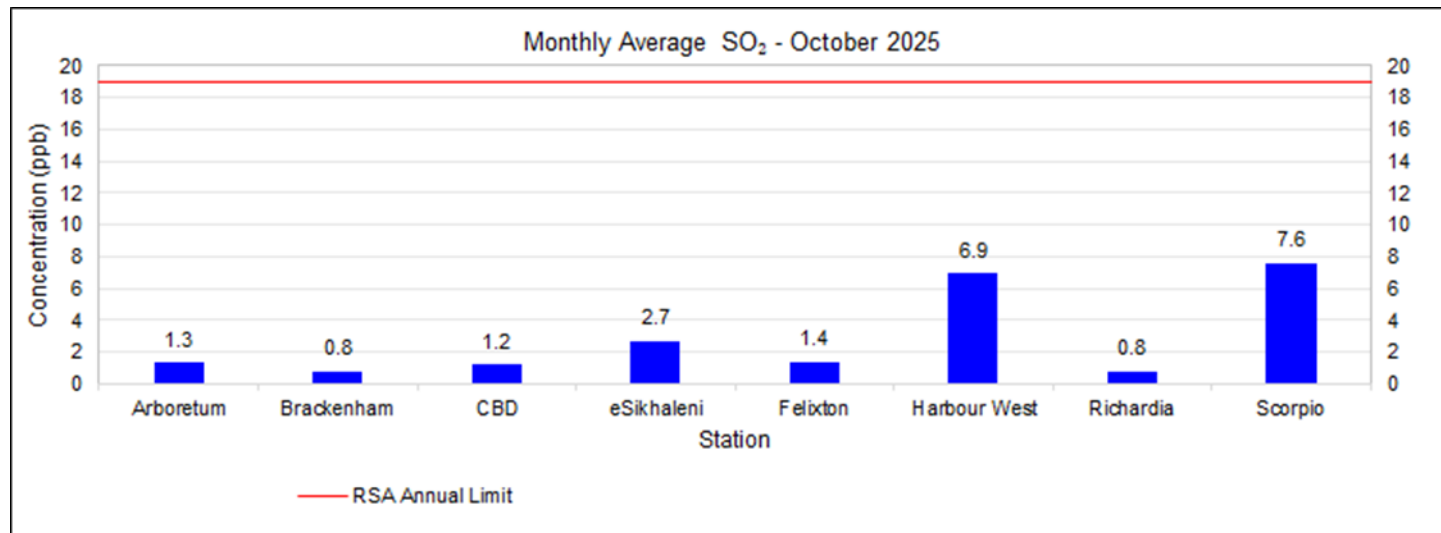
EXCEEDANCE SUMMARY

2025	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PM₁₀ Daily RSA Limit (75 µg/m³)													
Brackenheim	-	-	-	-	-	-	-	-	-	-	-	-	0
CBD	-	-	-	-	-	-	-	-	-	-	-	-	0
eSikhaleni	-	-	-	-	-	-	-	-	-	-	-	-	0
Felixton	-	-	-	-	-	-	-	-	-	-	-	-	0
Richardia	-	-	-	-	-	1	-	-	1	-	-	-	2
Scorpio	-	-	-	-	-	-	-	1	1	-	-	-	2
PM₁₀ Daily WHO Limit (45 µg/m³)													
Brackenheim	-	-	-	-	-	-	-	-	-	-	-	-	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	-	-	38
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)													
Brackenheim	-	-	-	-	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)													
Brackenheim	-	6	8	10	25	25	18	22	23	18	-	-	155
Felixton	2	3	2	2	18	19	14	20	20	14	-	-	114
Harbour West	1	2	4	1	11	3	8	11	13	6	-	-	60
Scorpio	1	4	1	-	11	14	14	22	19	14	-	-	100

SO₂

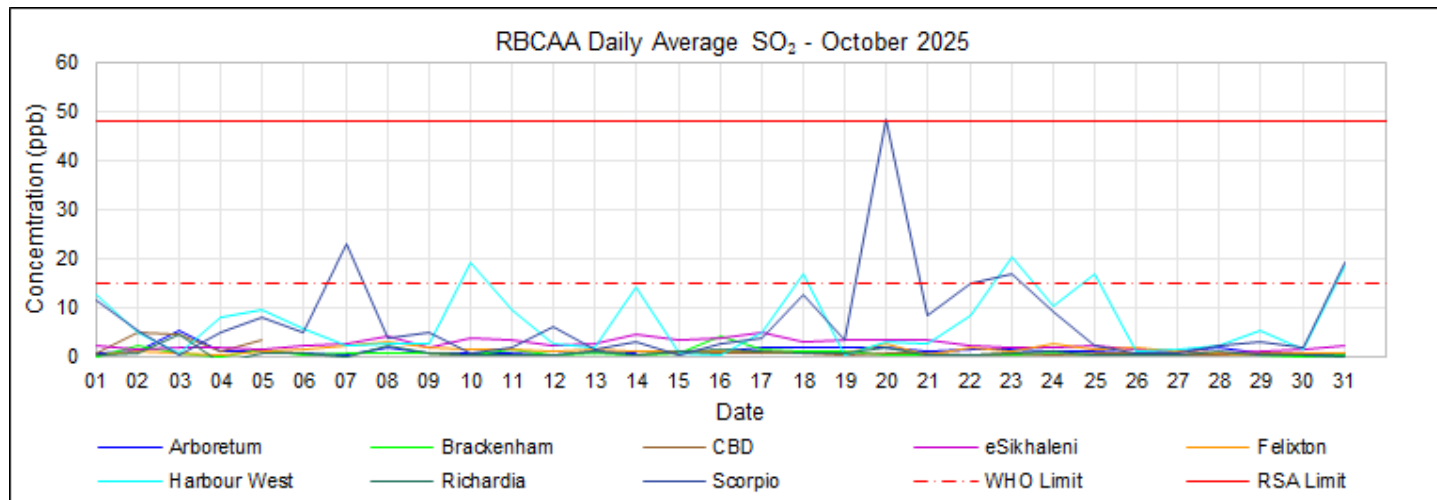
MONTHLY



SO₂

24-HOUR

SO ₂ Daily RSA Limit (48 ppb)	
Foskor	1
Scorpio	1
Loss of gas from the boiler	1
SO ₂ Daily WHO Limit (15 ppb)	
No response required	10
Harbour West	5
No comments.	5
Scorpio	5
No comments.	5



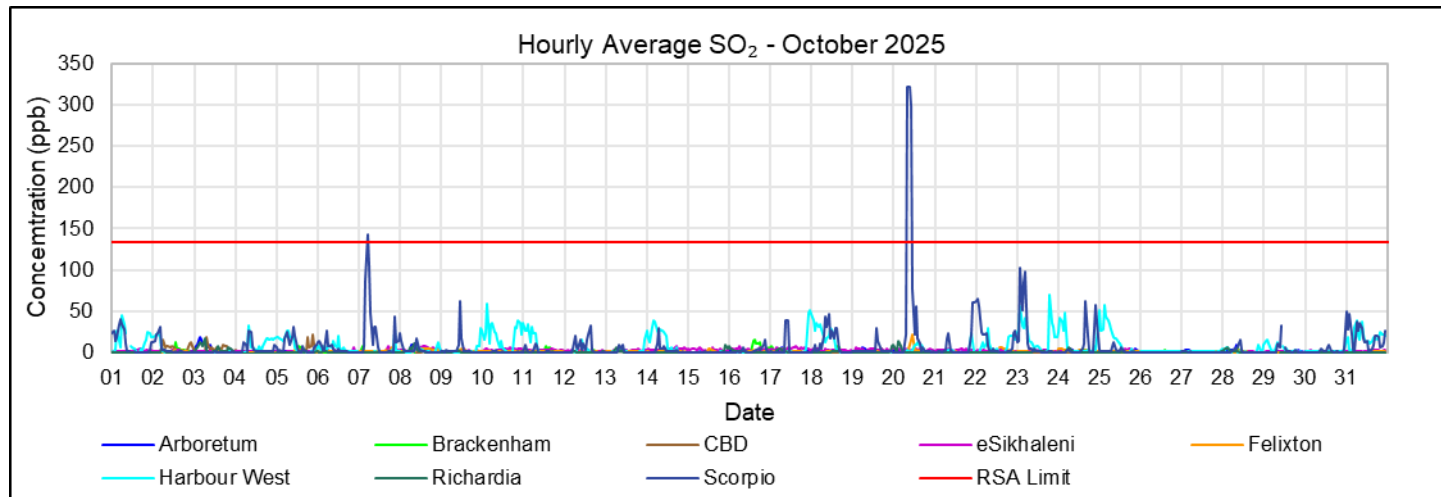
Missing Data (SO₂):

- Arboretum – Power outage, data invalidation (1 day/s with <80% data capture, 15 October 2025).
- CBD - Power outage, data invalidation (4 day/s with <80% data capture, 6-8, 13 October 2025).

SO₂

1-HOUR

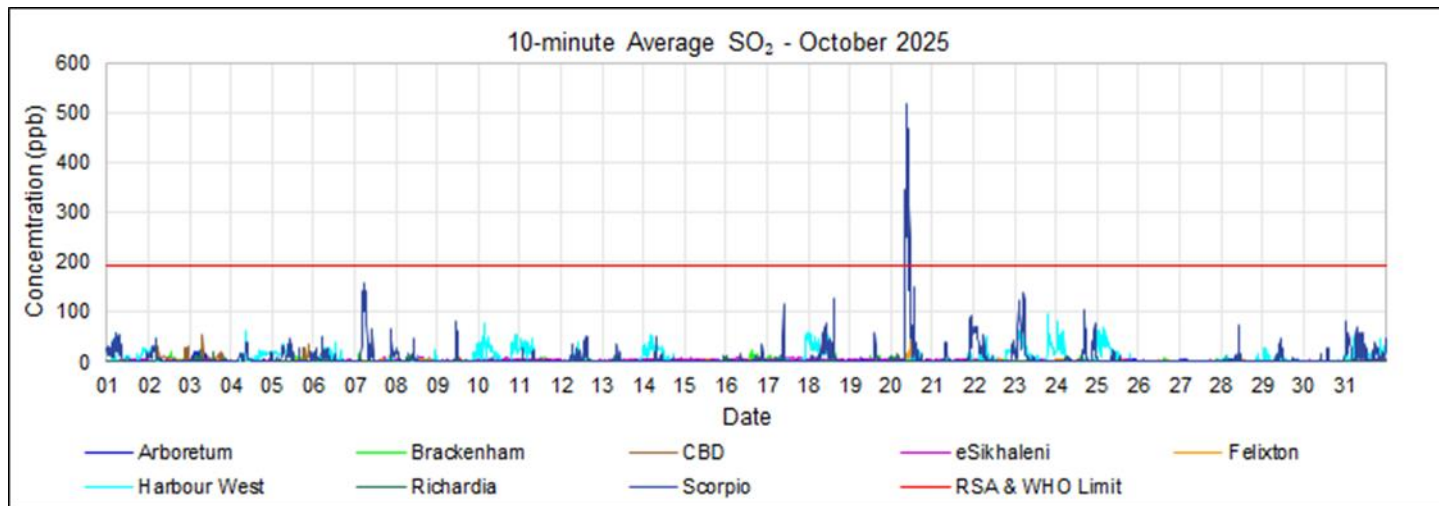
SO ₂ Hourly RSA Limit (134 ppb)	4
Foskor	4
Scorpio	4
Meteorology	1
Loss of gas from the boiler	3



SO₂

10-MINUTE

SO ₂ 10-minute RSA & WHO Limit (191 ppb)	16
Foskor	16
Scorpio	16
Loss of gas from the boiler	16



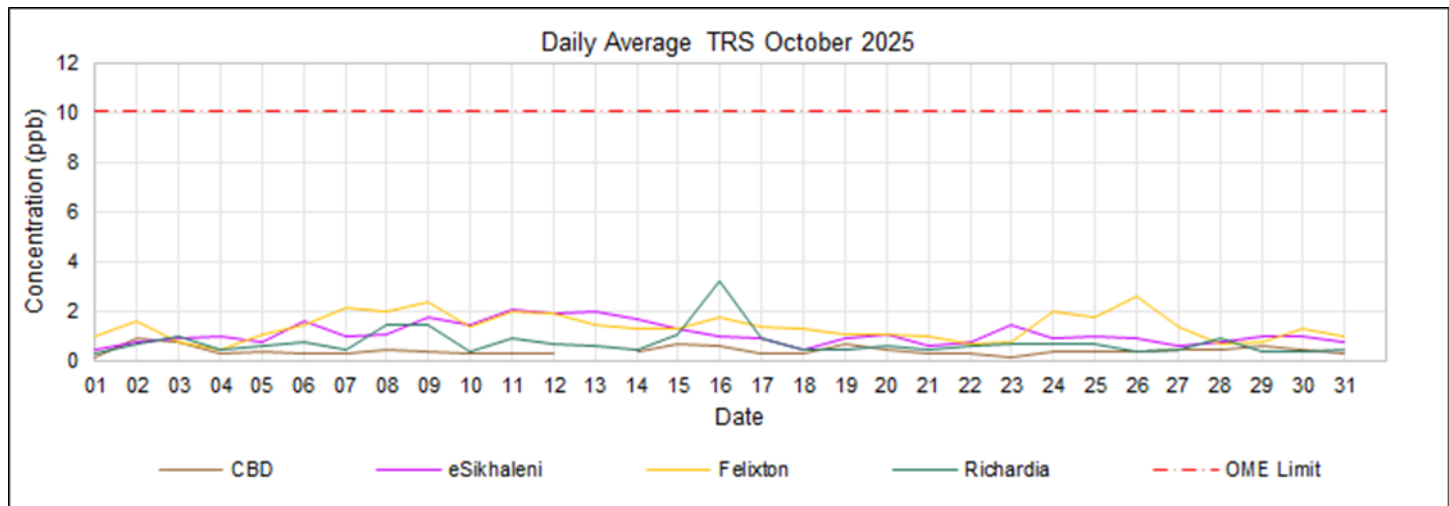
SO₂

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	-	-	39
Richardia	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	3	-	1	1	12	11	15	6	7	5	-	-	61
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	-	-	-	-	-	-	-	-	-	-	-	-	0
Scorpio	18	1	-	-	-	3	3	-	-	16	-	-	41

TRS

24-HOUR



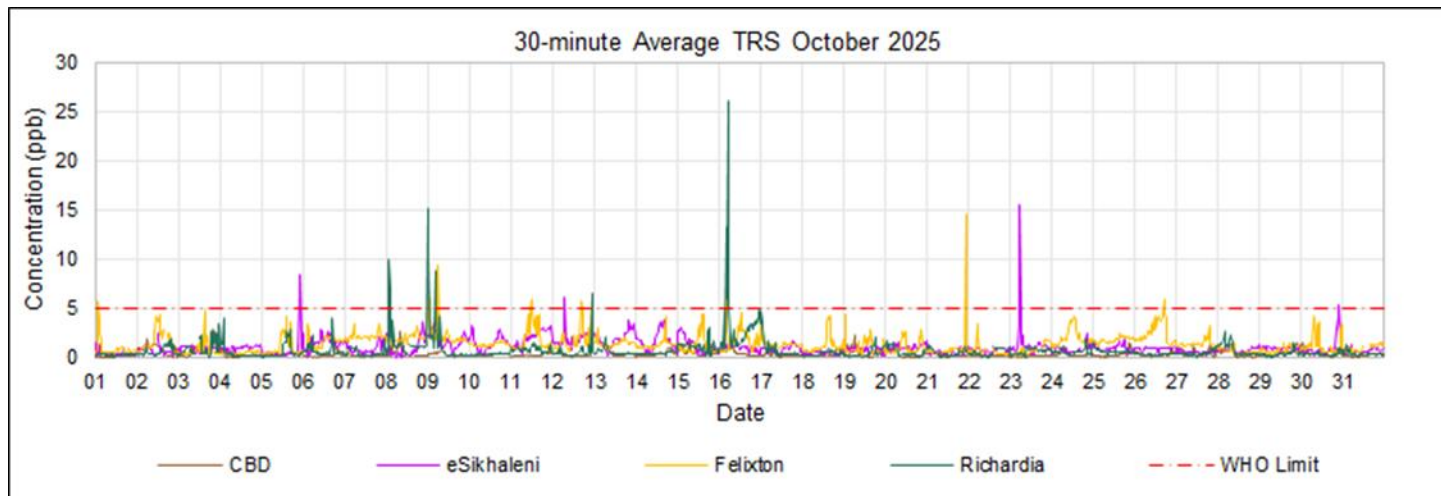
Missing Data (TRS):

CBD – Power outage, data invalidation (1 day/s with <80% data capture, 13 October 2025).

TRS

30-MINUTE

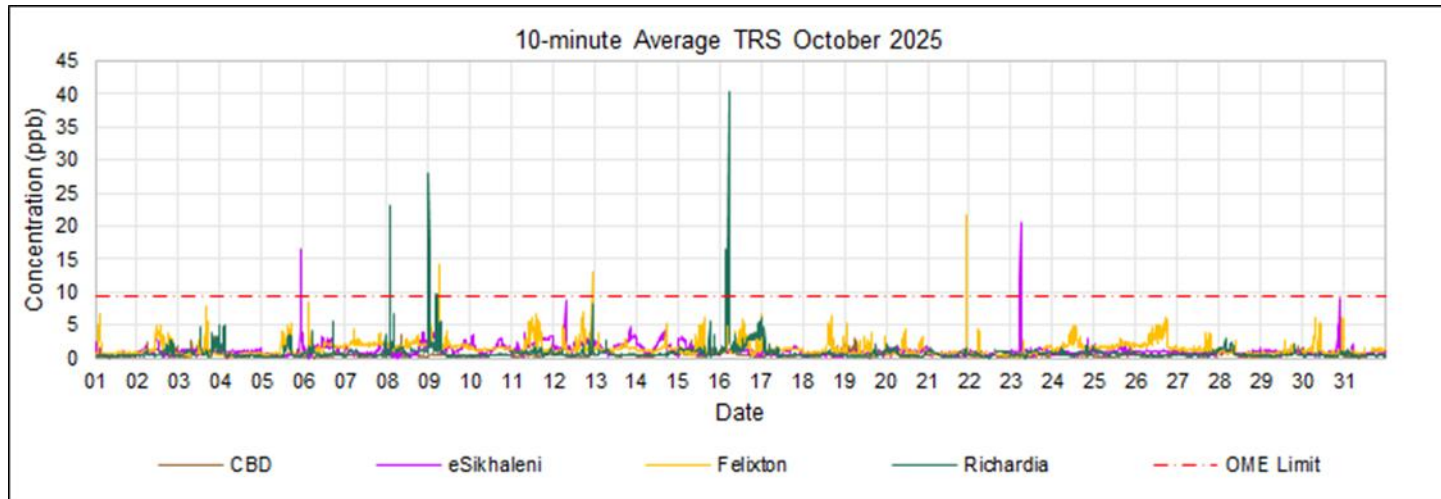
TRS 30-minute WHO H ₂ S Limit (5.0 ppb)	25
CoJ	1
Richardia	1
RBCAA allocation - sewage	1
Mondi	12
eSikhaleni	3
SETP	3
Felixton	1
SETP	1
Richardia	8
SETP	3
Source of TRS unknown	3
Meteorology	2
Mondi & THS	1
Felixton	1
SETP + THS Boilers-coal operated.	1
THS	11
eSikhaleni	2
Boilers-coal operated.	2
Felixton	9
Boilers-coal operated.	9



TRS

10-MINUTE

TRS 10-minute OME Limit (9.3 ppb)	21
Mondi	17
eSikhaleni	3
SETP	3
Felixton	2
SETP	2
Richardia	12
SETP	5
Source of TRS unknown	5
Meteorology	2
THS	4
eSikhaleni	2
Boilers-coal operated.	2
Felixton	2
Boilers-coal operated.	2



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	-	-	72
Felixton	1	-	8	7	11	31	51	20	51	11	-	-	191
Richardia	5	7	3	7	3	16	3	9	19	9	-	-	81
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	-	-	198
Richardia	3	1	-	9	-	13	-	19	24	12	-	-	81

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 October 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 CBD, Richardia and Scorpio.
 - PM_{2.5} at Brackenham, Felixton, Harbour West and Scorpio - all points monitored.
 - SO₂ at Scorpio and Harbour West; and
 - TRS at eSikhaleni, Felixton and Richardia.

Thank you

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