Quarterly Air Quality Monitoring Report

January 2025 – March 2025

Prepared By:

Mid West Ports Authority

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1. Introduction

Geraldton Port is a Prescribed Premises under the *Environmental Protection Act 1986* and as such operates under an Environmental Licence (L4275/1982/15) administered by the Department of Water and Environmental Regulation (**DWER**). The environmental licence sets emission concentration targets and limits for air quality at the prescribed premises boundary.

Mid West Ports Authority (MWPA) conducts a comprehensive air quality monitoring program to monitor and manage dust emissions associated with the operation of Geraldton Port. The location of the monitoring equipment is shown in **Figure 1**. For additional information on the monitoring program refer to the Air Quality Monitoring Sampling and Analysis Plan.

Condition 36 of the environmental licence requires MWPA to provide a Quarterly Air Quality Monitoring Report to DWER. Table 1 lists the reporting requirements under the Environmental Licence and identifies where this information can be found within this report.

The reporting period for this Quarterly Air Quality Monitoring Report is the inclusive period from 01 January 2025 to 31 March 2025.

TABLE 1 – AIR QUALITY REPORTING REQUIREMENTS

Condition	Requirement	Relevant Section(s)
Condition 27 (Table 4)	Ambient air quality target exceedances. Description of exceedances (including concentrations for all parameters specified in Table 4), dates of exceedances, operational description, and meteorological conditions at the time of exceedance, potential source(s) of exceedances, investigative and corrective actions taken.	Section 2 Real Time Air Quality Summary Section 3 High Volume (HVAS) Air Sampling Data Appendix A
Condition 27 (Table 4) Note 2	Continuous monitoring is permitted to include gaps equating to no more than two hours in every 24-hour averaging period, as required for the changing of HVAS sampler filter papers.	Section 4 Monitoring Equipment Incidents
DWER Letter Ref. 2011-000451 (22 June 2018)	24-hour averaged PM_{10} data for every monitor within the air quality monitoring network. Wind direction and speed data for that 24-hour period. Data may be tabulated or presented in figures at MWPAs discretion, provided the information requested above is presented together, for each individual day that an exceedance occurs.	Appendix A

Condition	Requirement	Relevant Section(s)
	A full description of all activities occurring within the premises that may have caused dust, for that 24-hour period (not just category 58 activities). MWPAs assessment of cause for the exceedance, and a clearly justified 'contributed' or 'not contributed' statement.	Section 2 Real Time Air Quality Summary Table 3
	Presented separately to the above in an Excel Spreadsheet or CSV file, DWER requests all air quality and meteorological time series data as five-minute averages (or next closer), for each site, for the entire quarterly reporting period.	Appendix B

2. Real Time Air Quality Summary

Each compliance air quality monitoring station has a Tapered Element Oscillating Microbalance (TEOM) real time air quality monitor which measures dust as PM_{10} (Figure 1). An additional reference offsite air quality monitoring station was commissioned in February 2013 which comprises a Beta Attenuating Monitor (BAM). This site is in the suburb of Bluff Point and is adjacent to the navigational aid.

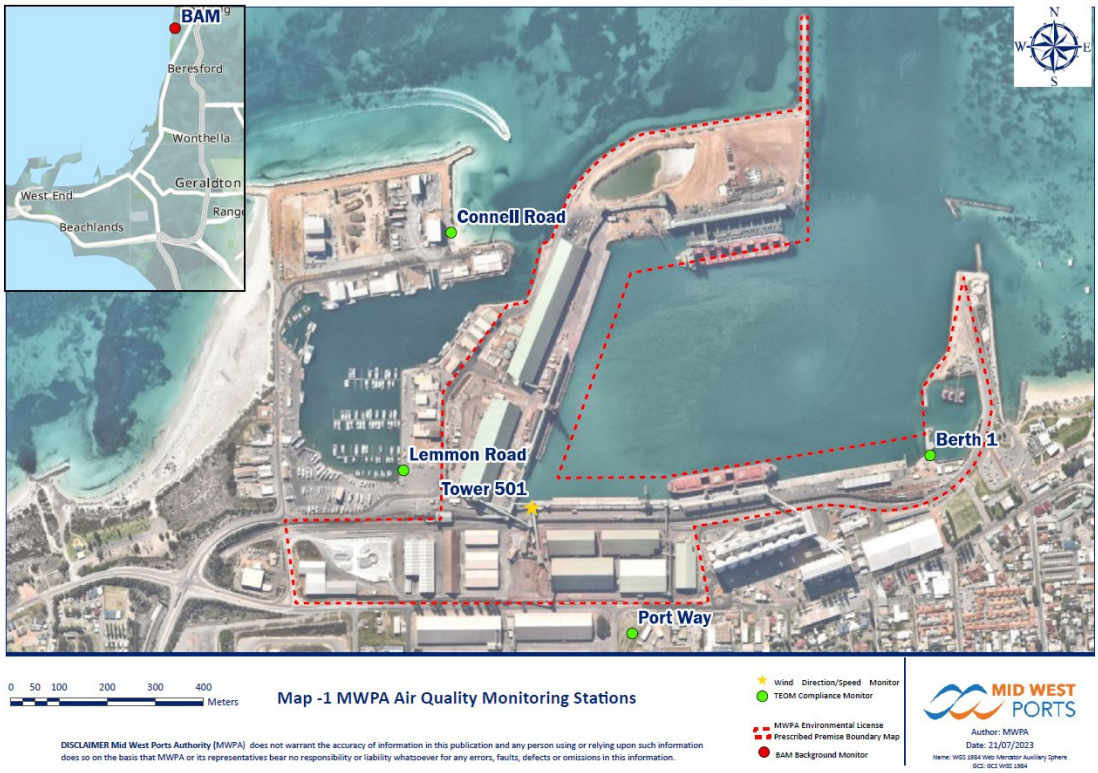

Figure 1 MWPA AIR QUALITY AND WIND MONITORING NETWORK

Daily average dust levels have been calculated over a 24-hour period from midnight to midnight and are presented in Appendix B. Table 2 provides a summary of results for the period.

TABLE 2 – PM_{10} DAILY AVERAGE DUST CONCENTRATIONS, JANUARY TO MARCH 2025

Criteria	Compliance Monitoring Stations				Offsite (BAM Monitor)
	Berth 1	Port Way	Connell Road	Lemmon Road	
Total Exceedances	5	22	18	12	19
Port Influenced Exceedances[1]	1	1	1	1	0
Average (µg/m³)	30.0	39.4	36.3	35.1	44.3
Maximum (µg/m³)	75.5	87	81.5	97.7	124
Minimum (µg/m³)	1.1	15.1	6.4	9.1	19.7
No Data (days)	6	0	0	0	30

A total of 57 site exceedances were recorded over 26 monitoring days at compliance monitoring stations in this reporting period. 19 exceedances were also recorded at the offsite reference monitor during the period. MWPA uses the MWPA Realtime PM10 Contribution Workbook to plot an "arc of influence." The workbook uses the wind direction to project the area of influence up wind of the monitoring station, which helps to identify possible dust sources. A review of Port operations and wind conditions using MWPA's Determining Port Contribution to Realtime PM10 Dust Procedure during each 24-hour period (Table 3) established that Port related operations contributed to 3 of these monitoring days (equalling 4 site exceedances).

5-minute average TEOM data, wind speed and wind direction data has been provided for each target exceedance event during this quarterly period (Appendix A, Figures 11 - 36 (exceedance graphs) and Appendix B (raw data)).

1 An exceedance is considered "Port Influenced" when the MWPA contribution is assessed to exceed 50% of the daily average target (i.e. greater than 25ug/m3 over 24 hours), excluding any background or off-site dust contribution.

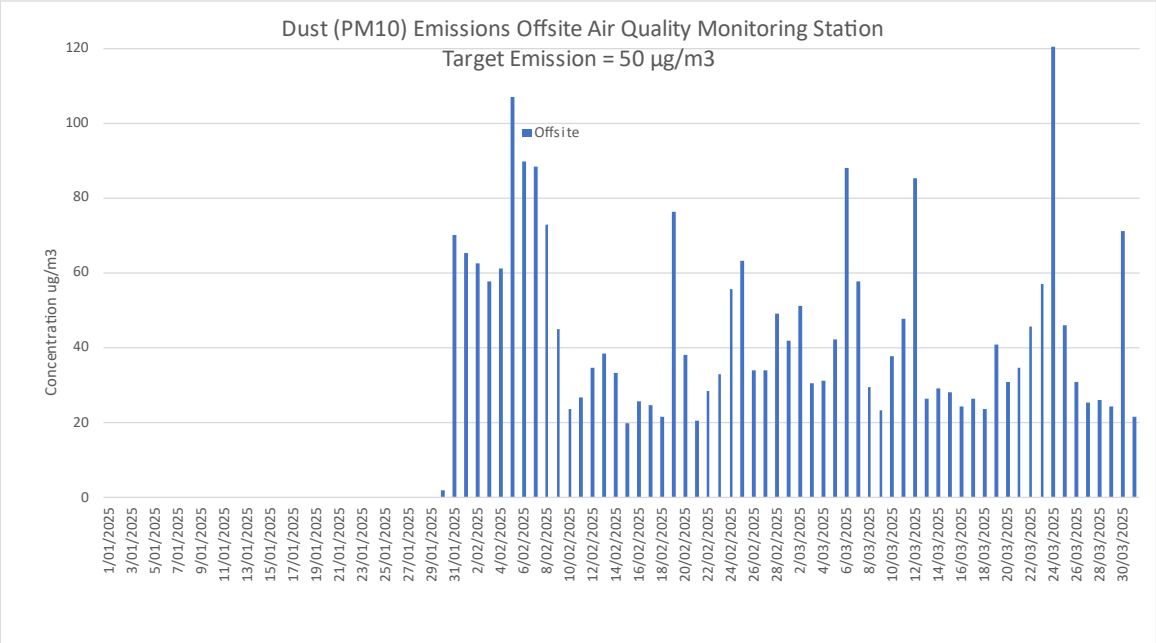

FIGURE 2 - JANUARY - MARCH 2025 DAILY AVERAGE DUST (PM10) RECORDED AT OFFSITE AIR QUALITY MONITORING STATION

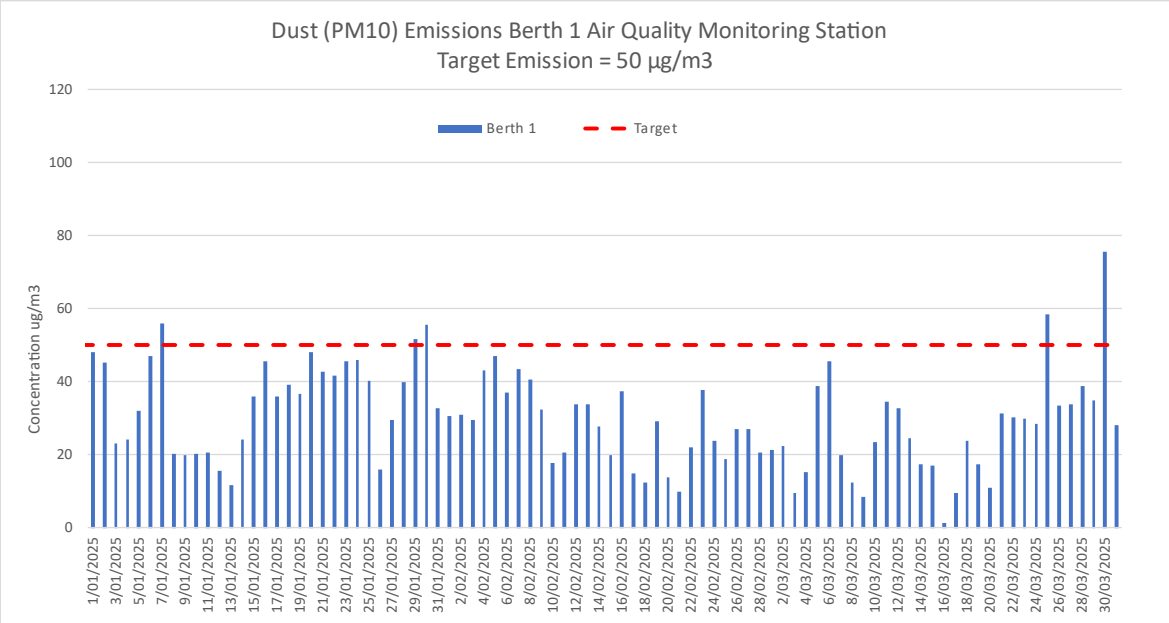

FIGURE 3 - JANUARY - MARCH 2025 DAILY AVERAGE DUST (PM10) RECORDED AT BERTH 1 AIR QUALITY MONITORING STATION

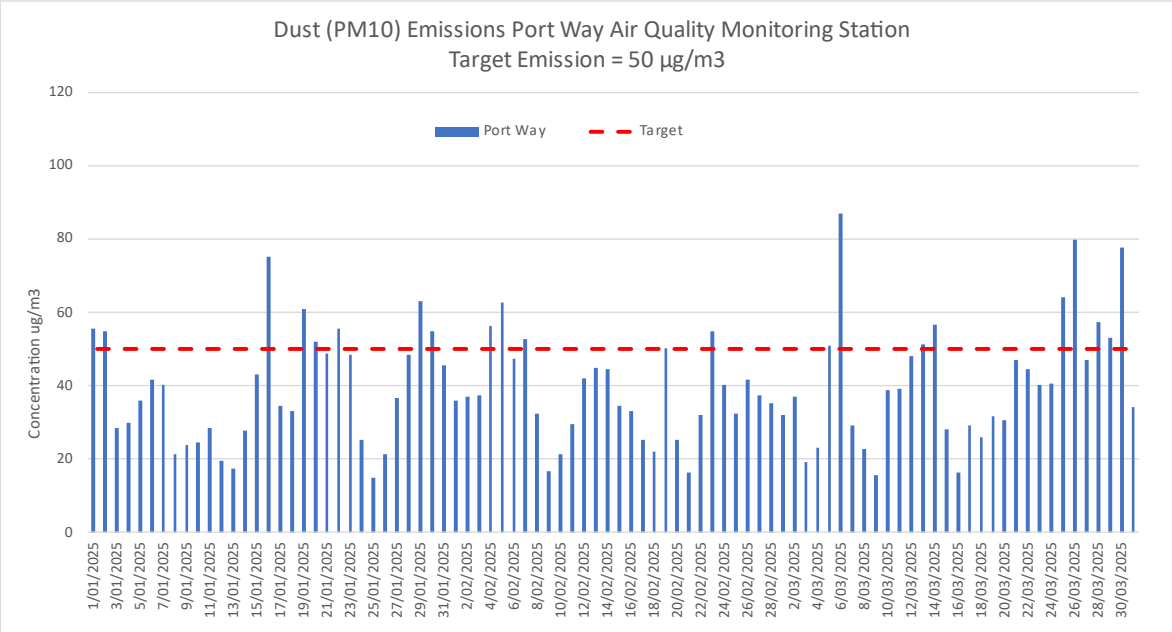

FIGURE 4 – JANUARY - MARCH 2025 DAILY AVERAGE DUST (PM_{10}) RECORDED AT PORT WAY AIR QUALITY MONITORING STATION

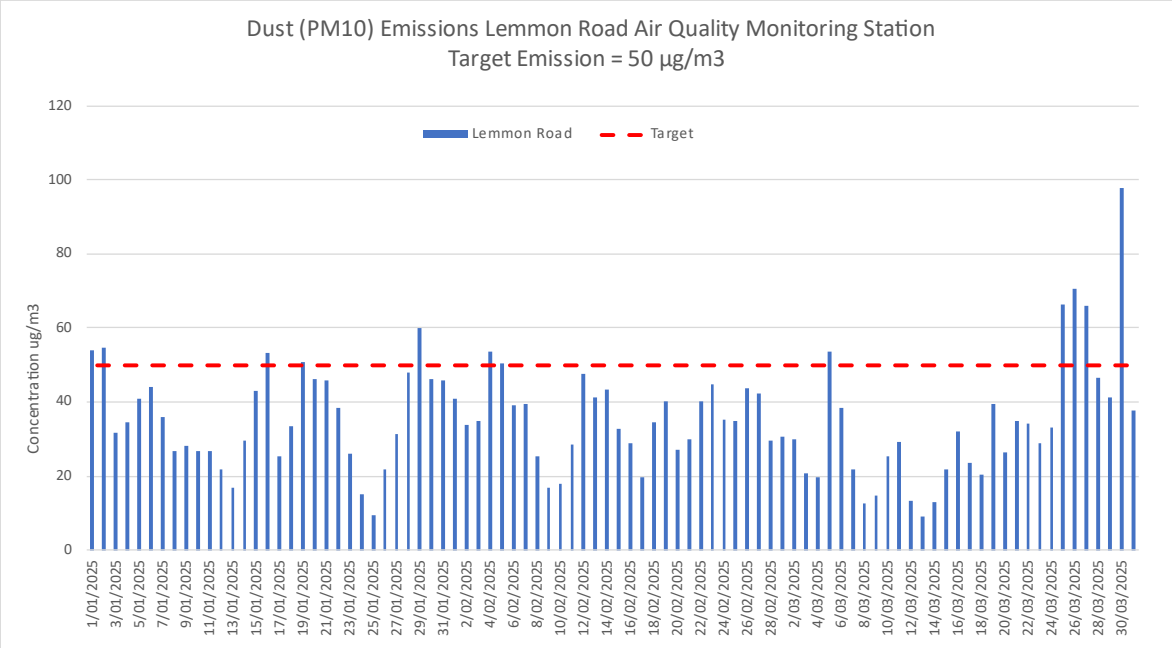

FIGURE 5 - JANUARY - MARCH 2025 DAILY AVERAGE DUST (PM10) RECORDED AT LEMMON ROAD AIR QUALITY MONITORING STATION

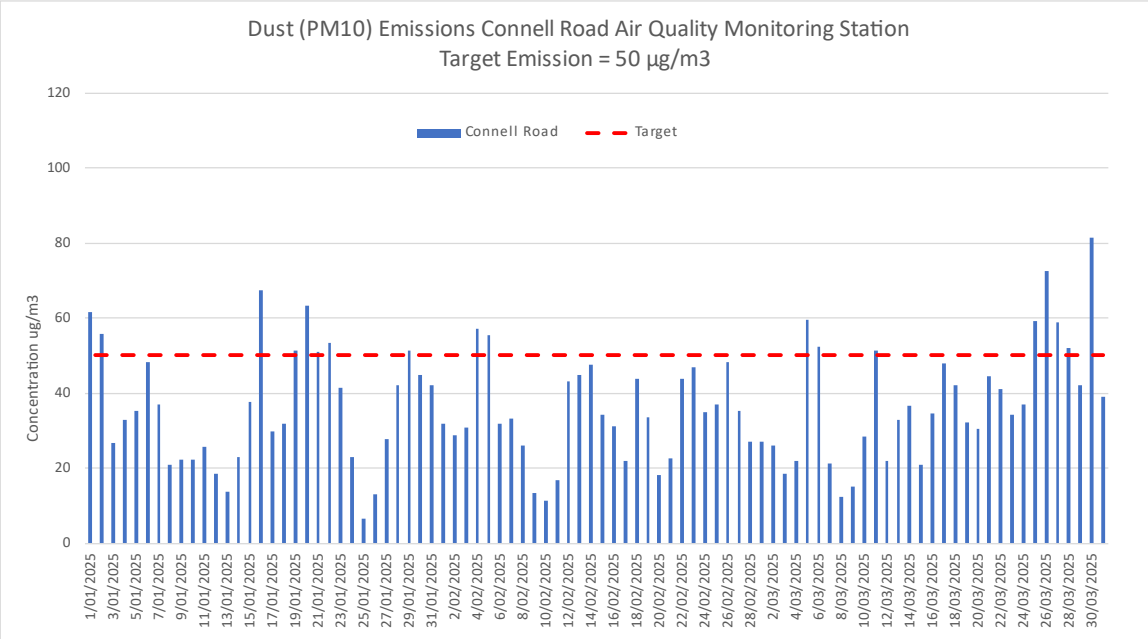

FIGURE 6 - JANUARY - MARCH 2025 DAILY AVERAGE DUST (PM_{10}) RECORDED AT CONNELL ROAD AIR QUALITY MONITORING STATION

TABLE 3 – PM_{10} DUST RESULTS JANUARY - MARCH 2025

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
1	1/01/2025	Not Contributed	Connell Road (61.6µg/m³), Lemmon Road (54µg/m³) and Port Way (55.4µg/m³) exceeded on this date. Wind was from the South to Southwest for most of the day. All monitors recorded high levels of particulates, with levels of concentration similar across monitors throughout the day indicating the source was diffuse. The exceedance not due to Port operations.	B3: Wheat B6: Gas Oil & Diesel	Figure 11
2	2/01/2025	Not Contributed	Connell Road (55.9µg/m³), Lemmon Road (54.6µg/m³) and Port Way (54.8µg/m³) exceeded on this date. Wind was from the South to Southwest for most of the day. All monitors recorded high levels of particulates, with levels of concentration similar across monitors throughout the day indicating the source was diffuse. The exceedance not due to Port operations.	B3: Wheat	Figure 12
3	7/01/2025	Contributed	Berth 1 (55.9µg/m³) exceeded on this date. Wind was from the West to Southwest throughout the day. The exceedance was due to shiploading of grain over Berth 3. The grain loading was stopped multiple times throughout the day to manage dust levels from loading.	B3: Wheat B5: Iron Ore B7: Iron Ore	Figure 13
4	16/01/2025	Not Contributed	Connell Road (67.3µg/m³), Lemmon Road (53.3µg/m³) and Port Way (75.2µg/m³) exceeded on this date. Wind was variable in direction and light to moderate in intensity. Most	B3: Wheat B4: Zircon B5: Iron Ore	Figure 14

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
			of the dust measured as from an offsite direction. The exceedance not due to Port operations.	B6: Zinc Concentrate B7: Iron Ore	
5	19/01/2025	Not Contributed	Connell Road (51.4µg/m³), Lemmon Road (50.9µg/m³) and Port Way (60.9µg/m³) exceeded on this date. Wind was from a Southwest direction for most of the day. The Port Way monitor recorded the highest daily average of particulates, all of which were from an offsite direction. The exceedance not due to Port operations.	B3: Canola B7: Iron Ore	Figure 15
6	20/01/2025	Not Contributed	Connell Road (63.4µg/m³) and Port Way (52µg/m³) exceeded on this date. Wind was from the South to Southwest in the early morning and afternoon and from the East to Northeast for the rest of the day. Most of both exceeding monitors daily averages were due to offsite and background dust. The exceedance not due to Port operations.	B3: Canola B7: Iron Ore	Figure 16
3	21/01/2025	Not Contributed	Connell Road (51µg/m³) exceeded on this date. Wind was light and variable in the morning and was from the Northwest to Southwest for the rest of the day. Most of the daily average for Connell Road was from an offsite direction.	B3: Canola B4: Talc B7: Iron Ore	Figure 13
4	22/01/2025	Not Contributed	Connell Road (53.3µg/m³) and Port Way (55.5µg/m³) exceeded on this date. Wind was from the Northeast and Northwest for a large portion of the day. Most of both exceeding monitors daily averages were due to offsite and background dust.	B3: Canola B4: Talc B5: Iron Ore B7: Iron Ore	Figure 14

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
5	29/01/2025	Not Contributed	Berth 1 (51.6µg/m³), Connell Road (51.3µg/m³), Lemmon Road (60µg/m³) and Port Way (62.9µg/m³) exceeded on this date. Wind was from the Southwest for much of the day. All monitors recorded high daily averages indicating regional influence. The exceedance not due to Port operations.	B3: Wheat B4: HMC B5: Iron Ore B6: Iron Concentrate B7: Iron Ore	Figure 15
6	30/01/2025	Not Contributed	Berth 1 (55.6µg/m³) and Port Way (54.9µg/m³) exceeded on this date. Wind was from the West to Southwest for most of the day. Most of Port Ways daily average was from an offsite direction. The daily average of Berth 1 was not significantly higher than the upwind monitors. The exceedance not due to Port operations.	B3: Wheat B6: Iron Concentrate B7: Iron Ore	Figure 16
7	4/02/2025	Not Contributed	Connell Road (57µg/m³), Lemmon Road (53.7µg/m³) and Port Way (56.1µg/m³) exceeded on this date. Wind was from the Southeast in morning and from South in the afternoon and evening. Lemmon Road and Connell Roads daily averages were less than Port Ways daily average which was mostly from an offsite direction. The exceedance was due to dust from offsite sources to the South and Southwest of the Port.	B3: Canola B4: Bulk Min Sands B6: Lead B7: Iron Ore	Figure 17
8	5/02/2025	Not Contributed	Connell Road (55.5µg/m³), Lemmon Road (50.5µg/m³) and Port Way (62.7µg/m³) exceeded on this date. Wind was from the South-Southeast in the early morning and from the Southwest for the rest of the day. Lemmon Road and Connell Roads daily averages were less than Port Ways daily average which was mostly from an offsite direction.	B3: Canola B6: Copper Concentrate / HPM B7: Iron Ore	Figure 18

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
9	7/02/2025	Not Contributed	Port Way (52.8µg/m³) exceeded on this date. Wind was from the Southwest throughout the day. All of Port Ways daily average was from an offsite direction.	B3: Wheat B4: HMC B5: Iron Ore B6: HMC / Gas Oil & Diesel	Figure 19
10	19/02/2025	Not Contributed	Port Way (50.2µg/m³) exceeded on this date. Wind ranged from the Southwest to East. All of Port Ways daily average was from an offsite direction.	B7: Iron Ore	Figure 20
11	23/02/2025	Not Contributed	Port Way (54.9µg/m³) exceeded on this date. Wind was from a Southerly direction throughout the day. All of Port Ways daily average was from an offsite direction.	B3: Barley / Wheat B4: Spodumene B5: Iron Ore B6: Zinc Concentrate B7: Iron Ore	Figure 21
4	5/03/2025	Not Contributed	Connell Road (59.4µg/m³), Lemmon Road (53.5µg/m³) and Port Way (51µg/m³) exceeded on this date. Wind was from the Southeast to East in the morning, and from the Southwest for the rest of the day. None of the exceeding monitors wee significantly higher than upwind monitors. The exceedance not due to Port operations.	B3: Wheat B5: Iron Ore B6: Fertiliser	Figure 14
5	6/03/2025	Not Contributed	Connell Road (52.4µg/m³) and Port Way (87µg/m³) exceeded on this date. Wind from the Southwest to South-southwest for most of the day, with a period from the East to Northeast in the morning. Most of the daily average recorded at both exceeding monitors was from an offsite direction.	B3: Wheat B5: Iron Ore B6: Fertiliser B7: Iron Ore	Figure 15

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
6	11/03/2025	Not Contributed	Connell Road (51.3µg/m³) exceeded on this date. Of the daily average (29.4µg/m³) was from an offsite direction. The remainder of the day was not significantly higher than the upwind monitors. The exceedance not due to Port operations.	B3: Wheat B4: Ilmenite B5: Iron Ore B6: Gas Oil & Diesel B7: Iron Ore	Figure 16
5	13/03/2025	Not Contributed	Port Way (51.4µg/m³) exceeded on this date. Wind was from a Southeast to Northeast direction in the morning and from the West in for the rest of the day. Most of the daily average recorded at Port Way was from an offsite direction. Visible dust from offsite grain unloading to the Northeast of the monitor were observed by the Operation Supervisor and likely contributed to the exceedance. The exceedance not due to Port operations.	B3: Wheat B4: Zircon Sand B6: Iron Concentrate B7: Iron Ore	Figure 15
6	14/03/2025	Contributed	Port Way (56.6µg/m³) exceeded on this date. Wind was from the Northwest to Southwest for most of the day. Zircon handling through the bulk handling facility truck unloader is likely to have contributed to the exceedance.	B4: Zircon Sand B6: Iron Concentrate B7: Iron Ore	Figure 16
7	25/03/2025	Not Contributed	Berth 1 (58.4µg/m³), Connell Road (59.1µg/m³), Lemmon Road (66.4µg/m³) and Port Way (64µg/m³) exceeded on this date. Wind was from a Southwest to South direction throughout the day. All monitors recorded daily averages above the target. The exceedances were due to particulates from offsite sources to the South of the Port.	B3: Wheat B4: Garnet B5: Iron Ore B7: Iron Ore	Figure 17
8	26/03/2025	Not Contributed	Connell Road (72.4µg/m³), Lemmon Road (70.4µg/m³) and Port Way (79.9µg/m³) exceeded on this date. Wind direction	B3: Wheat B4: Garnet	Figure 18

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
			ranged from South to East in the morning, and Southwest to South in the afternoon and evening. Lemmon Road and Connell Road monitors recorded lower daily averages than Port Way which was upwind of them. Port Way recorded most of its daily average from offsite sources from the Southwest to the East of the monitor.	B5: Iron Ore B7: Iron Ore	
9	27/03/2025	Contributed	Connell Road (58.7µg/m³) and Lemmon Road (65.9µg/m³) exceeded on this date. Wind was from the East in the morning, and from the Southwest to South in the afternoon and evening. Possible sources for the exceedance at both monitors include grain truck and rail in-loading, garnet handling through the bulk handling facility truck unloader and truck movements in the mineral storage area.	B3: Wheat B4: Garnet B5: Iron Ore B7: Iron Ore	Figure 19
10	28/03/2025	Not Contributed	Connell Road (52.1µg/m³) and Port Way (57.5µg/m³) exceeded on this date. Wind was from the South to East in the morning. And from the Southwest to South in the afternoon and evening. Most of the daily average at Port Way was due to offsite dust. Connell Road did not record a significantly higher daily average than the monitors upwind of it.	B3: Wheat B4: Garnet B5: Iron Ore B7: Iron Ore	Figure 20
11	29/03/2025	Not Contributed	Port Way (53µg/m³) exceeded on this date. Wind was variable in direction in the morning, and from the Southwest in the afternoon and evening. Most of the daily average for Port Way was from an offsite direction (48.7µg/m³). The exceedance was due to dust from offsite sources to the South of the monitor.	B4: Garnet/ Talc B5: Iron Ore B7: Iron Ore	Figure 21

No.	Target Exceedance Date	Contributed / Not contributed	Description & Prescribed / Operations Activities	Vessel Loading / Unloading	Figure Reference
12	30/03/2025	Not Contributed	Berth 1 (75.5µg/m³), Connell Road (81.5µg/m³), Lemmon Road (97.7µg/m³) and Port Way (77.6µg/m³) exceeded on this date. Wind was from the Southwest in the morning and afternoon, and from the Southeast in the evening. Daily averages for all monitors were well above the target. Two bushfires to south of Geraldton caused hazy conditions and likely contributed to the exceedances. The exceedance not due to Port operations.	B3: Wheat B4: Spodumene B5: Iron Ore B7: Iron Ore	Figure 22

3. High Volume (HVAS) Air Sampling Data

Samples collected from the MWPA HVAS dust monitors were analysed by MPL Laboratories which is a National Associated of Testing Authorities (NATA) accredited facility (NATA Accreditation No. 2901). HVAS samples are collected for 24-hour periods which commence at 12:00 noon. All references to the sample date are presented as the commencement date for the sample period.

A summary of HVAS Data is presented in ***Table 4.***

TABLE 4 – SUMMARY OF HVAS MONITORING DATA

Criteria		Port Way	Connell Road	Lemmon Road	Berth 1
PM_{10}	PM_{10} Samples Analysed	41	41	41	41
	Count PM_{10} > 50 µg/m^3	4	7	5	4
	Average PM_{10}	34.9	38.5	37.5	33.8
	Maximum PM_{10}	63	90	79	61
	Minimum PM_{10}	13	11	13	14
Count Copper as PM_{10} > 1.0 µg/m^3		0	0	0	0
Count Lead as PM_{10} > Target [2]		0	0	0	0
Count Manganese as PM_{10} > 0.15 µg/m^3		0	0	0	0

[2] *The target for Lead as PM_{10} is 2.0 µg/m3 at the northern dust monitor (Connell Road) and 0.5 µg/m3 at all other monitoring stations.*

3.1 Nickel

The bulk handling and export of nickel concentrate is a regulated product permitted under MWPA's environmental licence. The environmental licence target for nickel in air quality monitoring is 0.02 µg/m^3 (PM_{10}) 12 month rolling average. No nickel concentrate shiploading events occurred in Q3 2024/2025 FY.

All nickel rolling average results for the quarter were below the licence target level. The rolling average for nickel samples during the quarter are presented in ***Figure 7.***

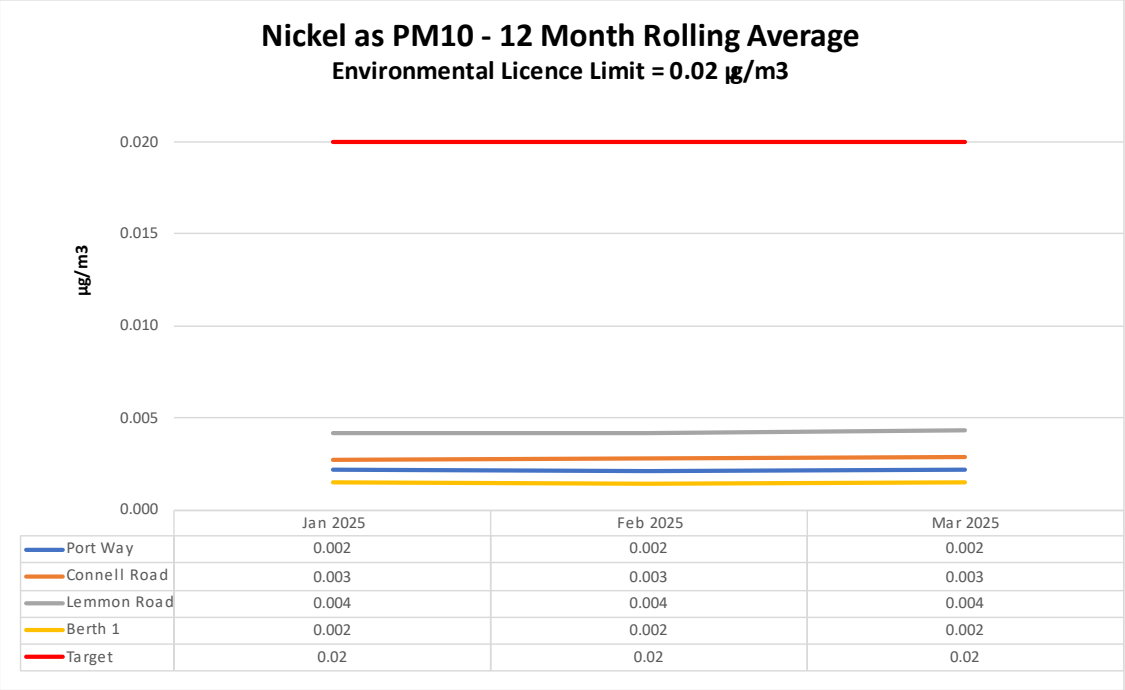

FIGURE 7 - JANUARY TO MARCH 2025 – NICKEL (PM10) LEVELS DURING NICKEL LOADING AND BACKGROUND SAMPLING

3.2 Manganese

No manganese concentrate shiploading occurred during the reporting period. The MWPA environmental licence defines the emission concentration target for manganese as a daily average concentration of 0.15 µg/m3 (PM_{10}). The results for Manganese background monitoring is presented in ***Figure 8***. All data recorded was significantly lower than the stipulated licence target.

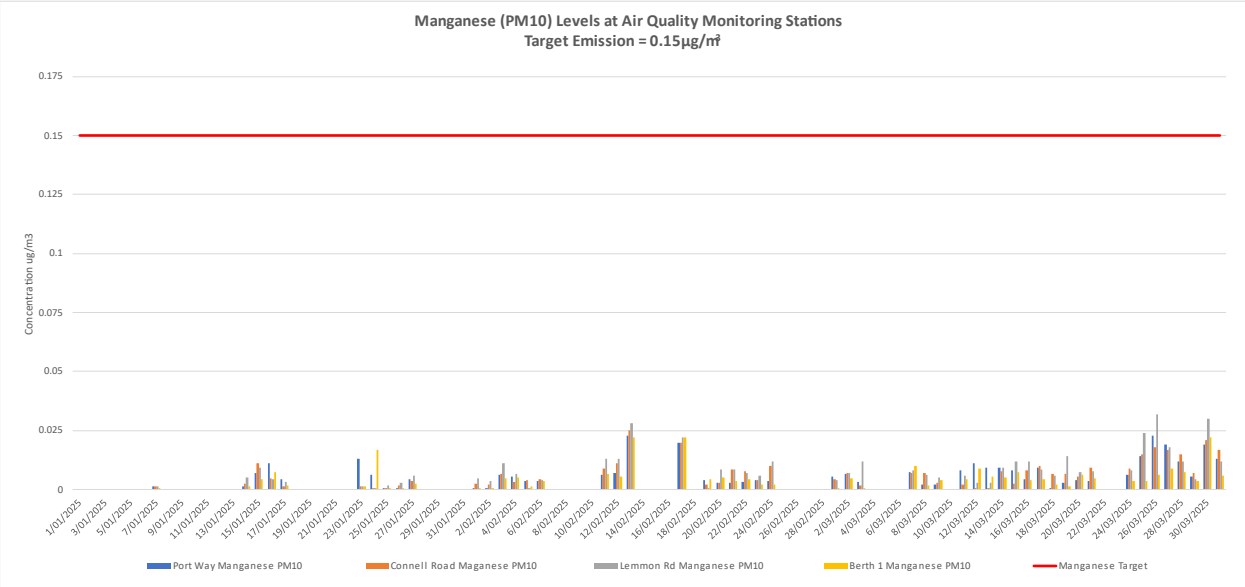

FIGURE 8 MANGANESE (PM10) LEVELS DURING METAL CONCENTRATE LOADING AND BACKGROUND SAMPLING

3.2 Lithium (Spodumene Concentrate)

Four spodumene concentrate shiploading events occurred in Q3 2024/2025 FY via Berth 4. There is no licence target applicable for lithium. Results are presented in ***Figure 9***.

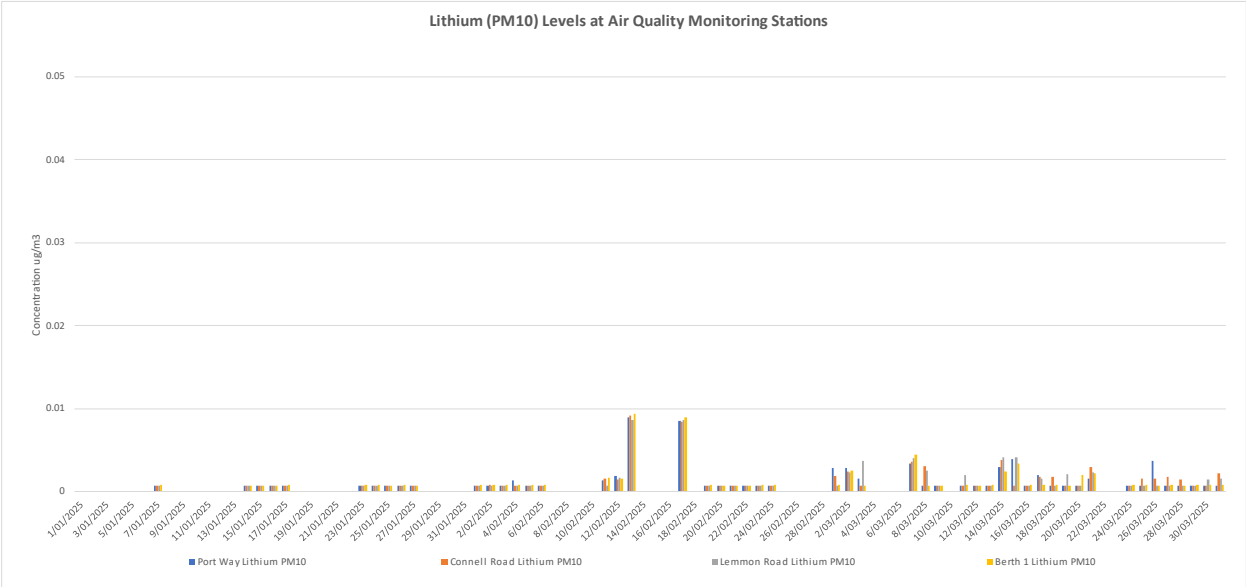

FIGURE 9 LITHIUM (PM10) LEVELS DURING METAL CONCENTRATE LOADING AND BACKGROUND SAMPLING

3.3 Lead

The bulk handling and export of lead concentrate is a regulated product permitted under MWPA's environmental licence. The MWPA environmental licence regulates a target for lead in air quality of 2.0 ug/m^3 at Connell Road and 0.5 µg/m^3 at Berth 1, Lemmon Road, and Port Way (PM_{10}) over a 24-hour period. Two lead concentrate shiploading events occurred in Q3 2024/2025 FY.

- MV Crimson Majesty loaded 10,275 MT of lead concentrate from 04 February to 06 February 2025.
- MV ICS Silver Spirit loaded 9,000 MT of lead concentrate from 22 February to 23 February 2025.

All lead concentrate shiploading was conducted via rotainer loading over Berth 6. All lead results for the quarter were below the licence target level. Results for lead loading events, including background lead monitoring are presented in ***Figure 10.***

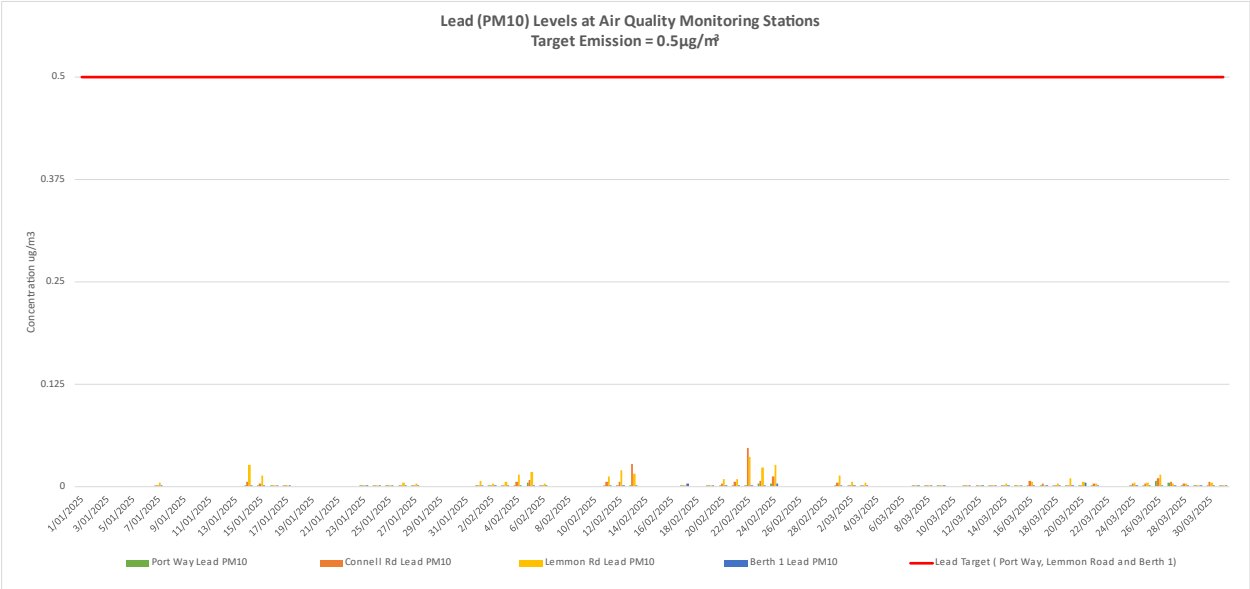

FIGURE 10 LEAD (PM10) LEVELS DURING METAL CONCENTRATE LOADING AND BACKGROUND SAMPLING

4. Monitoring Equipment Incidents

All monitoring equipment incidents throughout the quarter are recorded into the MWPA incident database (CAMMS) and investigated to determine the cause and identify improvement opportunities.

During the reporting period one incident occurred in relation to air quality monitoring:

Date	Incident Number	Title	Summary of Incident	Actions Taken
16/03/2025-26/03/2025	IN-28156	Monitoring Equipment Outage – Berth 1	Monitoring Outage: Berth 1 air quality station had greater than 2hrs downtime on multiple days due to an air conditioner fault causing intemittent elevated rack temperatures. Invalid monitoring days were 16/03/2025, 17/03/2025, 18/03/2025, 21/03/2025, 25/03/2025 and 26/03/2025.	Replace air conditioner. Investigate TEOM alerting.

5. Community Complaints

Condition 35 of the licence requires MWPA to maintain a complaints management system that records the number and details of complaints received concerning the environmental impact of port activities. All community complaints received throughout the quarter were registered in the MWPA incident database (CAMMS) and investigated.

During the reporting period six complaints were received by MWPA in relation to dust emissions.

Date	Incident Number	Title	Summary of Complaint	Actions Taken
21/01/2025	IN-27994	Community Concern - Dust Complaint	FBH customer contacted MWPA with concerns regarding black dust accumulating on vessels in the hardstand area of the FBH, and a query that the dust monitor was not plugged in and operating.	MWPA reviewed dust monitoring results and wind conditions and responded to complainant. MWPA advised that the dust monitor switched off was a temporary hivol used for a targeted monitoring campaign, alongside the e-sampler which operates continuously. Dust mitigation options for the rail corridor are being investigated by MWPA and Karara with updates provided via the FBH consultation meetings.
19/02/2025	IN-28041	Community Concern - Dust Complaint	Community member called with concern regarding red dust accumulating on residential property in bluff point. Community member had health concerns relating to metal analysis results recorded in human hair. Not Port Influenced.	MWPA responded to community member via phone call and provided information relating to the Port's monitoring program and air quality reports available on the web site.
24/02/2025	IN-28047	Community Concern - Dust Complaint	Complaint received from FBH stakeholder relating to black dust deposition to vessels on the hardstand on GFC boat yard.	MWPA responded to complainant to advise of upcoming FBH consultation meeting and dust mitigation options for rail corridor under consideration.
25/02/2025	IN-28051	Community Concern - Dust Complaint	FBH customer contacted MWPA with concerns regarding black dust accumulating on vessels in the hardstand area of the FBH.	MWPA responded to complainant to advise of upcoming FBH consultation meeting and dust mitigation options for rail corridor under consideration.
06/03/25	IN-28114	Community Concern - Dust Complaint	FBH customer contacted MWPA with concerns regarding black dust accumulating on vessels in the hardstand area of the FBH.	MWPA responded to complainant. Dust mitigation fencing options are being investigated by MWPA and Karara to address the issue.
26/03/25	IN-28115	Community Concern - Dust Complaint	FBH customer contacted MWPA with concerns regarding black dust accumulating on vessels in the hardstand area of the FBH.	MWPA responded to complainant. Dust mitigation fencing options are being investigated by MWPA and Karara to address the issue.

6. Definitions

PM_{10}	Particles with an aerodynamic diameter of less or equal to 10µm.
TEOM	Tapered Element Oscillating Microbalance
BAM	Beta Attenuation Monitor

HVAS	High Volume Air Sampler
Shiploading Event	The MWPA environmental licence defines a shiploading event as any shiploading where bulk metal concentrate product is loaded into in a ship or out of a ship
WS / WD	Wind Speed / Wind Direction
Port Way / PW	Port Way Air Quality Monitoring Station
Connell Road / CR	Connell Road Air Quality Monitoring Station
Lemmon Road / LR	Lemmon Road Air Quality Monitoring Station
Berth 1 / B1	Berth 1 Air Quality Monitoring Station
Offsite	Offsite background reference monitoring station, situated in Bluff Point
FBH	Fishing Boat Harbour

7. Appendix

7.1 Appendix A – Exceedances of Air Quality Emission Targets

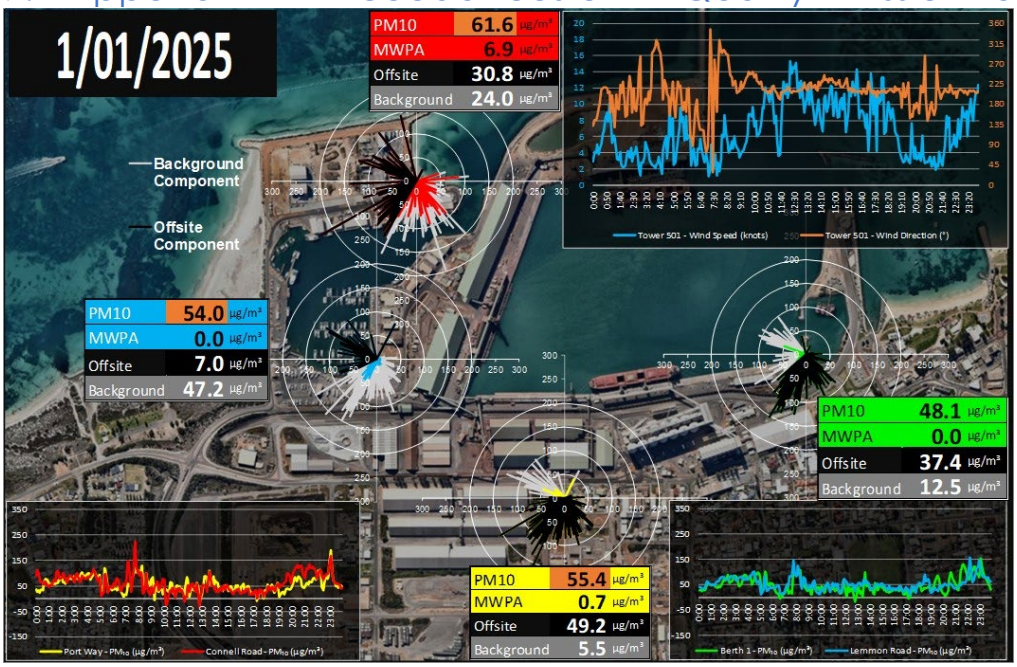

FIGURE 11 – 24-HOUR AVERAGED PM10 DATA FOR 01 JANUARY 2025

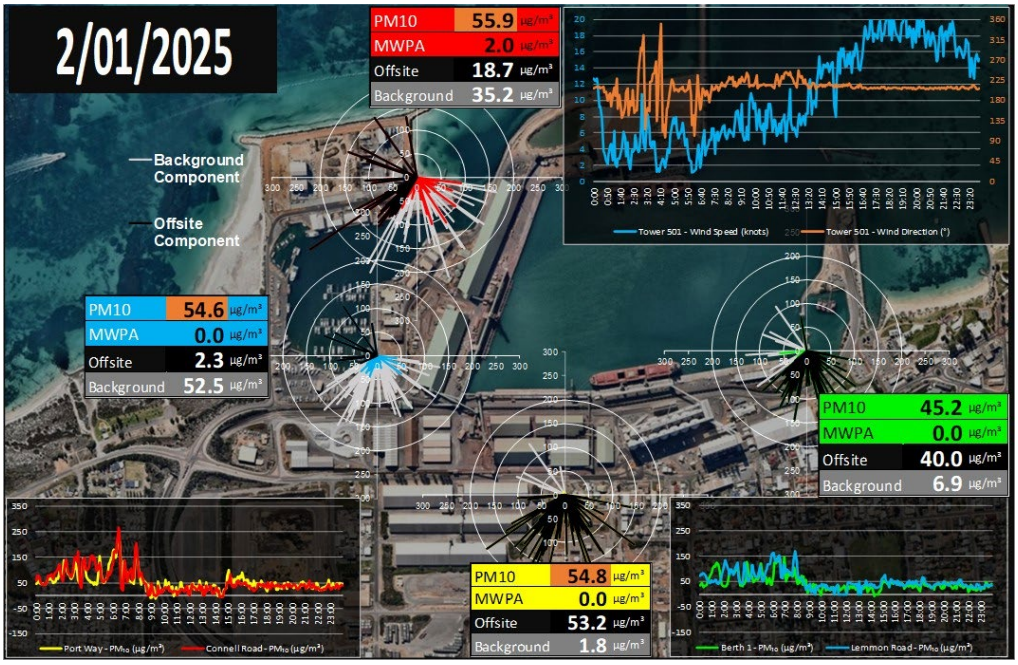

FIGURE 12 – 24-HOUR AVERAGED PM10 DATA FOR 02 JANUARY 2025

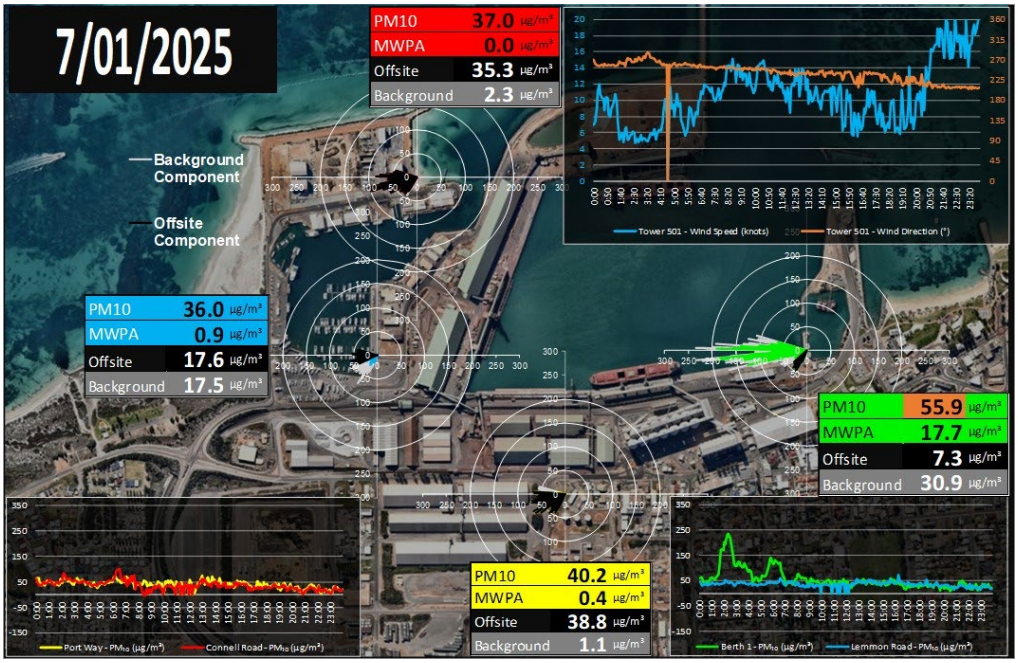

FIGURE 13 – 24-HOUR AVERAGED PM10 DATA FOR 07 JANUARY 2025

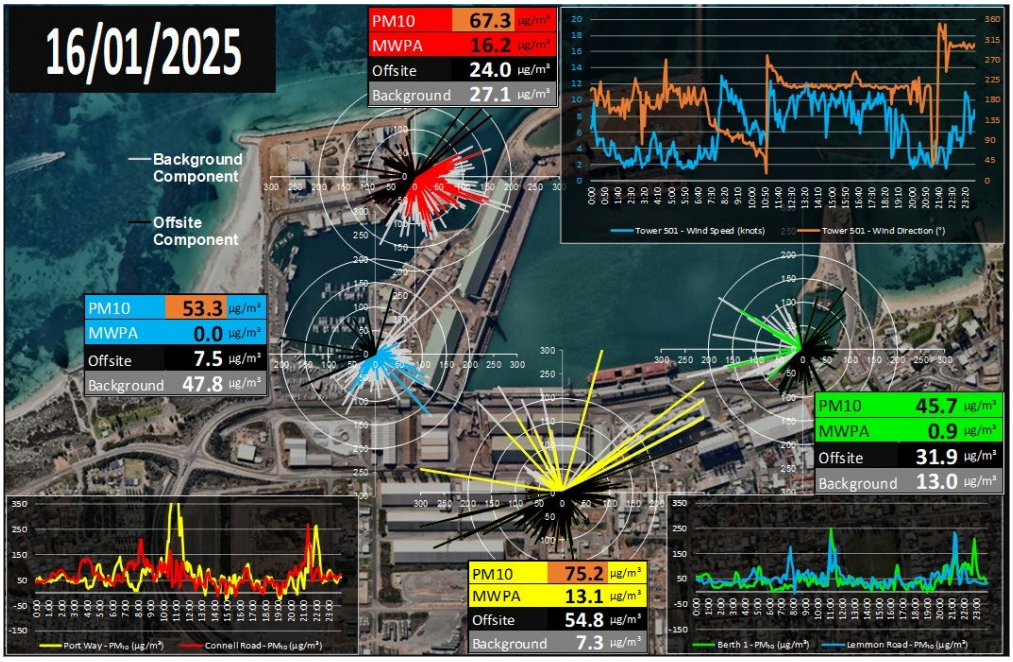

FIGURE 14 – 24-HOUR AVERAGED PM10 DATA FOR 16 JANUARY 2025

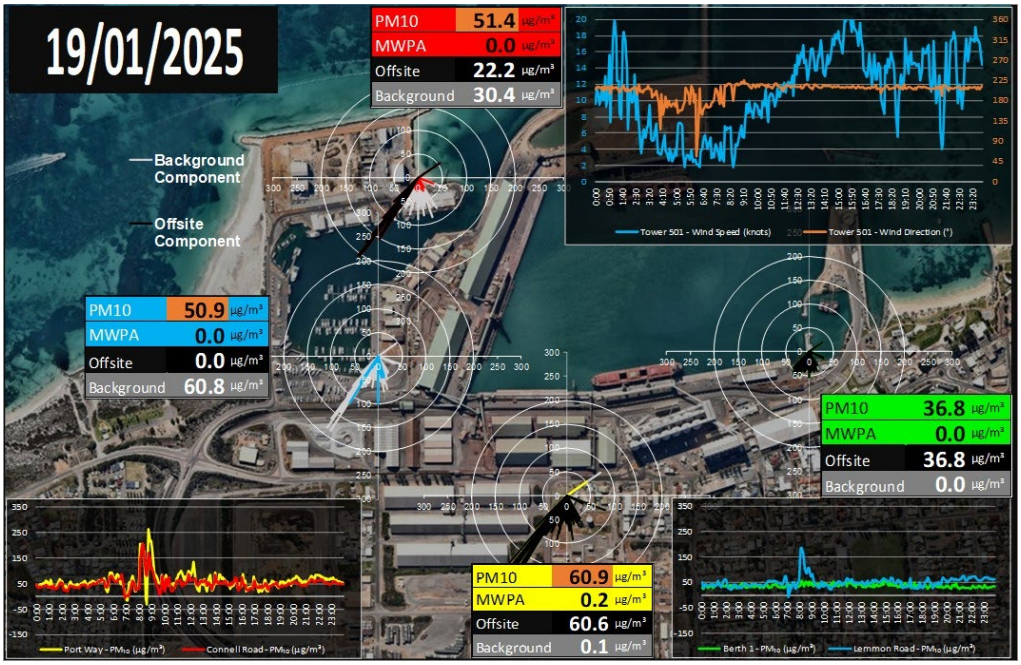

FIGURE 15 – 24-HOUR AVERAGED PM10 DATA FOR 19 JANUARY 2025

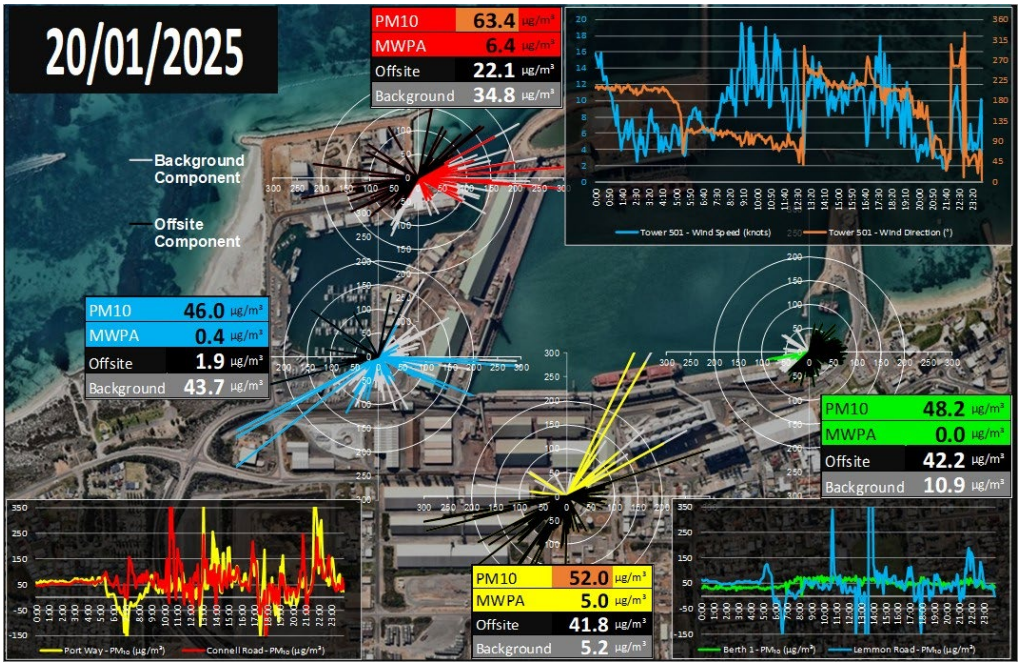

FIGURE 16 – 24-HOUR AVERAGED PM10 DATA FOR 20 JANUARY 2025

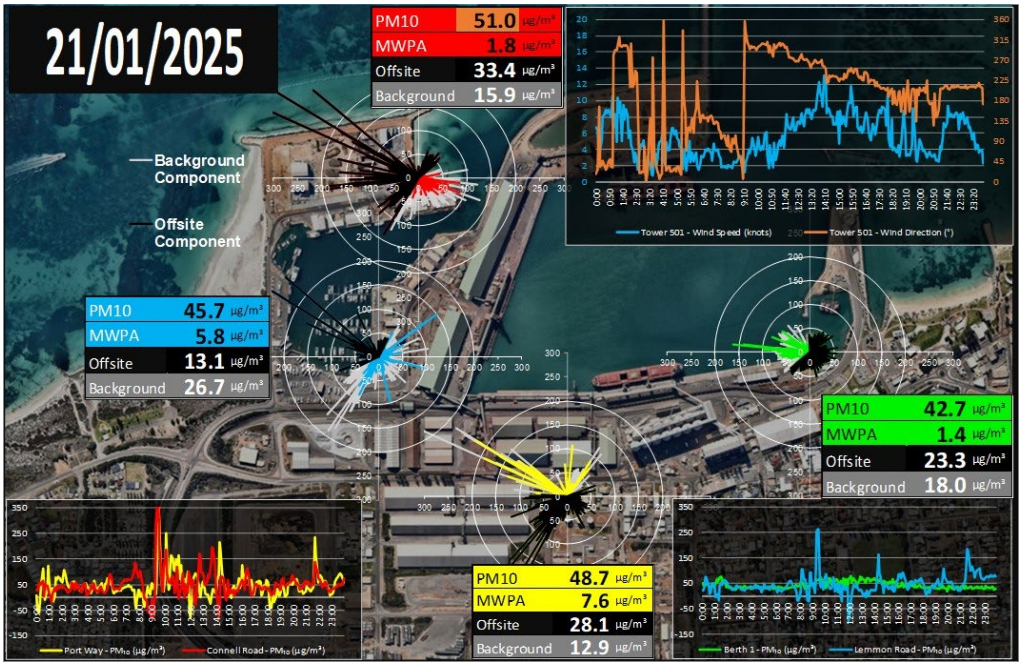

FIGURE 17– 24-HOUR AVERAGED PM10 DATA FOR 21 JANUARY 2025

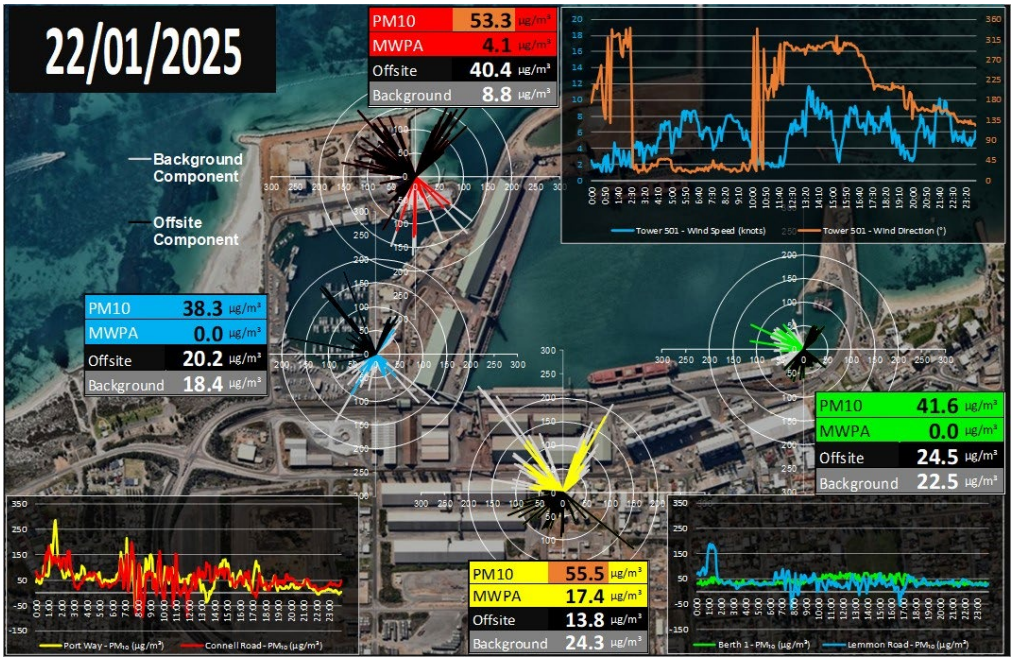

FIGURE 18 – 24-HOUR AVERAGED PM10 DATA FOR 22 JANUARY 2025

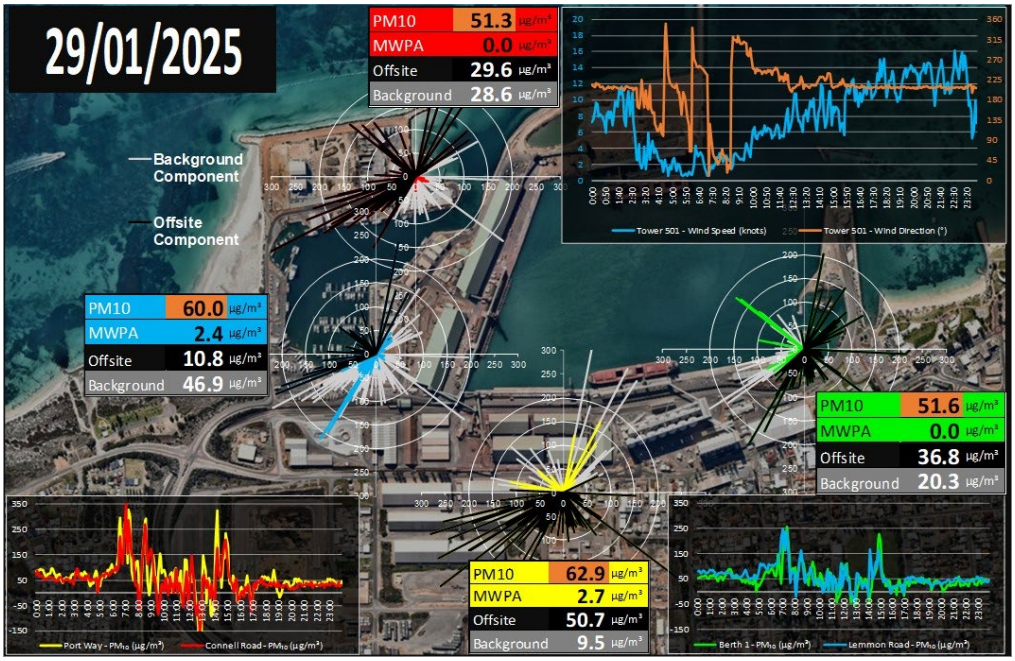

FIGURE 19 – 24-HOUR AVERAGED PM10 DATA FOR 29 JANUARY 2025

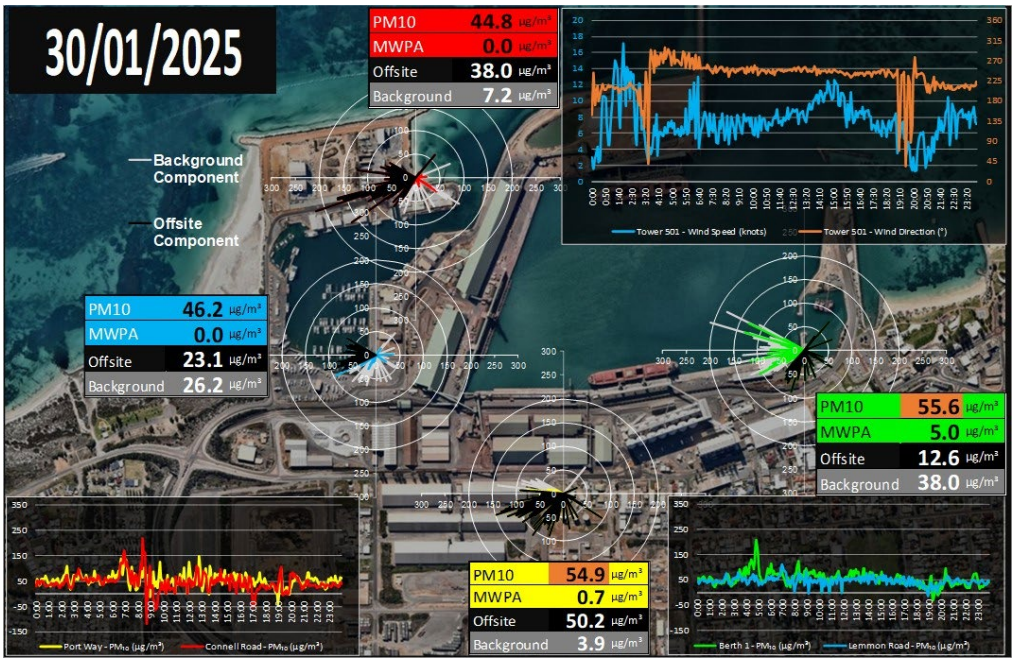

FIGURE 20 – 24-HOUR AVERAGED PM10 DATA FOR 30 JANUARY 2025

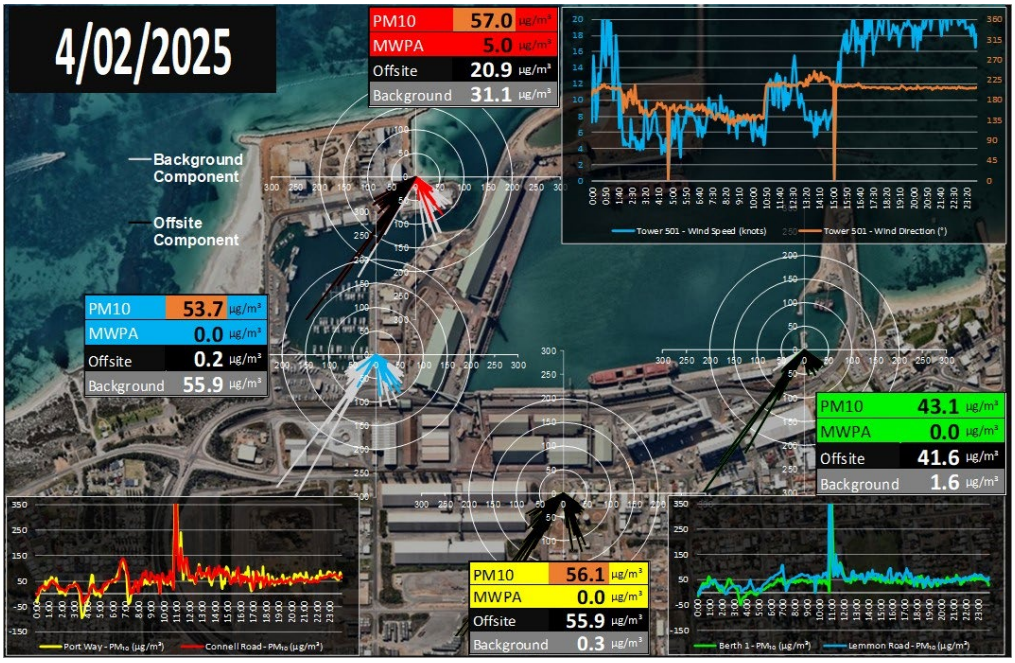

FIGURE 21 – 24-HOUR AVERAGED PM10 DATA FOR 04 FEBRUARY 2025

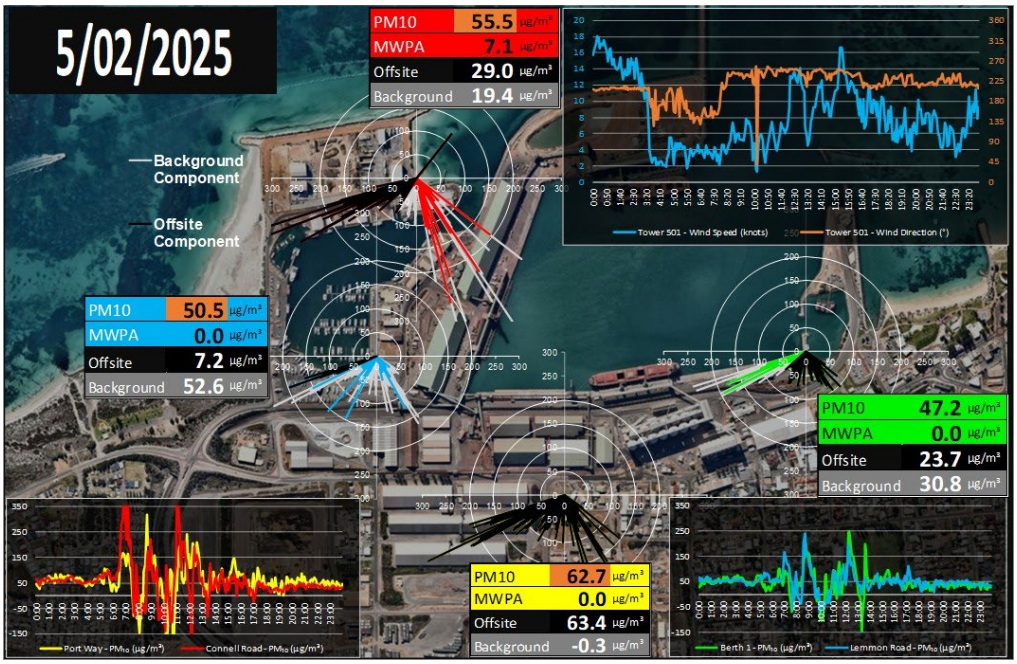

FIGURE 22– 24-HOUR AVERAGED PM10 DATA FOR 05 FEBRUARY 2025

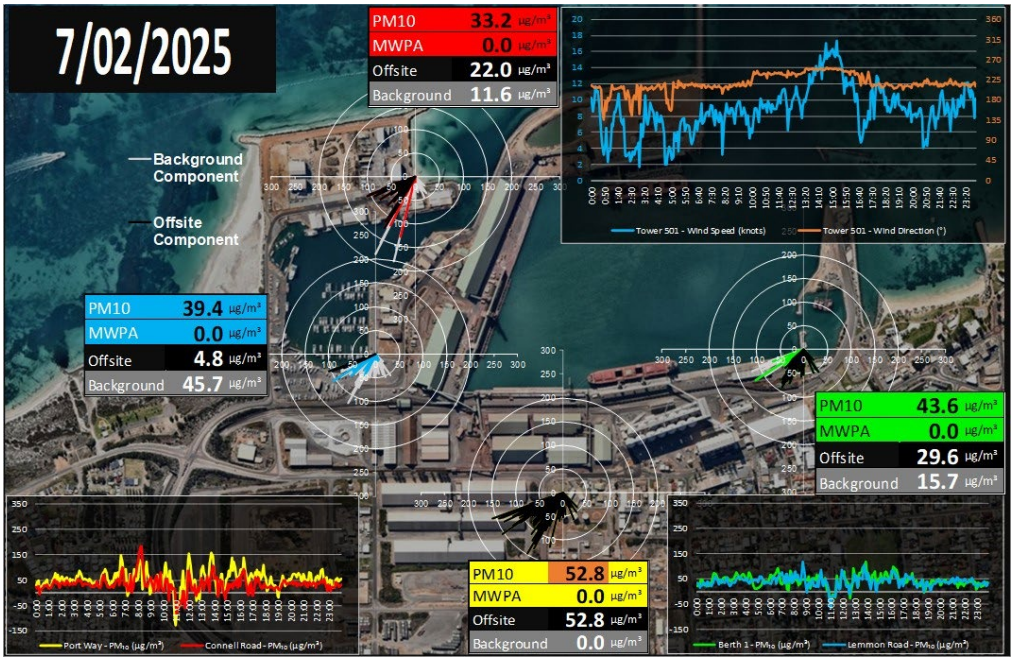

FIGURE 23 – 24-HOUR AVERAGED PM10 DATA FOR 07 FEBRUARY 2025

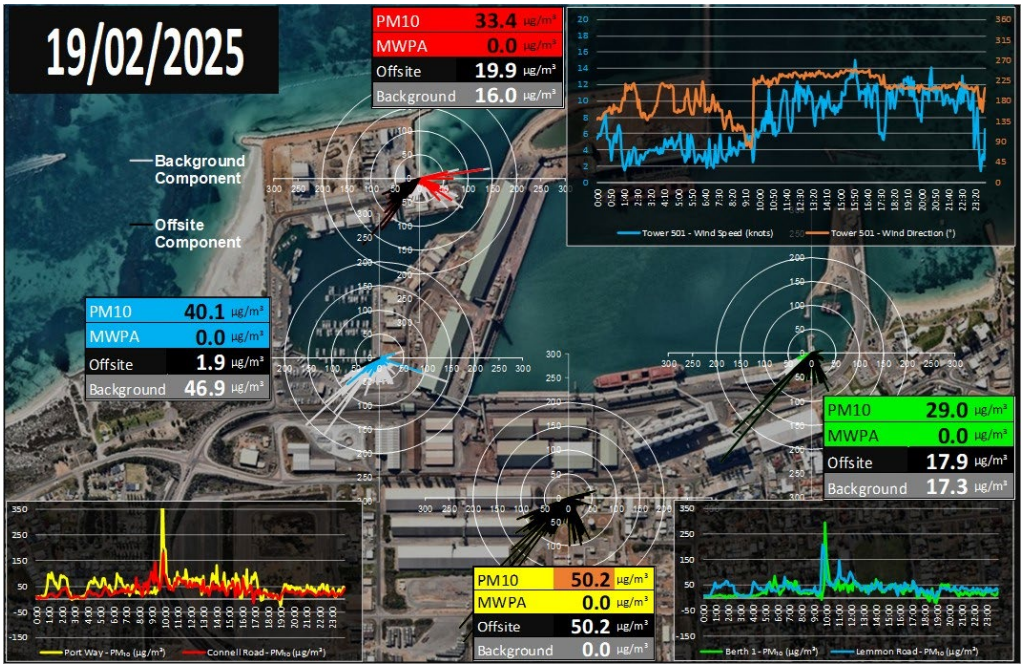

FIGURE 24 – 24-HOUR AVERAGED PM10 DATA FOR 19 FEBRUARY 2025

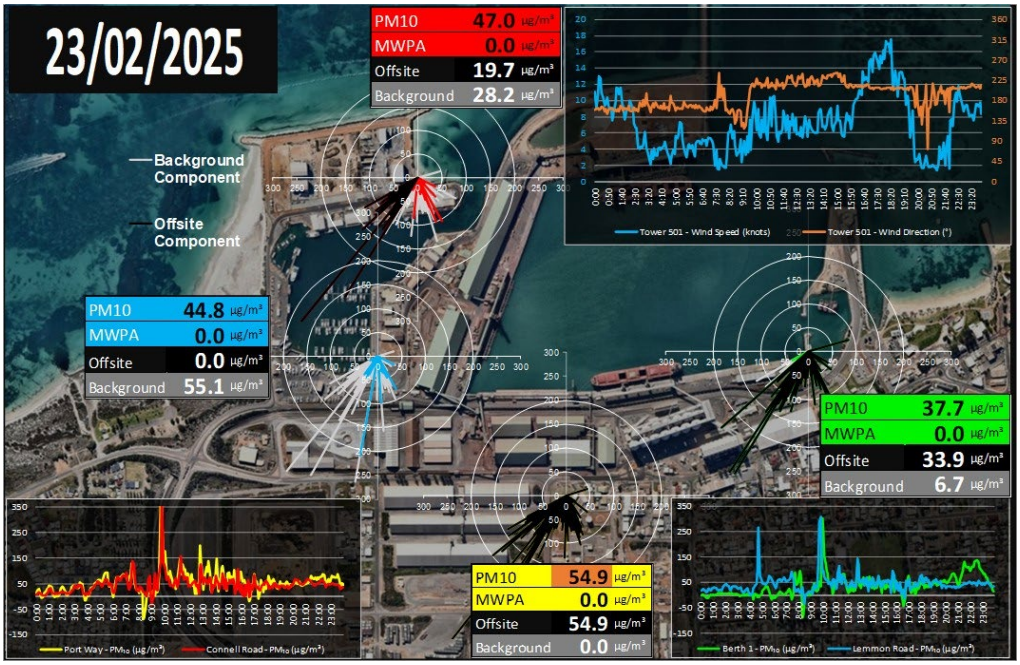

FIGURE 25– 24-HOUR AVERAGED PM10 DATA FOR 23 FEBRUARY 2025

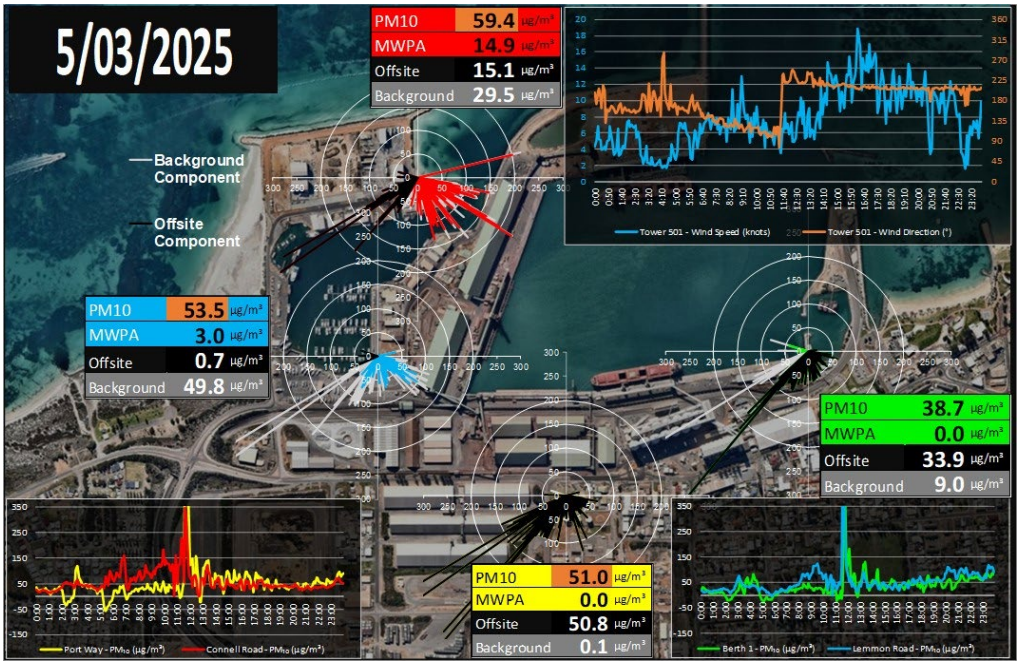

FIGURE 26– 24-HOUR AVERAGED PM10 DATA FOR 05 MARCH 2025

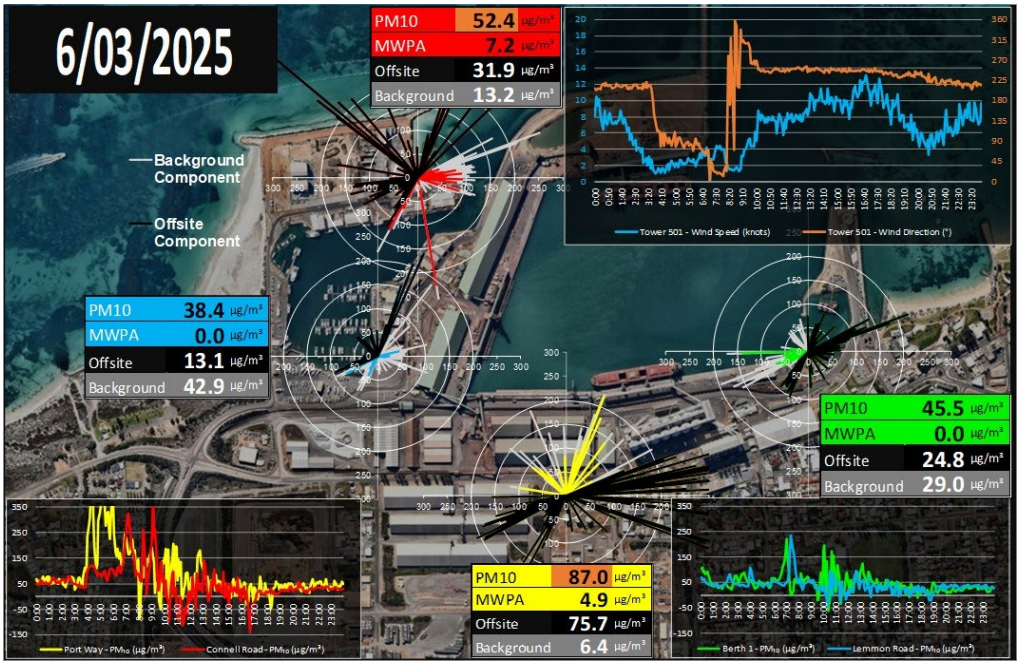

FIGURE 27– 24-HOUR AVERAGED PM10 DATA FOR 06 MARCH 2025

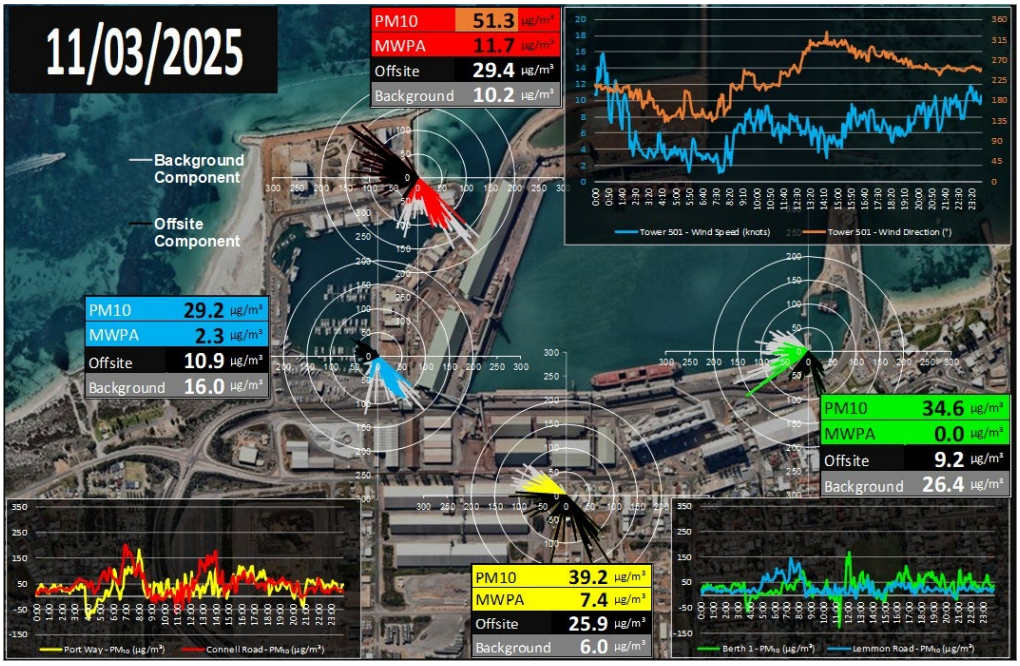

FIGURE 28– 24-HOUR AVERAGED PM10 DATA FOR 11 MARCH 2025

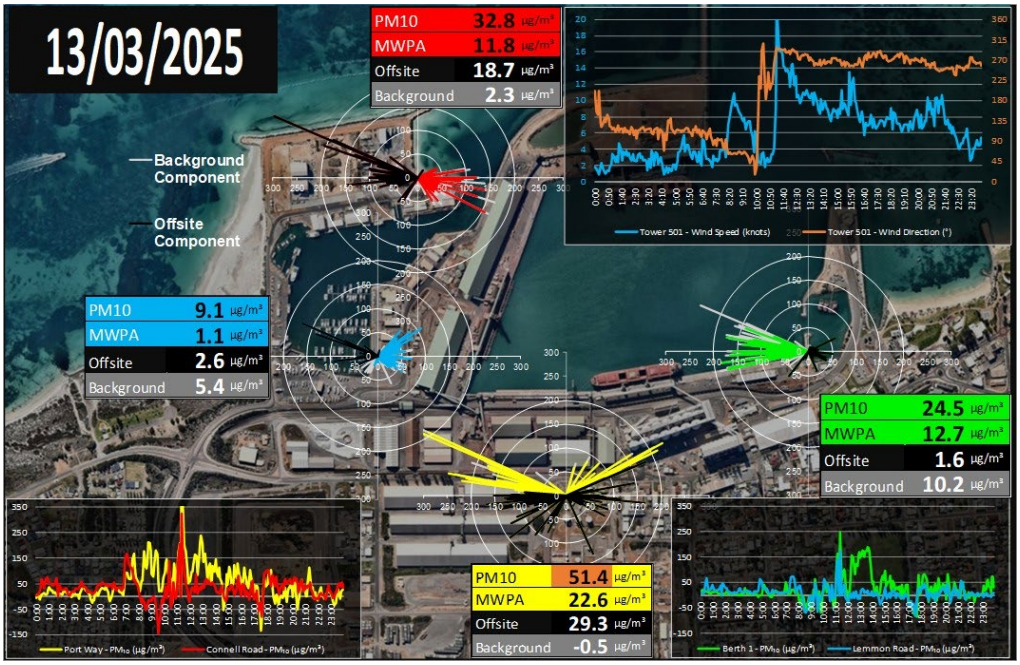

FIGURE 29– 24-HOUR AVERAGED PM10 DATA FOR 13 MARCH 2025

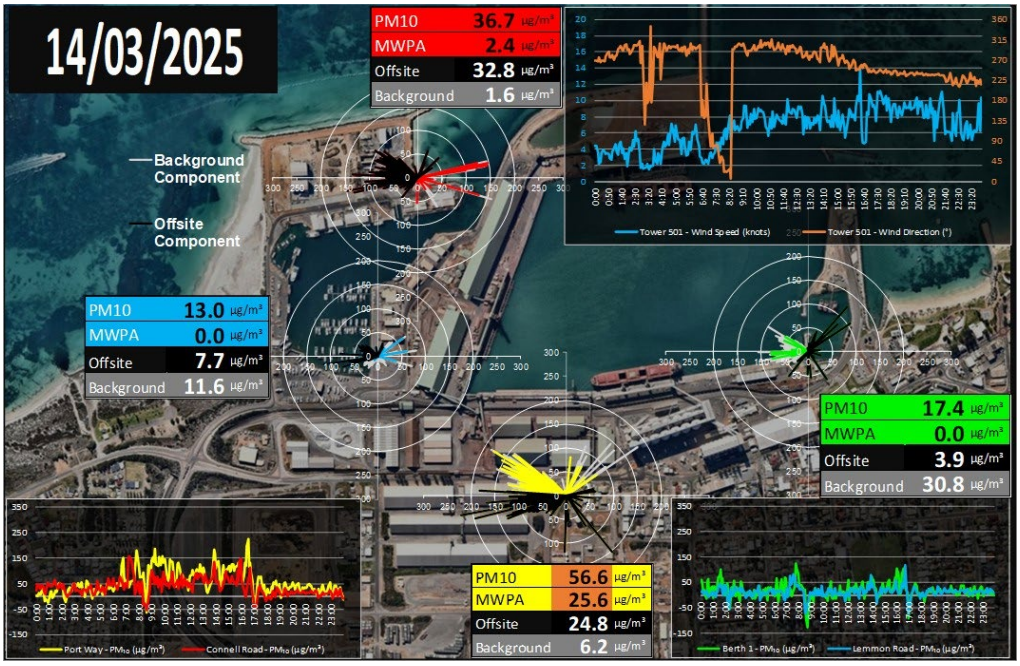

FIGURE 30– 24-HOUR AVERAGED PM10 DATA FOR 14 MARCH 2025

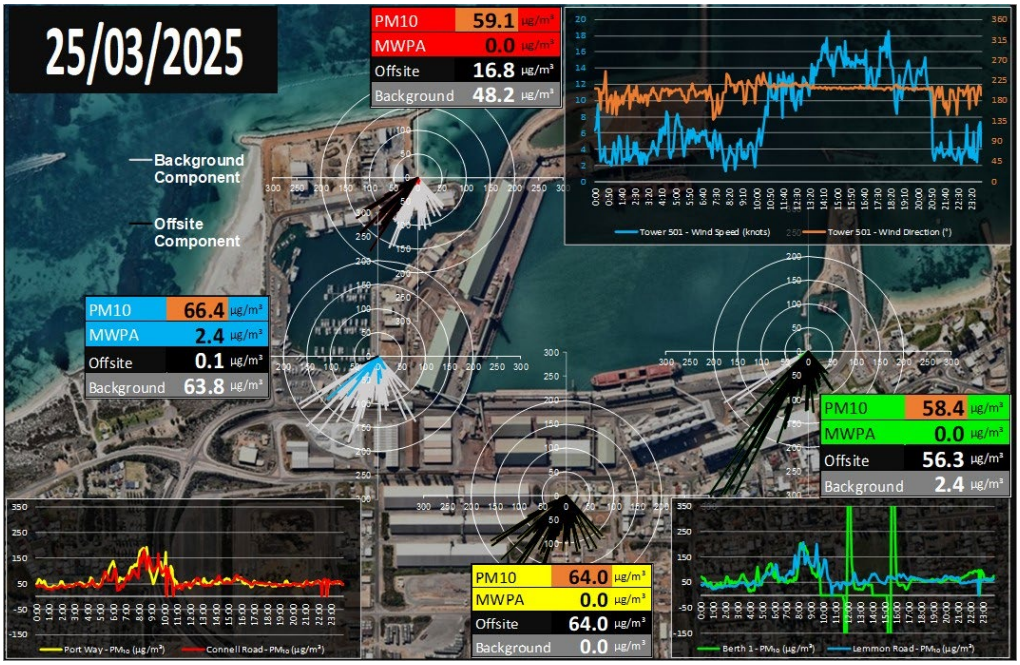

FIGURE 31– 24-HOUR AVERAGED PM10 DATA FOR 25 MARCH 2025

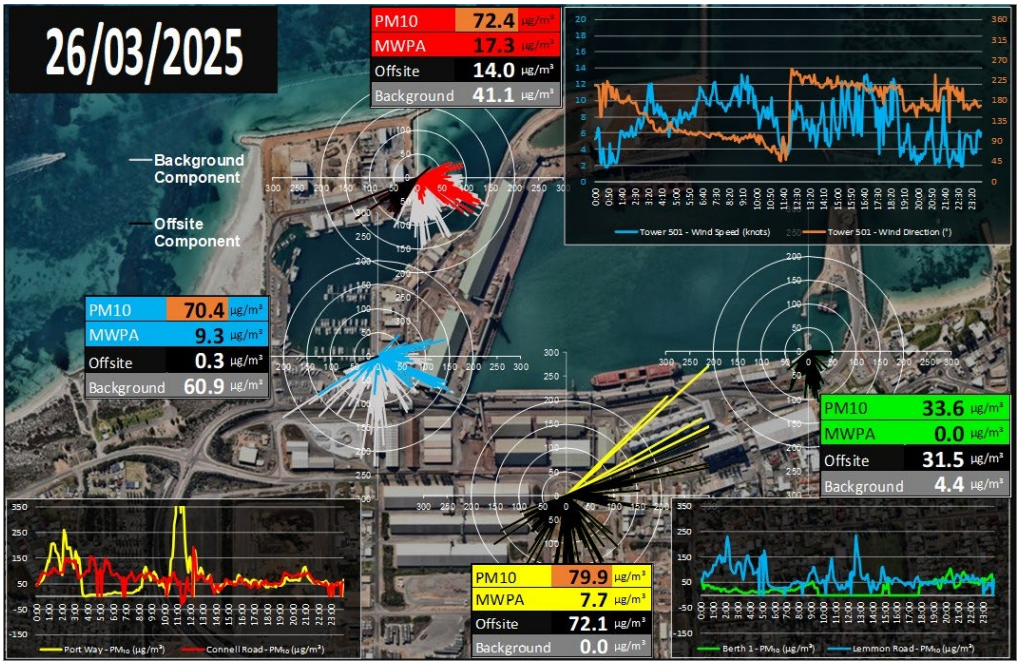

FIGURE 32– 24-HOUR AVERAGED PM10 DATA FOR 26 MARCH 2025

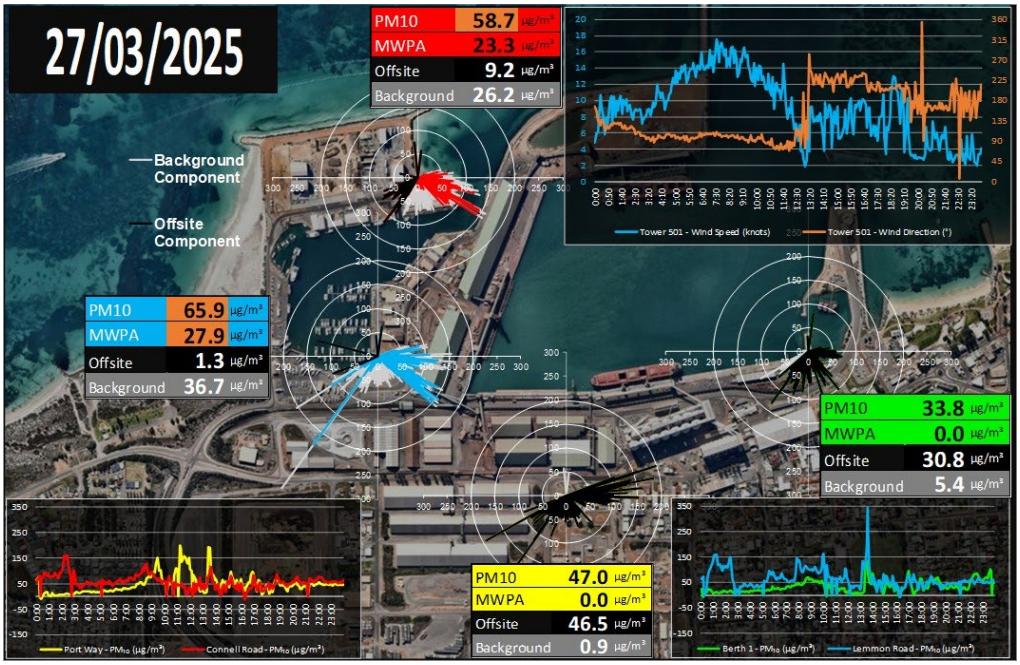

FIGURE 33– 24-HOUR AVERAGED PM10 DATA FOR 27 MARCH 2025

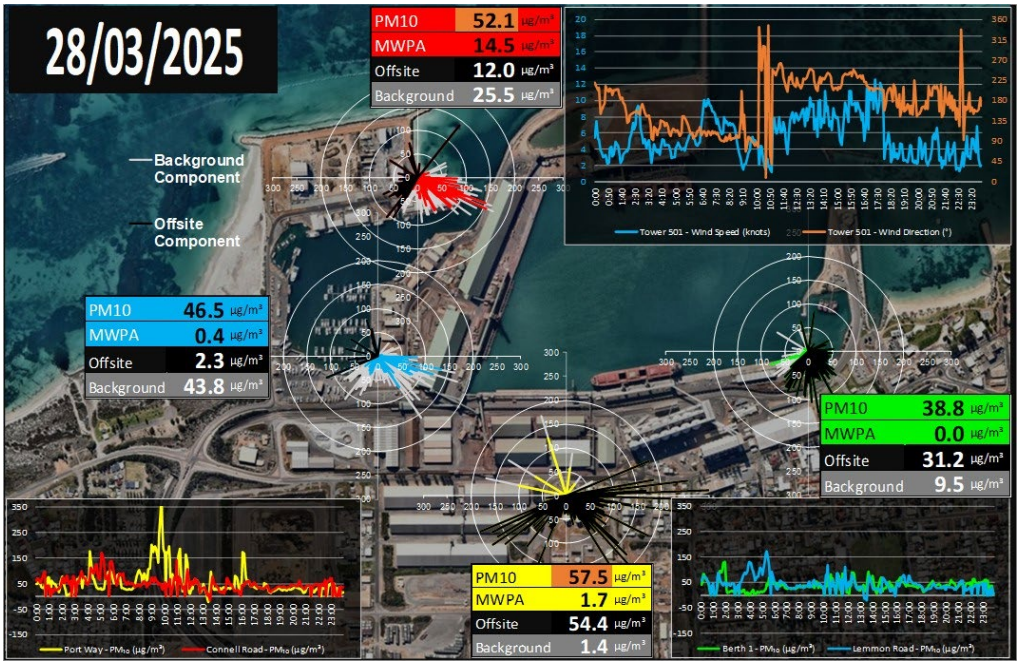

FIGURE 34– 24-HOUR AVERAGED PM10 DATA FOR 28 MARCH 2025

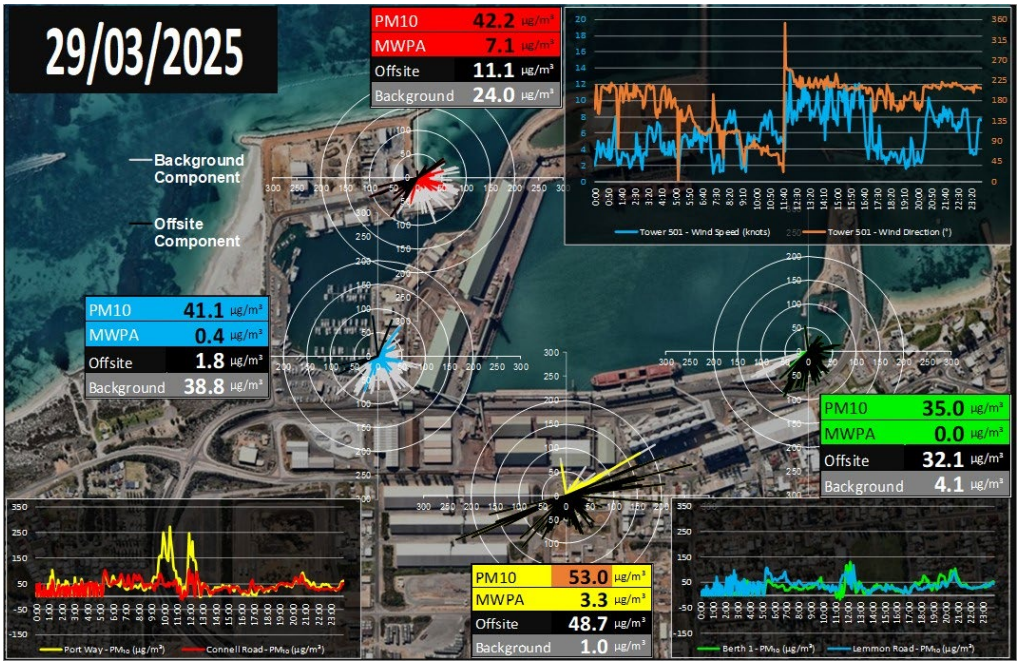

FIGURE 35– 24-HOUR AVERAGED PM10 DATA FOR 29 MARCH 2025

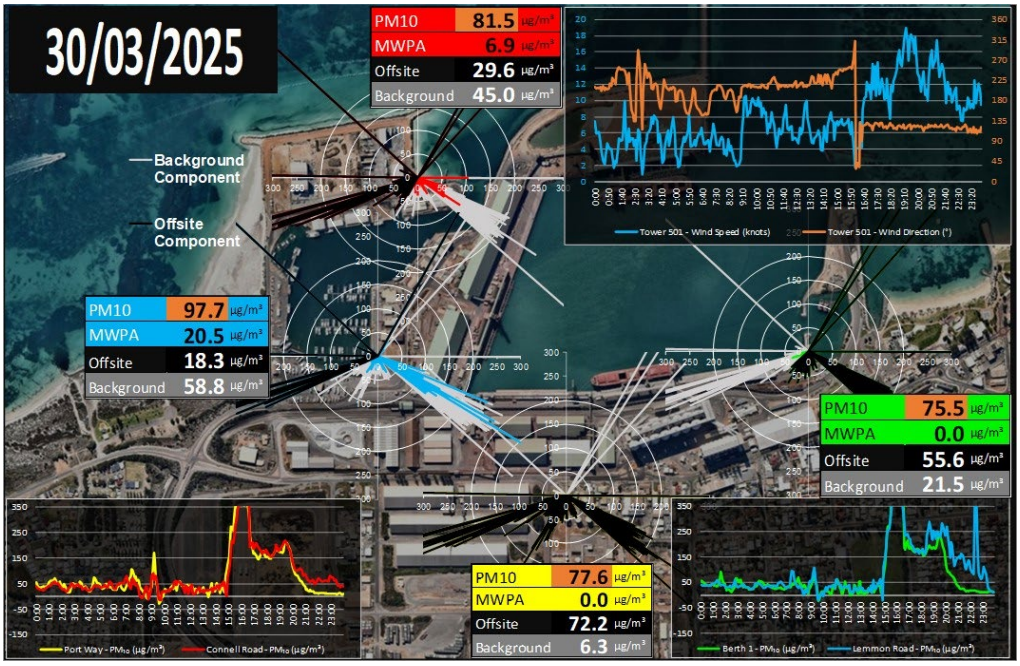

FIGURE 36– 24-HOUR AVERAGED PM10 DATA FOR 30 MARCH 2025

8.2 Appendix B – TEOM PM_{10} Air Quality Monitoring Results

Air quality and meteorological data in five-minute averages is provided in the PDF document attachments. The Excel spreadsheet has also been attached to the submission.