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Department of Water and Environmental Regulation

Port Hedland Dust Management

Annual air quality monitoring reports & Progress update

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CIF 20 May 2026

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History/Milestones

- Port Hedland Taskforce report (2017)
- Government response to Taskforce report (2018)
- Port Hedland Voluntary Buyback Scheme (2019 - March 2026)
- Risk-based licence reviews (2018-2022)
- Transfer of the Ambient Monitoring Network (2021)
- Port Hedland Regulatory Strategy (DWER-2021)
- Port Hedland Dust Management & Regulatory Guidelines (2026)
- Annual Air Quality Monitoring Reports 2022-2024, 2025

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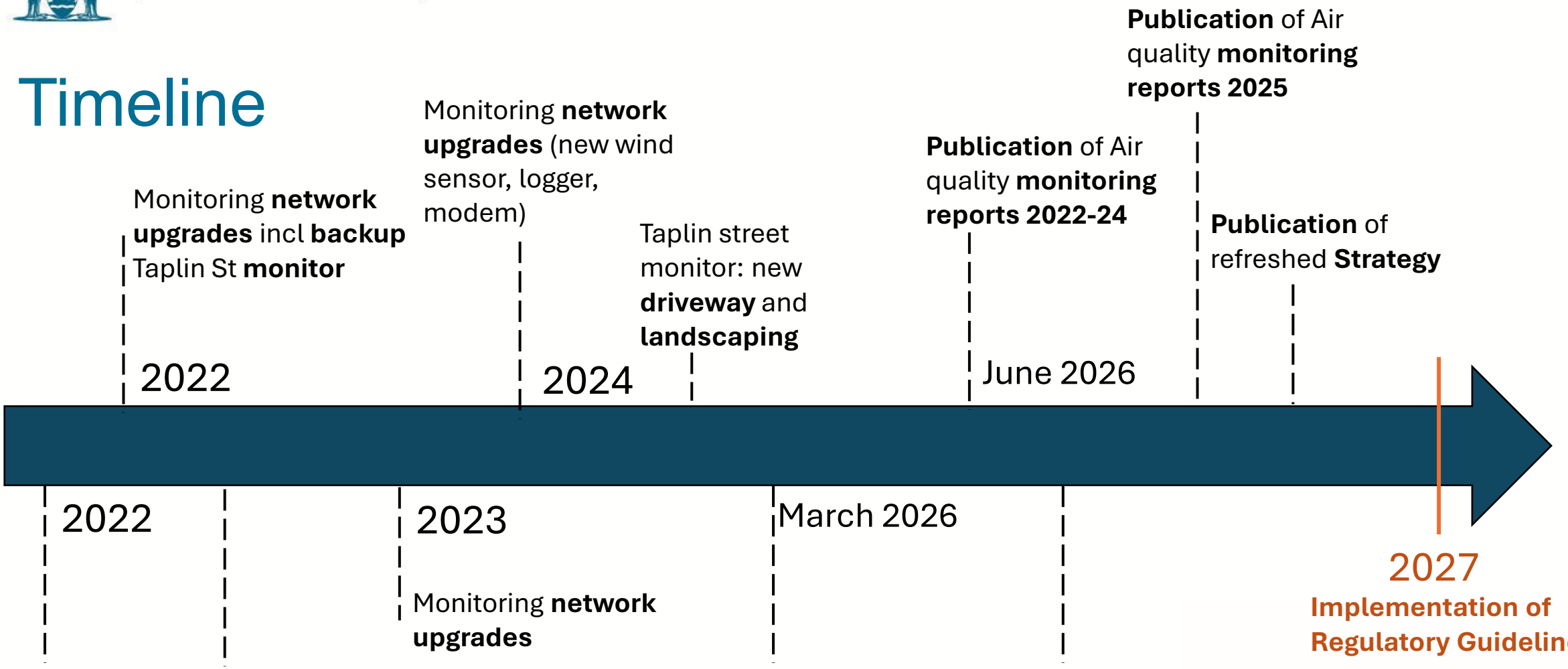
Timeline



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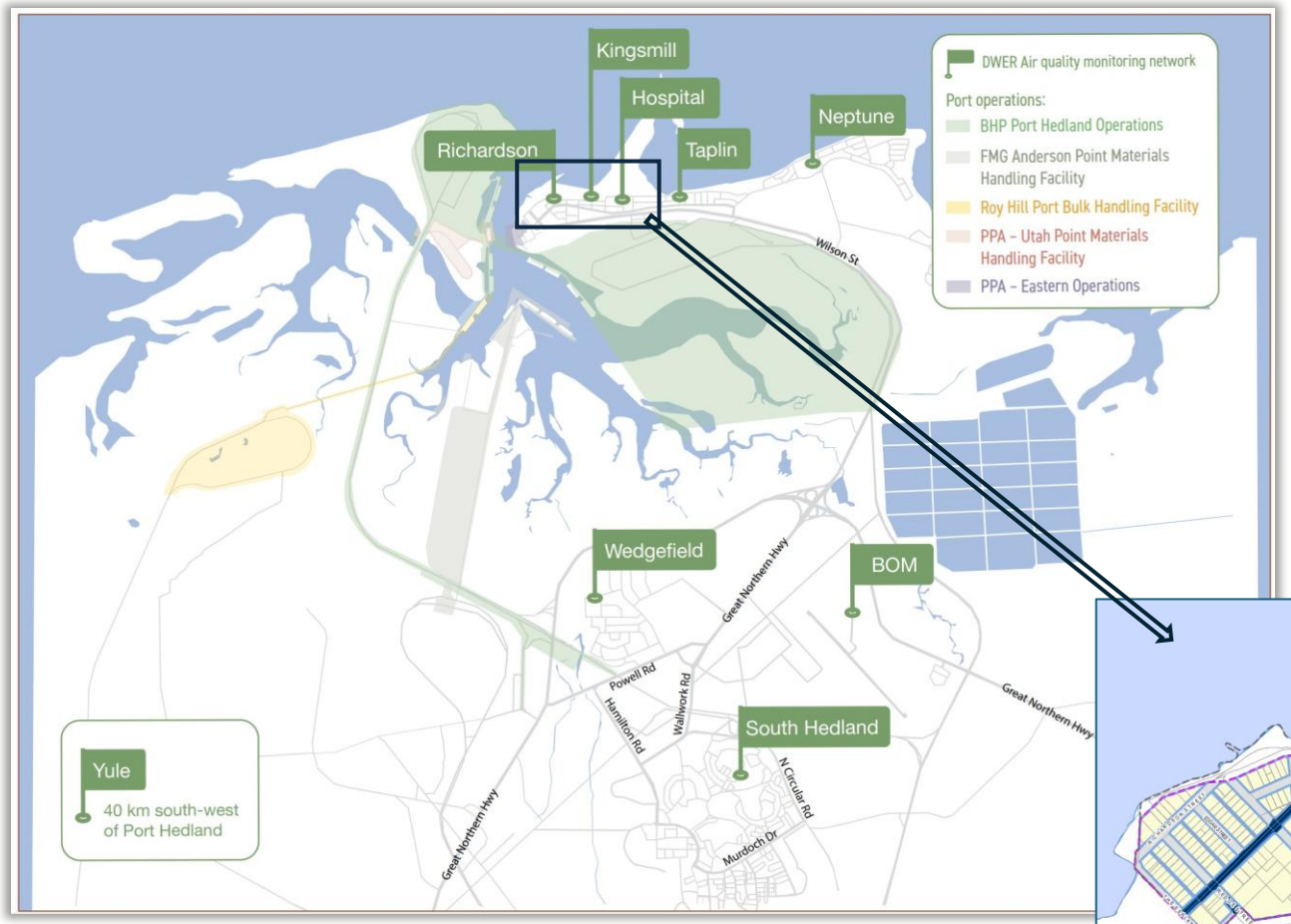
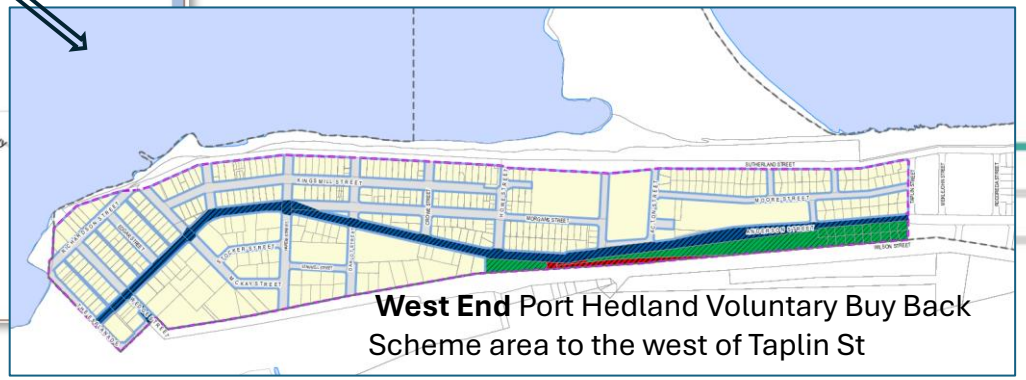
Ambient Air Quality Monitoring (DWER)



Key points

- **Taplin St** for reporting purposes/exceedances
- Port Hedland Air Guideline Value (AGV) PM_{10} = **70 µg/m³** (Taplin)*
- DWER took over management of network Dec 2021



West End Port Hedland Voluntary Buy Back Scheme area to the west of Taplin St

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Data availability for PM_{10}

Monitoring Station	Data availability rates (% of days) 2022					2023					2024				
	Q1	Q2	Q3	Q4	Annual	Q1	Q2	Q3	Q4	Annual	Q1	Q2	Q3	Q4	Annual
Valid?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kingsmill	99.8	92.7	99.3	99.9	97.9	100	88.0	96.7	100	96.2	96.9	95.2	92.8	96.8	95.4
Richardson	99.6	99.7	96.8	99.7	99.0	100	94.5	96.7	100	97.8	98.9	94.1	98.4	93.2	96.2
Hospital	99.9	96.9	99.9	99.7	99.1	97.8	86.8	96.7	98.9	95.1	99.8	98.4	99.9	99.6	99.4
Neptune	94.5	95.3	98.4	99.9	97.1	100	86.8	98.9	100	96.4	80.1	82.7	92.1	99.8	88.7
Taplin	99.6	99.9	97.0	99.8	99.1	100	92.3	96.7	100	97.3	95.6	99.8	96.7	99.7	97.9
Wedgefield	96.9	92.0	99.5	92.9	95.3	100	92.3	90.2	97.8	95.1	90.9	89.6	90.9	95.6	91.7
BOM	99.7	98.1	99.2	99.1	99.0	100	89.0	95.7	100	96.2	99.5	98.6	99.8	99.1	99.3
South Hedland	99.5	98.9	97.1	99.5	98.7	100	78.0	92.4	98.9	92.3	94.7	86.8	85.8	95.6	90.7
Yule River	98.8	99.5	97.6	97.6	98.4	100	83.5	92.4	100	94.0	98.1	95.8	95.5	94.9	96.1

The AAQ NEPM *Technical Paper No. 5 – Data Collection and Handling* prescribes **75%** (annual and per Q) **as adequate data availability**, ensuring data quality. 2022-24 data is well above this requirements.

DWER follows a program of instrumentation upgrades and replacement to ensure validity and reliability of monitors.

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West End monitoring stations PM_{10}

	2022	2023	2024
PM_{10} AGV 70 µg/m³			
	Total Exceedances AGV (days)	**Total Exceedances AGV (days)**	**Total Exceedances AGV (days)**
Richardson	12	72	35
Kingsmill	21	69	52
Hospital	14	65	51
PM_{10} NEPM annual guideline 25 µg/m³			
	Annual average AAQ NEPM	**Annual average AAQ NEPM**	**Annual average AAQ NEPM**
Richardson	42.3 (not met)	54.0 (not met)	47 (not met)
Kingsmill	40.2 (not met)	52.0 (not met)	48 (not met)
Hospital	38.6 (not met)	51.3 (not met)	48 (not met)

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West End monitoring stations NEPM pollutants

	2022	2023	2024
$PM_{2.5}$ NEPM annual guideline 8 µg/m³, daily guideline 25 µg/m³			
	Total Exceedances (days) of AAQ NEPM	**Total Exceedances (days) of AAQ NEPM**	**Total Exceedances (days) of AAQ NEPM**
Richardson	0 (met)	17 (not met)	10 (not met)
Hospital	0 (met)	15 (not met)	14 (not met)
	Annual average	**Annual average**	**Annual average**
Richardson	8.1 (not met)	11.9 (not met)	11 (not met)
Hospital	7.7 (met)	10.7 (not met)	10 (not met)
NO_2 NEPM annual guideline 15 ppb, hourly guideline 80 ppb			
	Annual average (ppb)	**Annual average (ppb)**	**Annual average (ppb)**
Richardson	N/A	9 (met)	8 (met)
	Max 1 hr average (ppb)	**Max 1 hr average (ppb)**	**Max 1 hr average (ppb)**
Richardson	N/A	67 (met)	41 (met)
SO_2 NEPM daily guideline 20 ppb, hourly guideline 100 ppb			
	Max daily average (ppb)	**Max daily average (ppb)**	**Max daily average (ppb)**
Richardson	2.9 (met)	4.1 (met)	4 (met)
	Max 1 hr average (ppb)	**Max 1 hr average (ppb)**	**Max 1 hr average (ppb)**
Richardson	8.1 (met)	12.2 (met)	11 (met)

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Exceedances - Methodology

DWER	PHIC
Exceptional (Natural) event Bushfire, reduction burning, continental windblown dust	**Natural/regional**
Other event Available data does not support attribution to industry or exceptional	**Local (industry)** **Local (industry and non-industry)** **Natural/regional and local (industry)** **Natural/regional and local (industry and non-industry)** **Local (industry) and Natural/regional**
Regulatory (Industry) event Majority from industry	**Exceedances >50% industry contribution equivalent to DWER 'regulatory/industry' event**

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Historic AGV exceedances summary

	DWER Analysis	PHIC Analysis
2022 Industry Attributed [Combination/Other] (Total)	**3** [0](6)	**0** [3](6)
2023 Industry Attributed [Combination/Other] (Total)	**13** [3](29)	**5** [9](29)
2024 Industry Attributed [Combination/Other] (Total)	**7** [10](31)	**5** [4](31)

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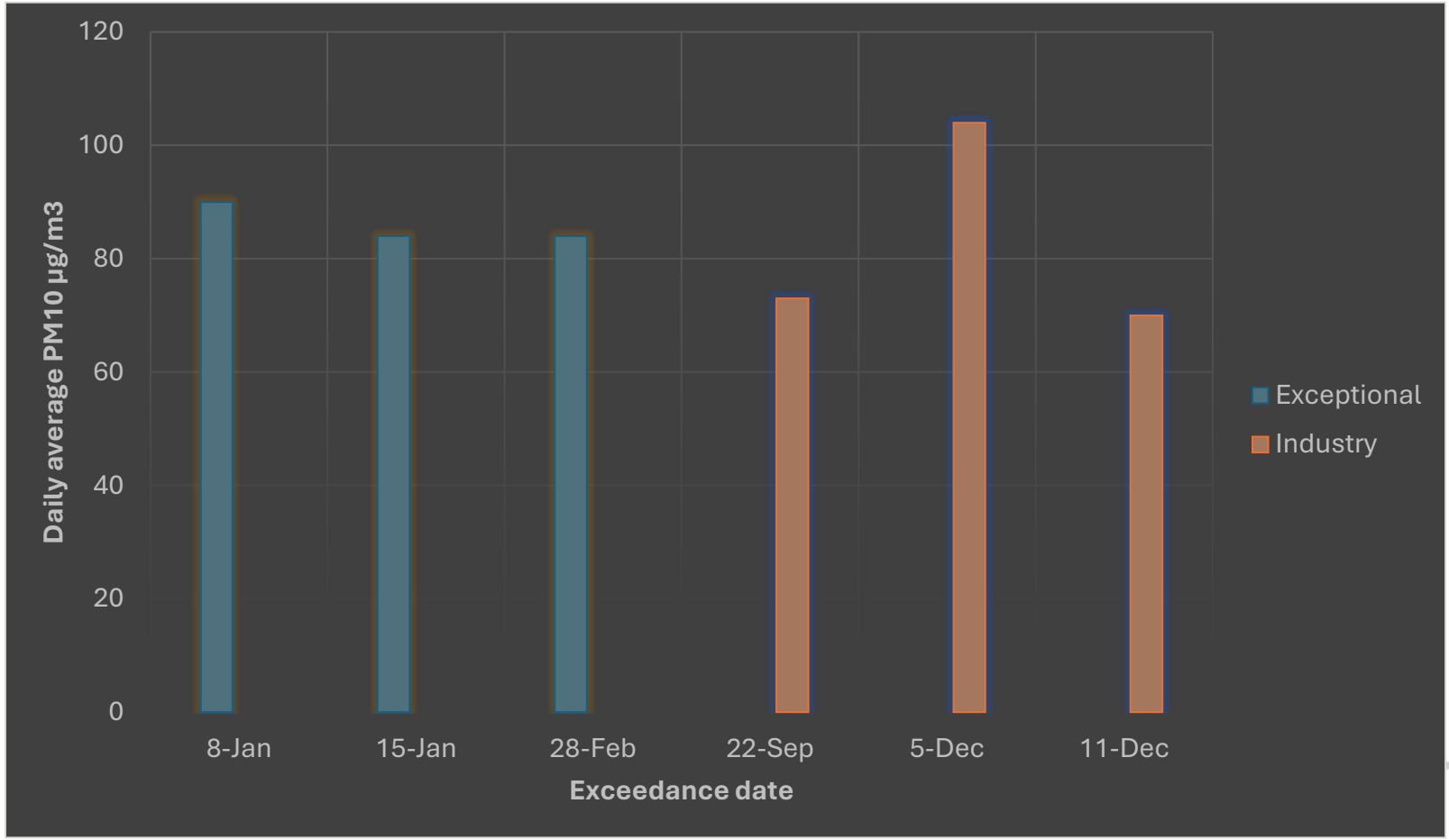
2022: AGV exceedances



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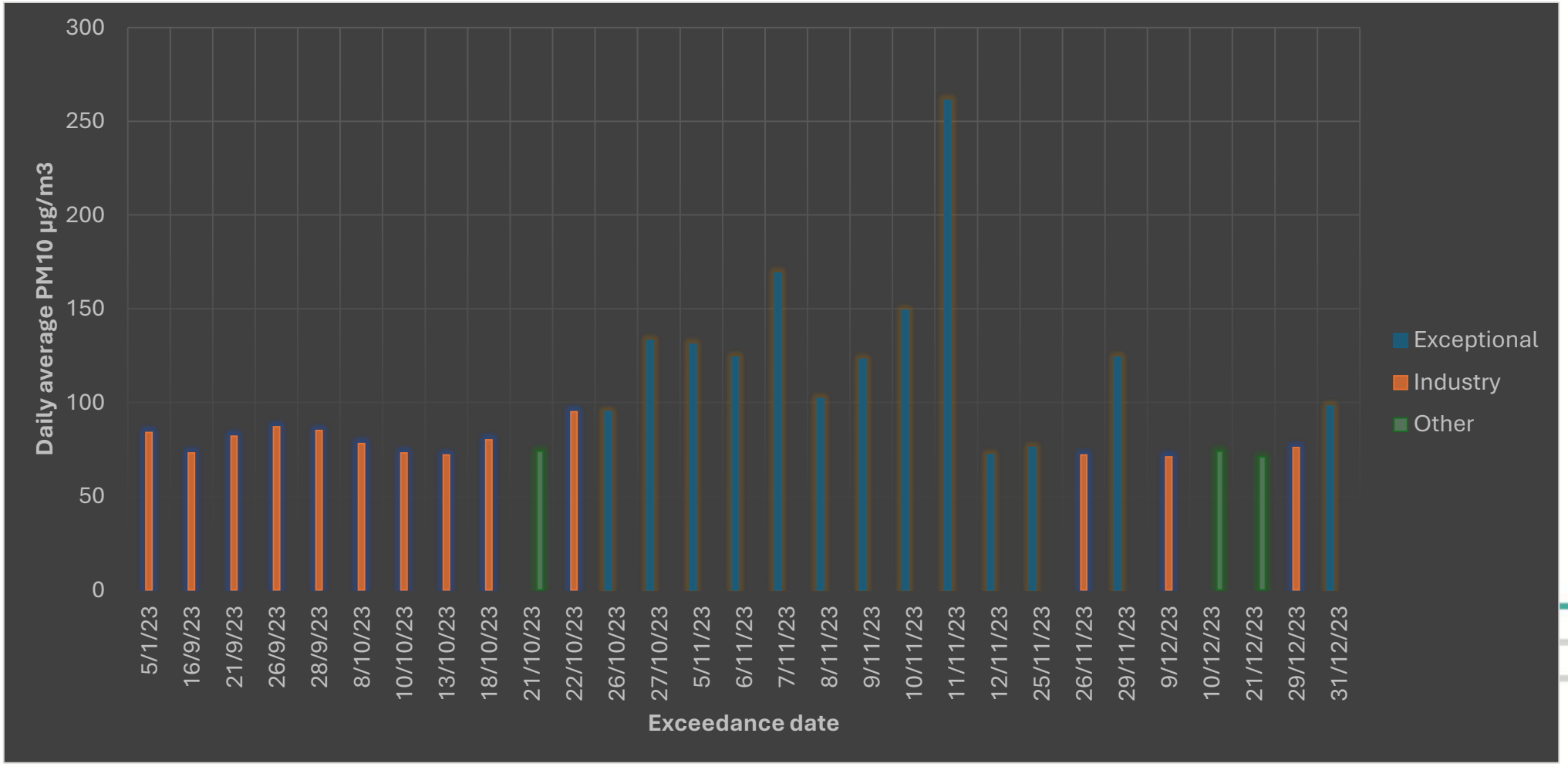
2023: AGV exceedances



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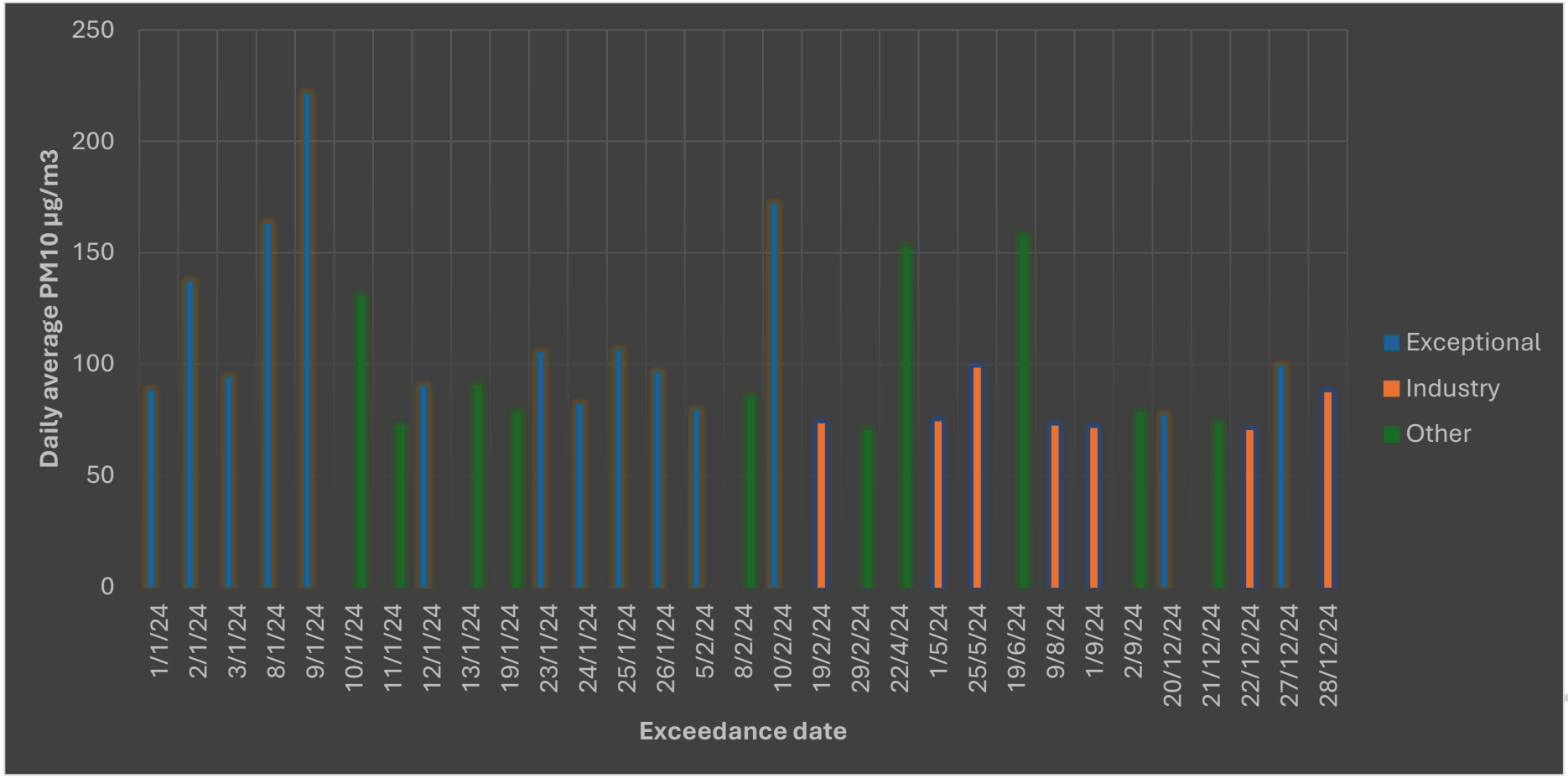
2024: AGV exceedances



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PM_{10} – residential, light industrial and background

	2022	2023	2024
PM_{10} NEPM annual guideline 25 µg/m^3			
	Annual average	**Annual average**	**Annual average**
Taplin	34.0 (not met)	42.8 (not met)	40 (not met)
Neptune	23.7 (met)	26.6 (not met)	31 (not met)
South Hedland	21.2 (met)	27.5 (not met)	28 (not met)
Wedgefield	53.6 (not met)	64.0 (not met)	66 (not met)
BOM	29.0 (not met)	34.9 (not met)	29 (not met)
Yule	16.4 (met)	21.3 (met)	23 (met)

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$PM_{2.5}$ – residential and background

	2022		2023		2024	
$PM_{2.5}$ NEPM daily guideline 25 µg/m³, annual guideline 8 µg/m³						
	Daily max	**Annual average**	**Daily max**	**Annual average**	**Daily max**	**Annual average**
Taplin	(met)	6.2 (met)	(not met)	8.2 (not met)	(Not met)	11 (not met)
South Hedland	N/A	N/A	(not met)	6.6 (met)	(Not met)	6 (met)
BOM	(met)	6.1 (met)	(not met)	9.1 (not met)	(Not met)	5 (met)
Yule	(met)	2.7 (met)	(not met)	4.9 (met)	(Not met)	4 (met)

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NEPM pollutants – Taplin St

		2022	2023	2024
NO_2 NEPM annual guideline 15 ppb, hourly guideline 80 ppb				
Taplin St	1hr max	35.5 (met)	50.1 (met)	41 (met)
	Annual average	7.7 (met)	8.2 (met)	7 (met)
SO_2 NEPM daily guideline 20 ppb, hourly guideline 100 ppb				
Taplin St	1hr max	5.6 (met)	10.4 (met)	7 (met)
	Daily max	1.7 (met)	2.0 (met)	5 (met)

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Current status

- **Resourcing** has been **reprioritised** by DWER, since February 2026 to address the delays in the publication of the Annual air quality reports
- **Public access to air quality data** for Port Hedland has been available on the DWER website **since 2022**
- Publication of **Annual Reports 2022-2024** by 30 June 2026
- Additionally, a **Regulatory Guideline** setting out the regulatory approach to manage dust in Port Hedland will be published 2026
- Following the conclusion of the Port Hedland Voluntary Buyback Scheme, the Department prioritises the protection of residential areas **east of Taplin Street**
- The Department intends to work collaboratively with the Department of Health (DoH) to ensure residents within the West End are informed of the impacts of dust and have access to adequate information from DoH to minimise their exposure risk

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Regulatory approach

- DWER acknowledges the past efforts to **manage** dust impacts on residents in the **West End**
- The **conclusion** of the **voluntary buy back scheme** in March 2026, provides a good foundation to manage dust impacts considering changes in the Port Hedland landscape and population
- Regulatory **focus on residents in East End,** considering past efforts to restrict residential use in the West End
- DWER committed to **continue informing** remaining residents in **West End** on air quality
- **Taplin Street** monitor remains key monitor to identify and record AGV exceedances

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Timeline

- Annual air quality reports 2022-2024 published on website June 2026
- Annual air quality report 2025 published on website September 2026
- Dust management Guideline published by September 2026
- Regulatory Guideline published and implemented by January 2027

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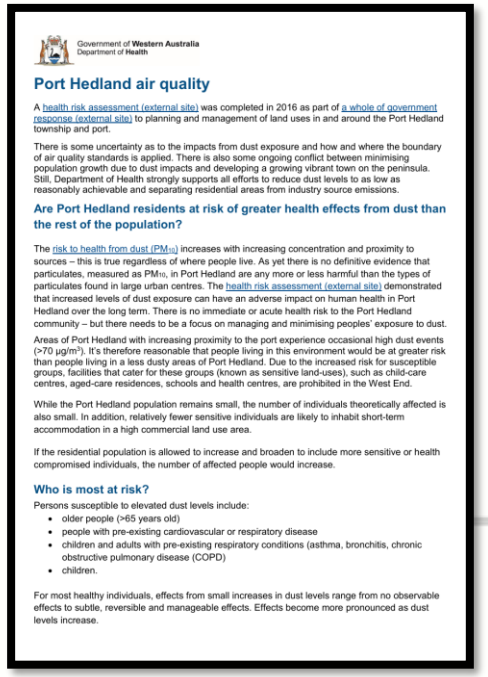
Key messages

- Public access to **Air quality data** for Port Hedland has been available via DWER website
- DWER committed to **continue informing** remaining residents in **West End** on air quality
- It is recommended for residents in the **West End** to refer to advice provided as **factsheet** by **DOH** (available on website).



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Recap and Questions?