



WILPINJONG COAL PTY LTD

Environment Protection Licence (EPL) 12425

[Link to Environment Protection Licence EPL12425](#)

**LICENCE MONITORING DATA
MONTHLY SUMMARY REPORT**

for

1 May 2025 to 30 May 2025

Air Monitoring

Air quality surrounding the Wilpinjong Coal Mine is monitored using:

1. tapered element oscillating microbalances (TEOM);
2. high volume air samplers (HV); and
3. dust deposition gauges (DG).

In terms of the above equipment:

1. the TEOM and HVAS measure fine dust particles up to 10 microns in diameter (i.e. PM10); and
2. the DG measure the total dust deposited in the gauge during the sample period.

All are influenced by mining as well as non-mining activities in the local area.

The location of the above monitoring equipment in relation to Wilpinjong Coal Mine is shown in **Figures 6** and **8**.

A summary of the monitoring results for the month is provided in **Table 1** and the yearly trends are also shown in **Figures 1** to **3**.

For comparison with **Figures 2** and **3**, **Figure 4** displays the Regional 24Hr PM10 Average. PM10 dust levels for the month have been recorded in Bathurst and Merriwa by NSW EPA.

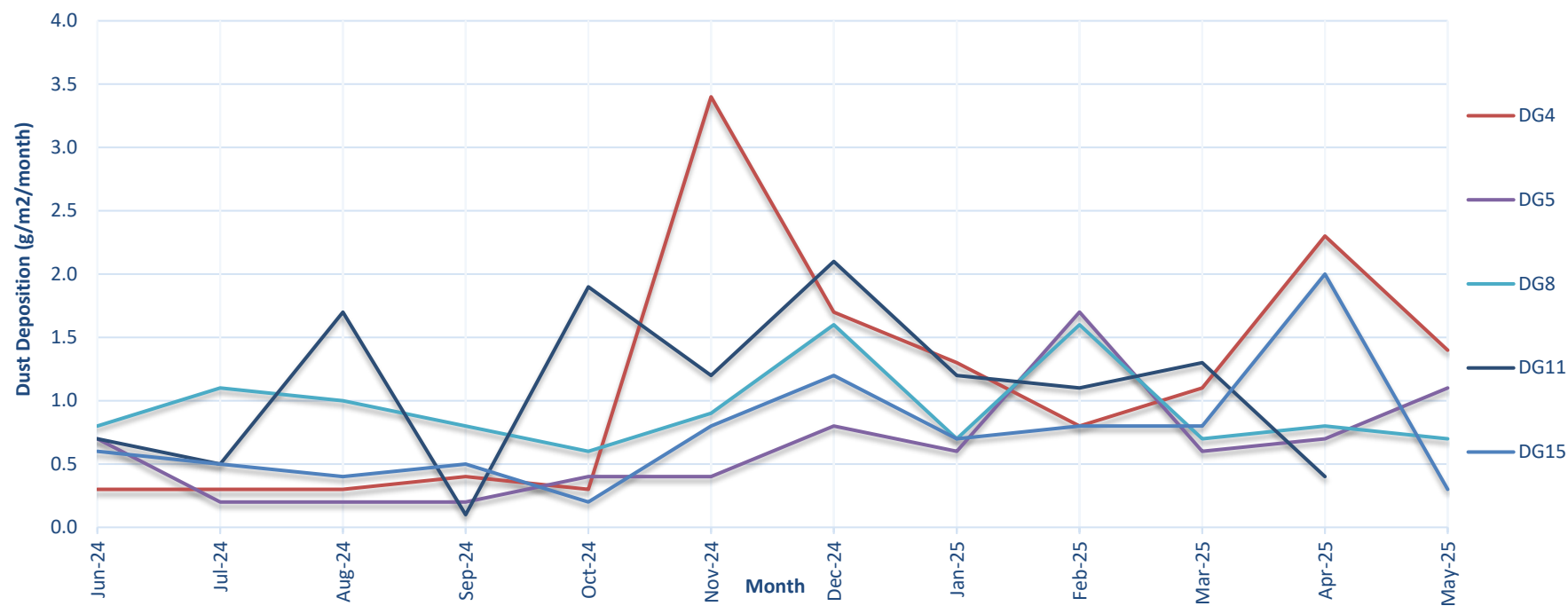
Table 1 - Air Monitoring

EPL ID No.	Monitoring Point ID.	Pollutant	Unit of Measure	Monitoring Frequency required by EPL	No. of times measured during month	Min. Value	Max. Value	Mean Value	Measurement	Annual Average	Limit	Exceed ^a (yes/no)	Date Last Sampled	Date Reported
3	DG4	Particulates - TIM	grams per square metre per month	Monthly	1				1.4				23/05/25	02/09/25
4	DG5	Particulates - TIM	grams per square metre per month	Monthly	1				0.3	0.6	4.0	No	23/05/25	02/09/25
6	DG8	Particulates - TIM	grams per square metre per month	Monthly	1				1.6				23/05/25	02/09/25
9	DG11	Particulates - TIM	grams per square metre per month	Monthly	1				0.4				23/05/25	02/09/25
17	DG15	Particulates - TIM	grams per square metre per month	Monthly	1				0.3				23/05/25	02/09/25
13	HV1	PM10	micrograms per cubic metre	Every 6 days	5	6.5	11.3	8.5			50	No	30/05/25	02/09/25
19	HV4	PM10	micrograms per cubic metre	Every 6 days	4	5.1	12.4	8.4			50		30/05/25	02/09/25
20	HV5	PM10	micrograms per cubic metre	Every 6 days	5	4.9	13.7	7.9			50		30/05/25	02/09/25
22	TEOM3	PM10	micrograms per cubic metre	Continuous (24 Hr Average)	100.0%	3.3	63.3	9.0			50	Yes		
23	TEOM4	PM10	micrograms per cubic metre	Continuous (24 Hr Average)	71.0%	5.8	18.5	8.7			50			

Notes:

- Limits specified in the above table are from Development Consent SSD-6764.
- As per Figure 4, a regional dust event was experienced on 27th May causing the exceedance reported at TEOM 3 for the month.

Figure 1a. DG Results - 12 Month Trend



1. Limit of 4 g/m²/month (annual average) applies to DG5 (Wollar Village) - refer Figure 1b.
2. An invalid result was taken at DG_11 during the February 2024 monitoring period due to the funnel not being situated correctly in the bottle.
3. During the June 2024 sampling period, DG12 recorded a result of 4.2 g/m²/month. 50% of this result was attributed to insects.

Figure 1b. DG 5 Results - Annual Average

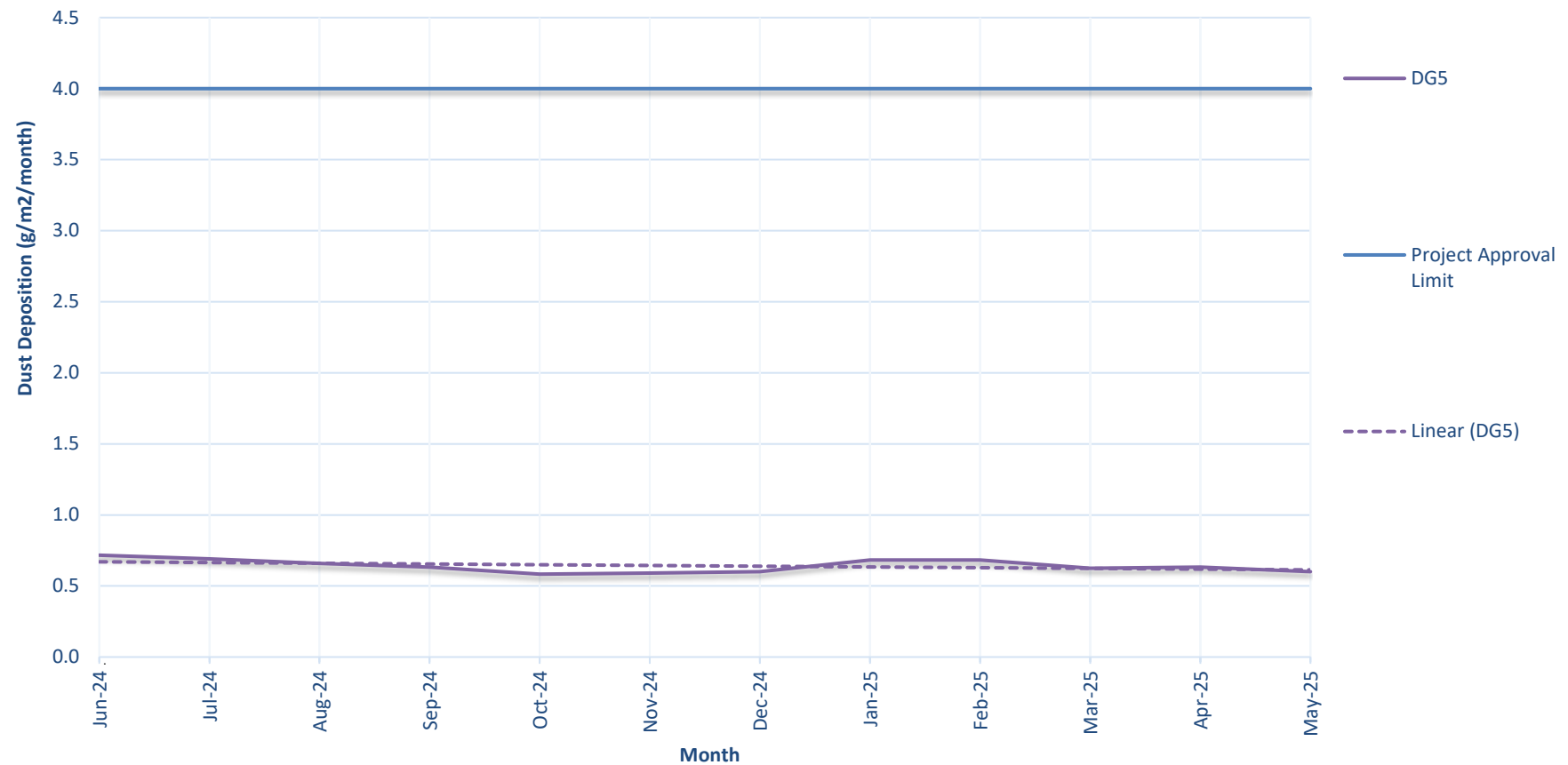
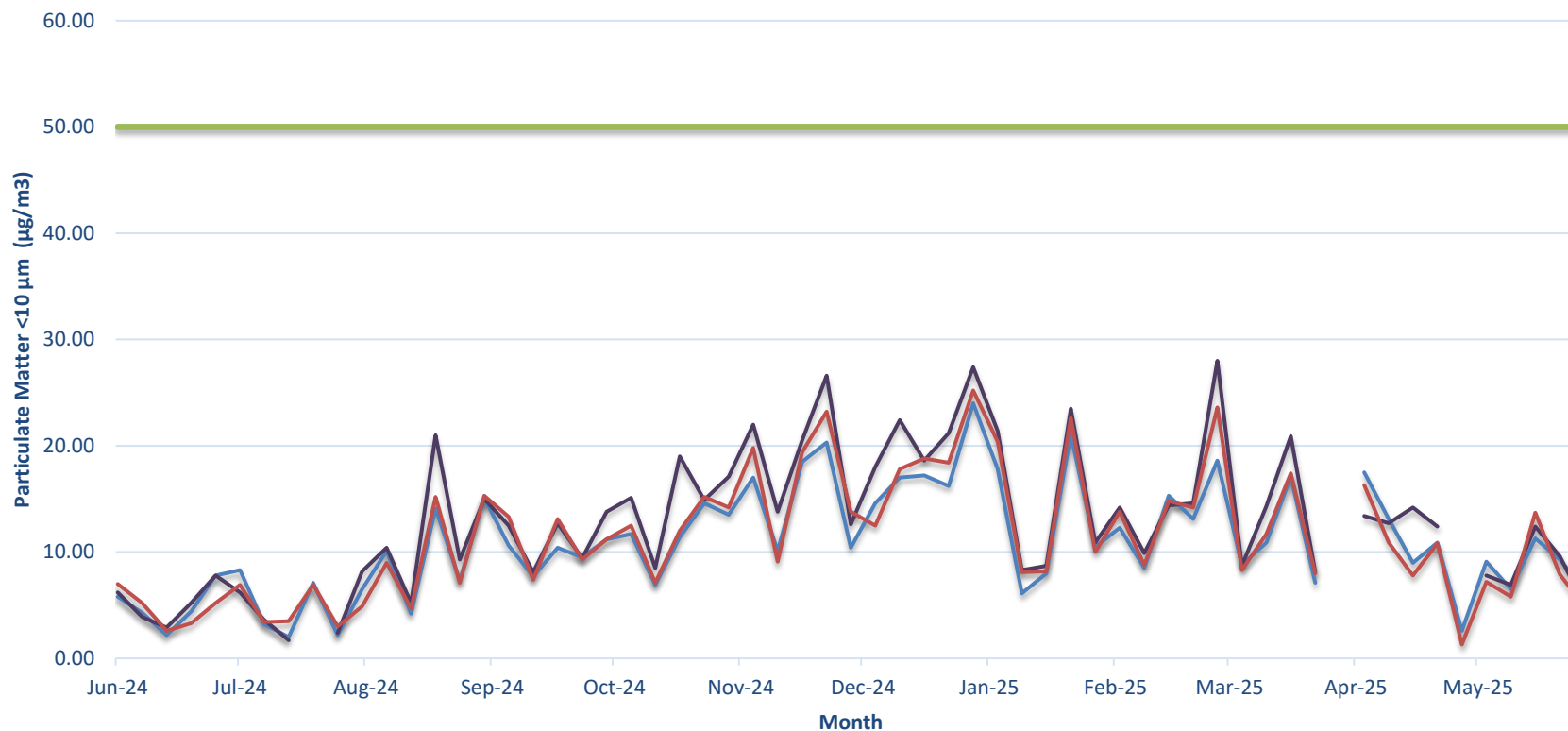


Figure 2. HV (PM10) Results - 12 Month Trend

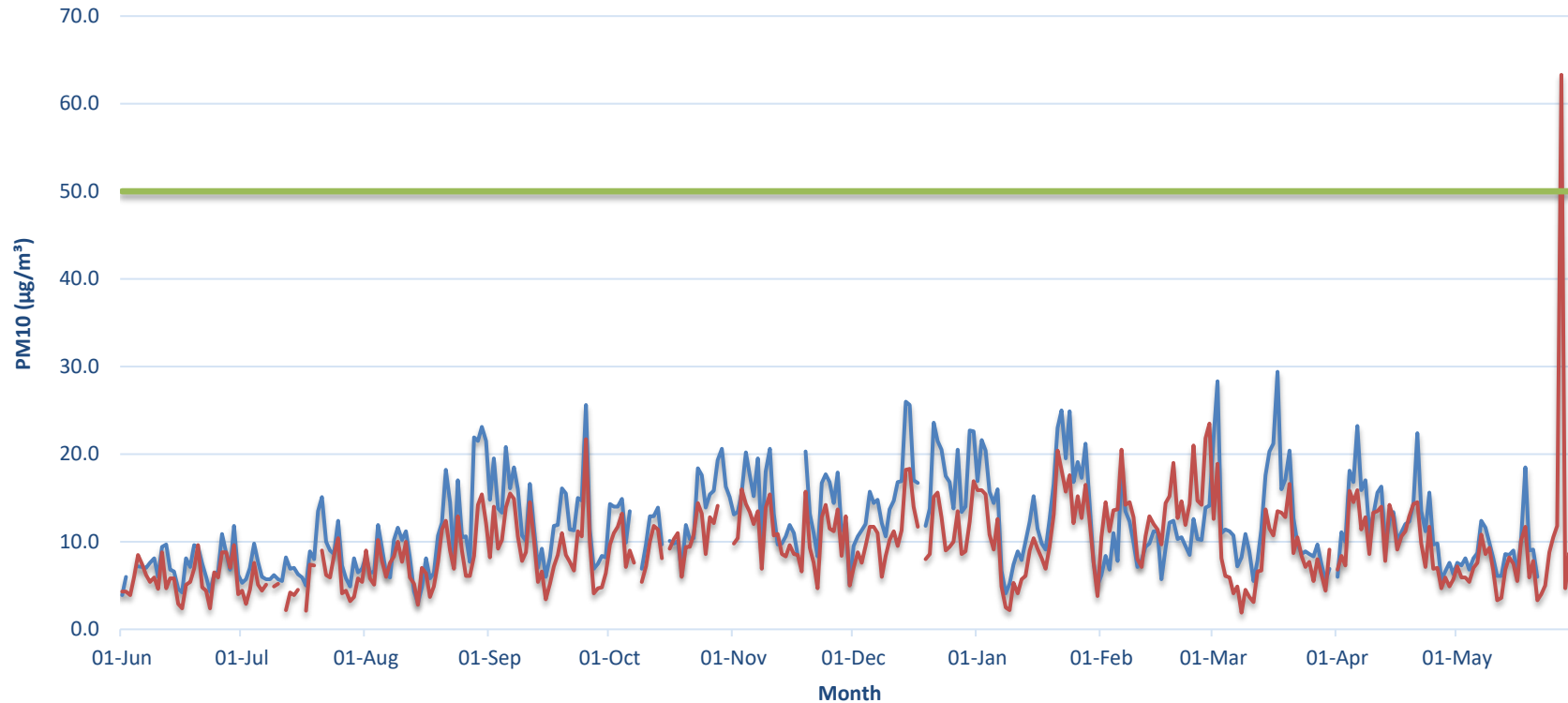


Notes:

1. Limit doesn't apply for extraordinary events such as bushfires, prescribed burning, or dust storms.
2. On 22nd July 2024, no sample could be obtained from HV_4 due to an unexpected power outage.

— HV1 (Wollar) — HV4 (Robinsons) — HV5 (Araluen Road) — 24 hour PM10 limit (refer notes)

Figure 3. TEOM (PM10) Results - 12 Month Trend

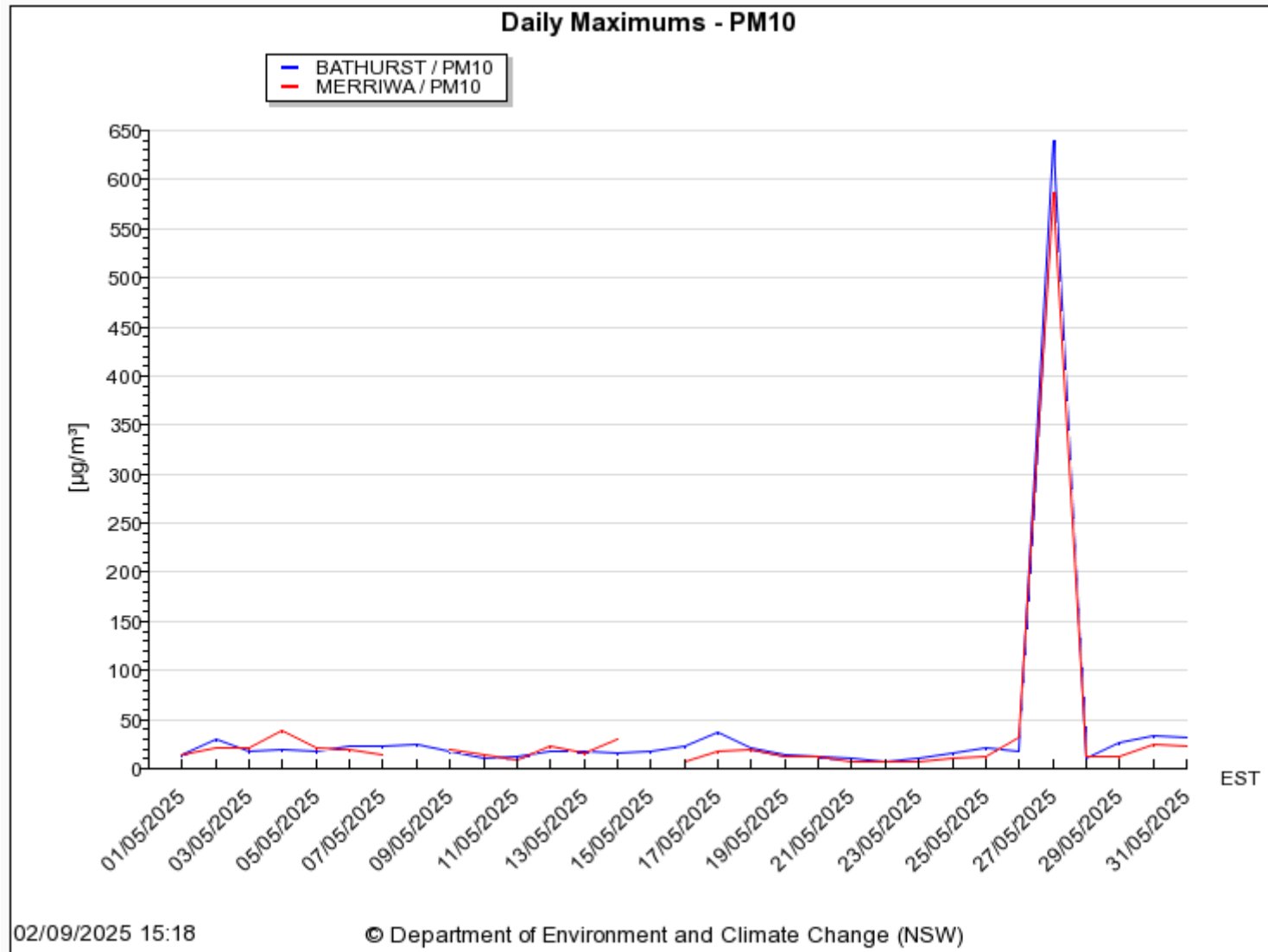


Notes:

1. Limit doesn't apply for extraordinary events such as bushfires, prescribed burning or dust storms.
2. Between 3rd - 4th June 2024, planned maintenance was undertaken at TEOM 4 resulting in a period of no data.
3. During the month of July 2024, there were calibration issues resulting in invalid data for 3 non consecutive days.
4. On 8th October 2024, both TEOM units stopped to manually update clock for DST - no data on this date.
5. An unexplained power outage on 15th October 2024 caused an extended period of no data on this day.
6. A mechanical fault involving the zero noise filter caused an extended period of unit downtime at TEOM 3 between 29th and 31st October 2024.
7. A power outage on 18th November 2024 caused a period of no data at TEOM 4
8. A power outage on 18th December 2024 caused a period of no data at TEOMs 3 & 4
9. A power outage on 31st March 2025 caused a result of no data for the 24h period.
10. On 27th May 2025, a regional dust event was experienced resulting in a limit exceedance at TEOM 3. The result has been determined not to have been caused by Wilpinjong Mine.

— TEOM 4 (Araluen Rd) — TEOM 3 (Wollar) — 24 hour PM10 Limit (refer Notes)

Figure 4. Daily PM10 Average Regional Results



Surface Water Monitoring

Surface water runoff is isolated and diverted around disturbed areas through the construction of water diversion bunds. Runoff from disturbed areas is diverted into on-site water retention dams.

A Reverse Osmosis (RO) Plant treats all water from the retention dams before it is discharged to Wilpinjong Creek. The EPL specifies limits for the quantity and quality of water that may be discharged from the site.

Table 2 - Site Water Discharge Monitoring

EPL ID No.	Monitoring Point ID.	Pollutant	Unit of Measure	Monitoring Frequency required by EPL	No. of times measured during month	Min. Value	Max. Value	Mean Value	Limit	Exceed ⁿ (yes/no)	Date Last Sampled	Date Reported
24	RO Plant Discharge	Conductivity	microSiemens per centimetre (uS/cm)	Continuous during discharge	100%	355	396	382	500	No		
		Oil and Grease	milligrams per litre (mg/L)	Weekly during any discharge	5	<5	<5	<5	10.0	No	28-May-2025	18-Aug-2025
		pH	pH Unit	Continuous during discharge	100%	6.6	8.3	7.1	≥6.5≤8.5	No		
		Total Suspended Solids	milligrams per litre (mg/L)	Weekly during any discharge	5	<1	<1	<1	50	No	28-May-2025	18-Aug-2025
		Volume discharged	megalitres per day	Continuous during discharge	100%	4.889	6.450	5.808	6.5	No		
30	Clean Water Dam Discharge	Turbidity	Nephelometric Turbidity Units	Continuous during discharge	100%	No discharge recorded during the month			As per EPL 12425	No		

Noise Monitoring

Environmental noise monitoring (“monitoring”) is carried out monthly.

The purpose of the monitoring is to assess whether mining operations are consistent with the objectives of the EPL and the development consent conditions.

In terms of this monitoring, it is undertaken:

1. by an independent noise consultant.
2. during the night-time; and
3. at the sites shown in **Figure 7**.

On pages 11 and 12 of this report are the noise levels and findings from the consultant’s report.

Table 4.1 Total measured noise levels, dB – May 2025 ¹

Location	Start date and time	L _{Amax}	L _{A1}	L _{A10}	L _{Aeq}	L _{A50}	L _{A90}	L _{Amin}
N6	6/05/2025 00:43	44	32	25	23	21	20	18
N14	6/05/2025 00:15	52	45	39	35	31	24	21
N15	5/05/2025 23:00	47	36	27	25	20	18	17
N17	5/05/2025 22:27	37	30	22	20	18	17	16
N19	5/05/2025 22:00	38	24	19	18	17	16	16
N20	5/05/2025 23:30	47	31	25	24	20	18	17

Notes: 1. Levels in this table are not necessarily the result of activity at site.

Atmospheric condition data measured by the operator during each measurement using a hand-held weather meter is shown in Table 4.2. The wind speed, direction, and temperature were measured at approximately 1.5 m above ground. Attended noise monitoring is not done during rain, hail, or wind speeds above 5 m/s at microphone height.

Table 4.2 Measured atmospheric conditions – May 2025

Location	Start date and time	Temperature °C	Wind speed m/s	Wind direction ° Magnetic north ¹	Cloud cover 1/8s
N6	6/05/2025 00:43	11	0.5	230	0
N14	6/05/2025 00:15	13	<0.5	-	1
N15	5/05/2025 23:00	13	<0.5	330	3
N17	5/05/2025 22:27	14	<0.5	-	4
N19	5/05/2025 22:00	15	<0.5	-	3
N20	5/05/2025 23:30	11	0.7	270	2

Notes: 1. "-" indicates calm conditions at monitoring location.

Table 4.3 Measured low-frequency L_{eq} noise levels, dB(Z) - May 2025 ¹

Location	Start date and time	Frequency (Hz)											
		12.5	16	20	25	31.5	40	50	63	80	100	125	160
-	NPfl Reference (Z)	89	86	77	69	61	54	50	50	48	48	46	44
N6	6/05/2025 00:43	-	-	-	-10	-7	-3	1	-2	6	9	7	6
N14	6/05/2025 00:15	-	-	-10	-8	-2	2	5	5	11	14	19	16
N15	5/05/2025 23:00	-	-	-	-	-10	-9	-1	-1	6	8	10	9
N17	5/05/2025 22:27	-	-	-	-	-10	-7	-5	-2	-1	-1	1	2
N19	5/05/2025 22:00	-	-	-	-	-10	-9	-5	-4	-4	-5	-5	-2
N20	5/05/2025 23:30	-	-	-	-	-10	-10	-8	-4	-5	-3	-3	-1

Notes: 1. Levels in this table are not necessarily the result of activity at site.

2. "-" indicates noise levels were too low to be measured by the sound level meter.

6 Summary

EMM was engaged by Wilpinjong Coal Pty Ltd to conduct a monthly noise survey of operations at WCP. The survey purpose was to quantify the acoustic environment and compare site noise levels against specified limits from the relevant EPL and consent.

Attended environmental noise monitoring described in this report was done during the night period of 5/6 May 2025 at six monitoring locations.

Noise levels from site complied with relevant limits at all monitoring locations during the May 2025 survey.

Wilpinjong Coal received the report from EMM Consulting Pty Ltd on 13th May 2025.

Blasting

Monitoring is carried out near sensitive locations during blasting activities to determine the vibration in the air (overpressure) and earth (ground vibration). A summary of the results of this monitoring, and the limits specified in the EPL, are shown in **Tables 3** and **4**. **Figures 7 & 8** shows the actual overpressure and vibration levels recorded during the month.

Table 3 – Overpressure Monitoring Results

Location	Month	Number of Blasts	Minimum overpressure (dB(L))	Maximum overpressure (dB(L))	Mean overpressure (dB(L))	EPL overpressure Limits (dB(L))	Exceedance (yes/no)
Approx. 50m west of the Wollar Public School	May	11	79.10	103.40	91.25	115dB (95% blasts) 120dB (100% blasts)	no

Table 4 – Vibration Monitoring Results

Location	Month	Number of Blasts	Minimum vibration (mm/sec)	Maximum vibration (mm/sec)	Mean vibration (mm/sec)	EPL vibration Limits (mm/sec)	Exceedance (yes/no)
Approx. 50m west of the Wollar Public School	May	11	0.03	1.83	0.52	5 mm/s (95% blasts) 10 mm/s (100% blasts)	no

Figure 7. Overpressure (dBL) recorded during Month

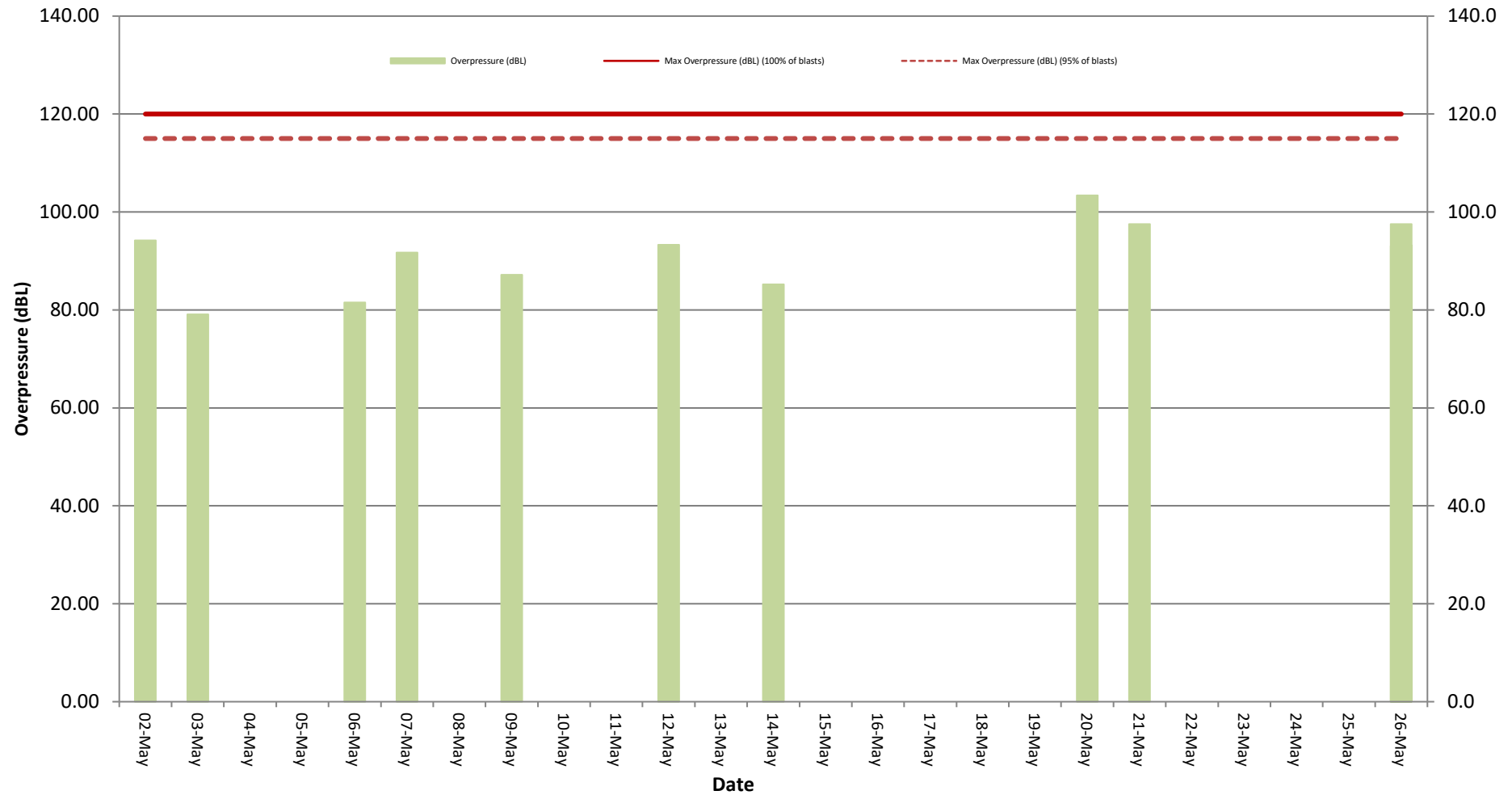
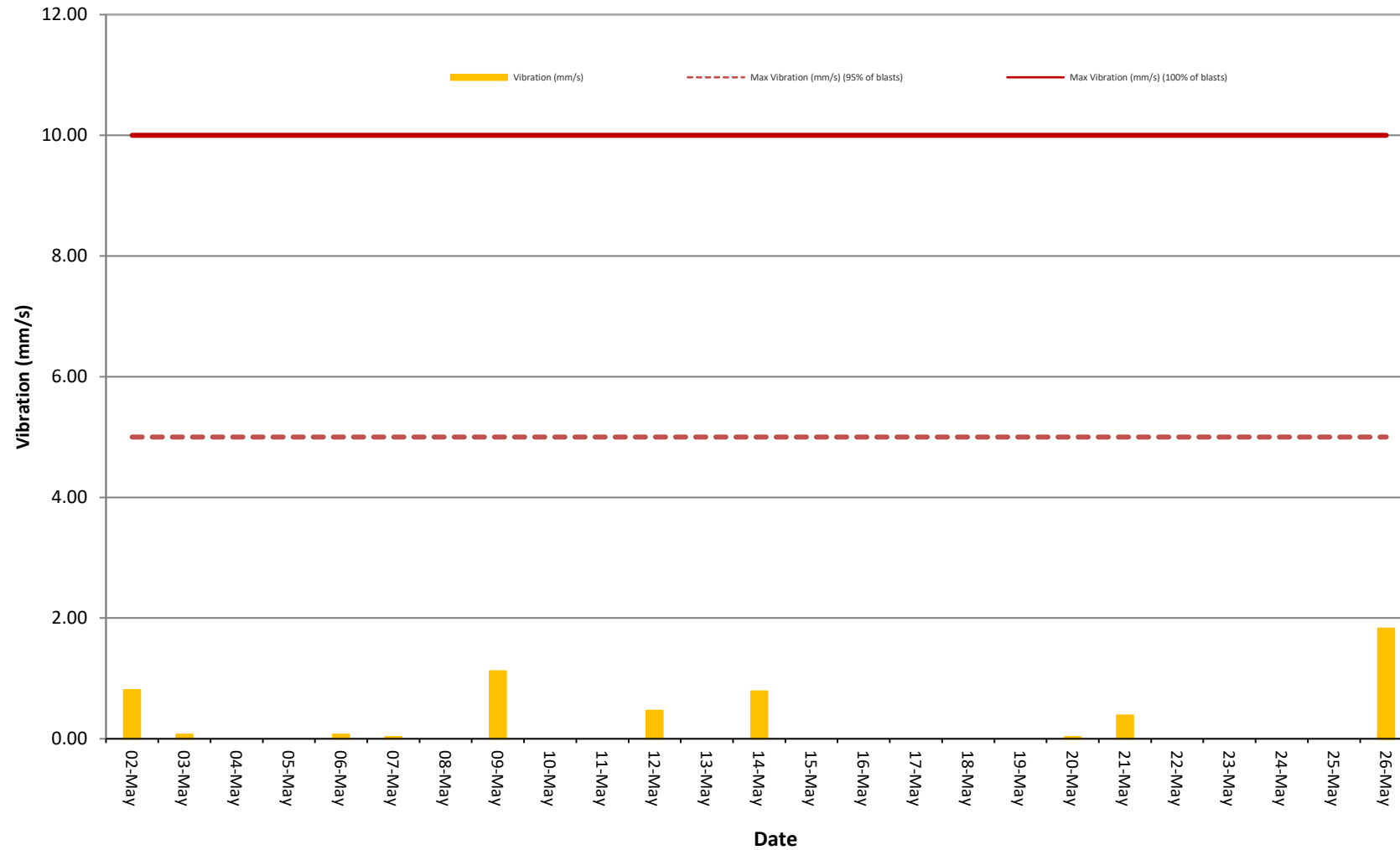


Figure 8. Vibration (mm/s) recorded during Month



Weather Monitoring

Continuous weather monitoring occurs onsite at the location shown on Figures 5 and 6 (**Meteorological Station**). The Meteorological Station continuously monitors for: rainfall; relative humidity; temperature (i.e. at 2m, 10m & 60m), barometric pressure, wind speed, wind direction and temperature lapse rate.

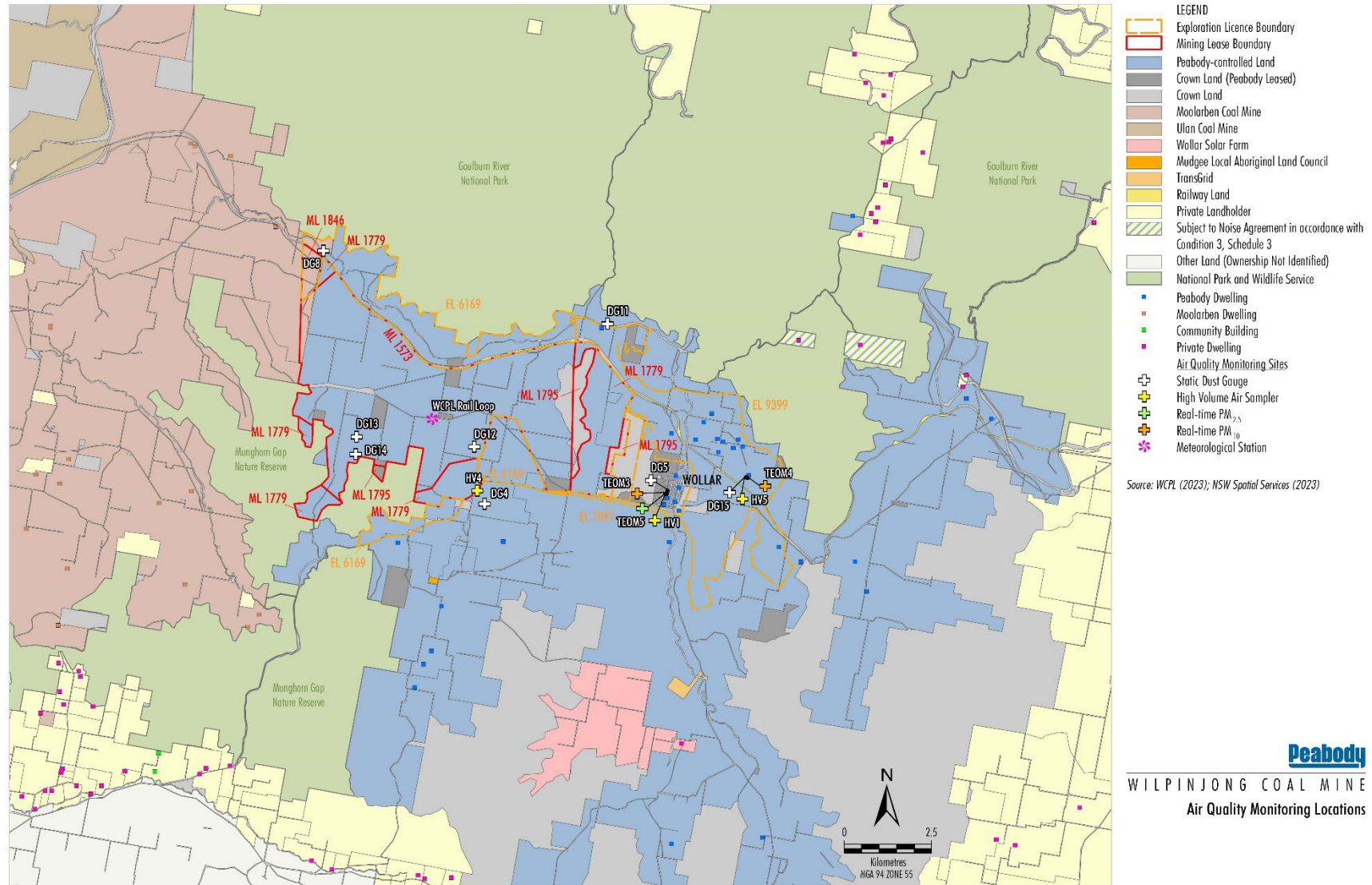
The temperature lapse rate is a measure of stable atmospheric conditions and is determined by measuring air temperature at two elevations 58m apart (i.e. 2m and 60m from ground level) and extrapolating the temperature difference over 58m to determine the lapse rate per °C/100m.

Table 5 shows the meteorological data recorded during the month.

Table 5 – Monthly Meteorological Data

Date	Temperature (°C)									Humidity (%)			Prevailing Wind				Rain (mm)	Bar (hPa)	Lapse Rate (°C/100m)
	2m			10m			60m						Speed			Dir (Deg)			
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max				
1/05/2025	13.2	6.2	19.4	13.3	7.1	18.3	13.7	10.2	17.5	65.2	36.6	93.5	1.9	0	5.2	88	0	1024.7	8.4
2/05/2025	13	5.2	19.2	13.1	6.1	18.3	13.2	7.1	17.3	72.3	50	93.7	1.9	0	5.4	62	0	1029.1	7.0
3/05/2025	14.2	9.5	20.1	14.5	10.2	19.4	14.5	10.6	18.5	74.1	45.2	92.8	1.8	0	4.5	55	0	1031.4	6.1
4/05/2025	13.9	5.6	21.5	14.3	5.9	20.7	14.9	8.2	19.6	78	52.3	95.2	1.3	0	5.1	50	0	1030.1	8.2
5/05/2025	16.3	11	22.9	16.6	12.1	22.3	16.7	13	20.8	78.3	52.4	92.1	0.7	0	2.6	33	0	1025.9	7.0
6/05/2025	15.2	8.2	25.4	15.5	8.7	23.9	16.1	9.8	23.1	73	32.1	95.8	0.6	0	3.2	257	0	1021.4	7.5
7/05/2025	14.9	6.5	24.2	15.4	7.4	23.1	16.4	8.9	22.2	71.8	40.9	94.3	1.4	0	6	238	0	1018.6	9.6
8/05/2025	15.9	7.5	23.6	16	9.2	22.7	16.3	11.1	21.6	62.6	21.9	93.4	1.2	0	4.4	50	0.2	1021.8	7.7
9/05/2025	14.4	7.1	19.9	14.3	8	19	14.1	9.5	18	68.3	45.2	90.6	2.4	0	5.1	48	0	1028.2	4.4
10/05/2025	14.9	9.9	19.6	14.9	11	18.8	14.7	11.5	17.9	72.3	53.3	86.7	2.8	0	5.2	56	0	1028	4.9
11/05/2025	16.3	10.8	20.5	16.3	11.9	19.7	16	13.1	18.8	75.4	57.6	91.4	2.3	0	4.6	42	0	1025.8	5.4
12/05/2025	17.1	13.3	21.9	17.1	14.5	20.9	16.7	14.6	20	75	51	88.9	1.9	0	3.4	50	0	1023.4	4.2
13/05/2025	16.6	11.7	22.1	16.7	12.7	21.3	16.6	14.1	20.1	77	52.4	91.8	1.7	0	3.8	37	0	1022.4	4.7
14/05/2025	16.2	10.7	23.5	16.5	11.7	22.6	16.9	13.2	21.6	75.4	38.4	93.8	0.3	0	3.2	202	0	1019	6.1
15/05/2025	14.6	11.6	17.9	14.9	12.1	17.8	14.8	12.2	17.1	82.8	70.1	91.6	0.9	0	3.1	40	0	1018.7	4.4
16/05/2025	15.5	11.5	21.3	15.6	12.5	20.3	15.4	12.8	19.2	81.1	57.1	92.6	0.4	0	1.9	32	0	1015.4	3.9
17/05/2025	14.2	7.4	22.8	14.5	9	21.8	14.5	9.4	20.9	68.9	30.3	96.3	1	0	4	227	0.2	1013.8	8.6
18/05/2025	11.9	7.1	18	12.1	8.4	16.8	12.1	9.3	15.7	70.5	55	82.8	1.5	0	5	43	0	1018.9	8.8
19/05/2025	12.7	7.3	15.4	12.8	8.9	14.9	12.5	10.1	14.2	66.2	50.9	89.7	3.6	0	6.5	89	0.2	1024.1	5.6
20/05/2025	15	12.7	16.7	15	12.7	16.7	14.5	12.1	16.1	64	58.9	70.2	4.7	3	7	82	0	1024.2	-0.4
21/05/2025	15	14	15.8	15.2	14.2	15.9	14.8	13.8	15.4	84.7	67.9	90.2	3.1	1.8	5.7	82	15.2	1021.5	0.4
22/05/2025	15.2	14.4	16.4	15.3	14.4	16.4	15	14.1	16.1	91.1	86.3	94	2.3	0	5.1	85	43	1014	0.4
23/05/2025	14.5	7.8	19.2	14.5	8.7	18.2	14.5	10.4	17.2	79.4	49.3	95.4	1.5	0	3.9	254	0.2	1013.1	5.8
24/05/2025	11.8	5.9	18.8	12	6.7	17.9	12.5	8.2	17.1	71.7	41.8	90.8	1.7	0	5.2	256	0	1015.4	7.4
25/05/2025	10	4	17.5	10.4	4.7	16.8	10.9	5.7	16.3	75.6	32.8	94.5	0.6	0	3	256	0	1018.6	4.9
26/05/2025	10.3	6.4	13.2	10.5	7	13.3	10.5	7.5	13.3	88.9	67.4	93.5	0.2	0	2.2	82	17.8	1016.5	2.8
27/05/2025	12.8	9.4	15.5	12.8	9.5	15.7	12.4	9.2	15.7	71.6	43.6	95.1	3.8	0	8.6	235	22.2	1010.9	1.6
28/05/2025	11.1	6.7	16.2	11.2	7.7	15.3	10.8	8.4	14.4	68.9	51.4	83.3	2.6	0	6.2	234	0	1016.5	4.0
29/05/2025	9.7	5.1	15.4	10	5.7	14.8	10	5.9	13.9	82.2	61.3	93.3	0.1	0	1.8	35	0	1019.4	3.7
30/05/2025	11.5	6	18.3	11.9	6.4	17.7	12.4	7.3	16.8	80	51.5	95.5	0.9	0	4.6	55	0	1023	7.7
31/05/2025	10.3	5	17.8	10.8	5.2	17.3	11.7	6.1	16.4	82.3	52.8	95.8	0.9	0	3.7	47	0	1026	8.6

Figure 6 – Air (Dust) Monitoring Locations



WIL-12-11_FMS 2023_2024

Figure 7 – Attended Noise Monitoring Locations

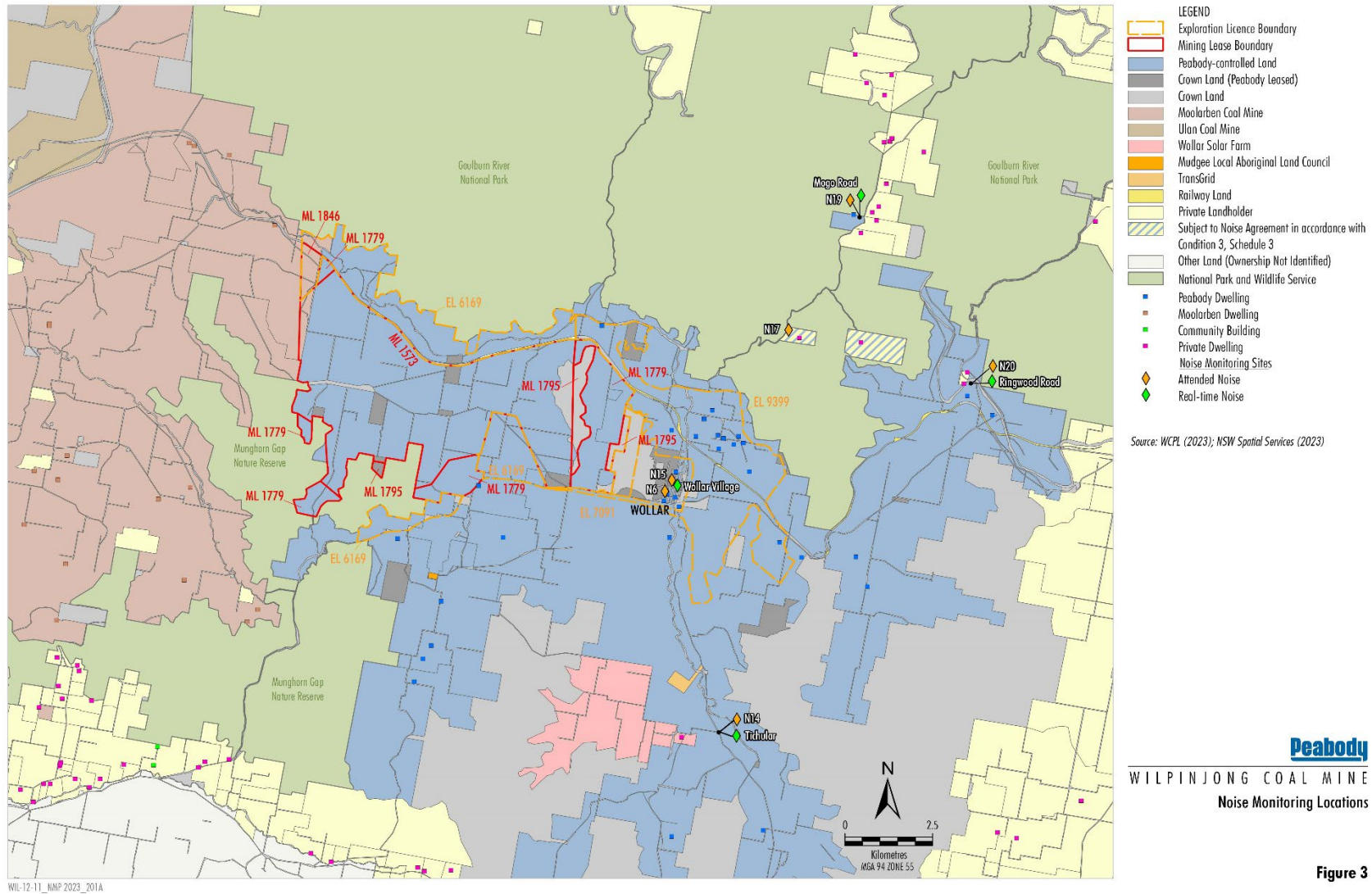


Figure 8 – Wollar Village Environmental Monitoring Sites

