

**APPENDIX 3B
AIR QUALITY
MONITORING DATA**

Summary of Annual Average Dust Deposition 2011-2023

EPL 12425 ID No.	3	4	-	6	-	9	10	11	12	26
Monitoring ID No.	DG4	DG5	DG7*	DG8	DG10	DG11	DG12	DG13	DG14	DG15
2011 Annual Average Total Insoluble Matter (g/m ² /month)	0.40	1.13	1.22	0.94	3.02	1.30	3.73	1.95	1.88	
2012 Annual Average Total Insoluble Matter (g/m ² /month)	2.80	0.73	1.52	1.03	1.19	1.41	6.52	2.38	2.18	
2013 Annual Average Total Insoluble Matter (g/m ² /month)	1.20	0.60		1.43	2.04	1.98	3.26	1.94	1.04	1.00
2014 Annual Average Total Insoluble Matter (g/m ² /month)	1.68	0.83		1.48	3.31	1.28	3.28	2.81	1.43	0.85
2015 Annual Average Total Insoluble Matter (g/m ² /month)	0.90	0.80		1.09	3.61	1.94	2.91	5.91	1.16	0.75
2016 Annual Average Total Insoluble Matter (g/m ² /month)	1.30	1.34		1.10	1.88	4.18	2.48	33.81	4.80	1.64
2017 Annual Average Total Insoluble Matter (g/m ² /month)	1.3	1.4		1.9	4.3	1.8	3.7	10.5	26.3	1.2
2018 Annual Average Total Insoluble Matter (g/m ² /month)	3.2	2		1.7	3.7	2.2	5.2	4.1	6.6	1.3
2019 Annual Average Total Insoluble Matter (g/m ² /month)	5.3	2.7		2.3	4.6	3.1	5.9	3.3	5.5	1.6
2020 Annual Average Total Insoluble Matter (g/m ² /month)	1.7	1.9		2.9		2.3	4.1	2.6	3.8	1.7
2021 Annual Average Total Insoluble Matter (g/m ² /month)	2.9	1.7		1.1		1.7	3.0	1.4	1.5	1.0
2022 Annual Average Total Insoluble Matter (g/m ² /month)	3.7	0.7		1.1		0.7	1.9	2.0	1.2	0.8
2023 Annual Average Total Insoluble Matter (g/m ² /month)	3.4	0.8		1.1		0.9	2.0	1.9	1.3	0.9

Notes: Grey shaded cells indicated compliance dust depositional monitoring sites. Green shaded cells indicated internal dust depositional monitoring sites at heritage sites. *At the end of the 2012 reporting period DG7 was relocated from the Mittaville Property to Araluen Road. Araluen Road is situated to the north east of Wollar Village. The new dust gauge is identified as DG15. DG10 was decommissioned in 2020.

Summary of TSP and PM₁₀ Results

Monitoring Locations [#]							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 [^]	HV4	HV5	TEOM1 [^]	TEOM3	TEOM4
2012 Results							
PM ₁₀ (µg/m ³) recorded range*	2.8 – 21.7	-	12.0 – 21.8	**	3.4 - 60.3	**	**
PM ₁₀ (µg/m ³) annual average	9.1	-	9.7	**	9.7	**	**
TSP (µg/m ³) recorded range*	-	1.9 – 47.0	-	-	-	-	-
TSP (µg/m ³) annual average	-	18.8	-	-	-	-	-
2013 Results							
PM ₁₀ (µg/m ³) recorded range*	1.2 – 43.7	-	2 – 55.1	1.8 – 49.8	3.0 – 82.5	2.4 – 55.6	0.7 – 68.9
PM ₁₀ (µg/m ³) annual average	10.84	-	12.4	15.71	18.5	13.1	16.8
TSP (µg/m ³) recorded range*	-	3.1 – 77.6	-	-	-	-	-
TSP (µg/m ³) annual average	-	27.45	-	-	-	-	-

Monitoring Locations [#]							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 [^]	HV4	HV5	TEOM1 [^]	TEOM3	TEOM4
2014 Results							
PM10 (µg/m ³) recorded range*	1.70 - 41.20	-	1.80 – 37.70	2.80 – 47.80	1.8-69.5	2.65 – 59.12	1.18 – 53.96
PM10 (µg/m ³) annual average	11.15	-	11.95	14.58	17.3	13.2	13.5
TSP (µg/m ³) recorded range*	-	7.20 – 59.0	-	-	-	-	-
TSP (µg/m ³) annual average	-	23.09	-	-	-	-	-
2015 Results							
PM10 (µg/m ³) recorded range*	1.1 – 29.3	-	1.9 – 40.0	1.0 – 35.3	2.2 – 87.8	1.4 – 78.5	0.1 – 77.3
PM10 (µg/m ³) annual average	9.99	-	11.52	11.68	14.1	11.26	14.16
TSP (µg/m ³) recorded range*	-	3.7 – 68.7	-	-	-	-	-
TSP (µg/m ³) annual average	-	22.74	-	-	-	-	-
2016 Results							
PM10 (µg/m ³) recorded range*	1.5 – 23.0	-	1.8 – 25.2	2.5 – 34.2	3.3 – 41.7	0.4 – 34.4	0.0 – 51.1
PM10 (µg/m ³) annual average	9.78	-	11.69	13.95	15.0	10.2	11.3
TSP (µg/m ³) recorded range*	-	3.9 – 82.0	-	-	-	-	-
TSP (µg/m ³) annual average	-	27.59	-	-	-	-	-
2017 Results							
PM10 (µg/m ³) recorded range*	2.1 - 28.2	-	4.5 - 69.1	5.1 - 55.4	2.9 - 86.7	0.9 - 52.2	0.9 - 50.9
PM10 (µg/m ³) annual average	12.2	-	16.7	16.6	18.4	9.5	12.8
TSP (µg/m ³) recorded range*	-	10.1 - 142.0	-	-	-	-	-
TSP (µg/m ³) annual average	-	38.1	-	-	-	-	-
2018 Results							
PM10 (µg/m ³) recorded range*	2.1 – 168	-	2.6 – 208	2.1 – 167	2.5 – 206.6	0.1 – 143.3	0.1 – 156.8
PM10 (µg/m ³) annual average	23.3	-	24.76	16.9	22.1	14.4	18.0
TSP (µg/m ³) recorded range*	-	5.6 – 237	-	-	-	-	-
TSP (µg/m ³) annual average	-	45.7	-	-	-	-	-
2019 Results							
PM10 (µg/m ³) recorded range*	2.8 - 196	-	3.6 - 207	3.0 - 195	0.6 – 107.8	3.0 – 242.8	3.8 – 273.1
PM10 (µg/m ³) annual average**	16.1	-	17.8	23.8	^^	14.6	22.9
TSP (µg/m ³) recorded range*	-	11.7 - 309	-	-	-	-	-
TSP (µg/m ³) annual average	-	^^	-	-	-	-	-
2020 Results							
PM10 (µg/m ³) recorded range*	2.2 – 59.1	-	1.9 - 106	3.4 – 66.2	-	0 – 331.0	2.38 – 416.15
PM10 (µg/m ³) annual average**	13.52	-	18.71	17.37	-	26.5	19.58
TSP (µg/m ³) recorded range*	-	8.1 - 143	-	-	-	-	-
TSP (µg/m ³) annual average	-	46.41	-	-	-	-	-

Monitoring Locations [#]							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 [^]	HV4	HV5	TEOM1 [^]	TEOM3	TEOM4
2021 Results							
PM10 (µg/m ³) recorded range*	2.8 – 30.3	-	3.0 – 38.6	3.0 – 38.6	-	1.0 – 86.6	1.8 – 139.5
PM10 (µg/m ³) annual average**	9.50	-	14.77	8.6	-	8.6	11.91
TSP (µg/m ³) recorded range*	-	-	-	-	-	-	-
TSP (µg/m ³) annual average	-	-	-	-	-	-	-
2022 Results							
PM10 (µg/m ³) recorded range*	1.0 – 18.9	-	1.3-26.2	1.6-24.8	-	2.1-22.9	1.9-22.3
PM10 (µg/m ³) annual average	6.96	-	8.54	9.51	-	7.4	8.99
TSP (µg/m ³) recorded range*	-	-	-	-	-	-	-
TSP (µg/m ³) annual average	-	-	-	-	-	-	-
2023 Results							
PM10 (µg/m ³) recorded range*	0.0 – 24.1	-	0.0-31.0	0.0-27.1	-	2.7-31.5	3.5-36.5
PM10 (µg/m ³) annual average	9.96	-	11.99	11.35	-	10.2	12.14
TSP (µg/m ³) recorded range*	-	-	-	-	-	-	-
TSP (µg/m ³) annual average	-	-	-	-	-	-	-

Notes: * Data presented is the range of minimum and maximum 24-hour averages and includes all extraordinary events. [^] Data recorded at these sites is not for compliance, but for management purposes only (in August 2020 both HV3 and TEOM 1 were decommissioned due to mining operations commencing in Pit 8). ^{^^}Insufficient data for annual average calculation, data unavailable after 22 August 2019. [#] Refer to Figure below. **Annual averages exclude extraordinary events in 2019 & 2020.

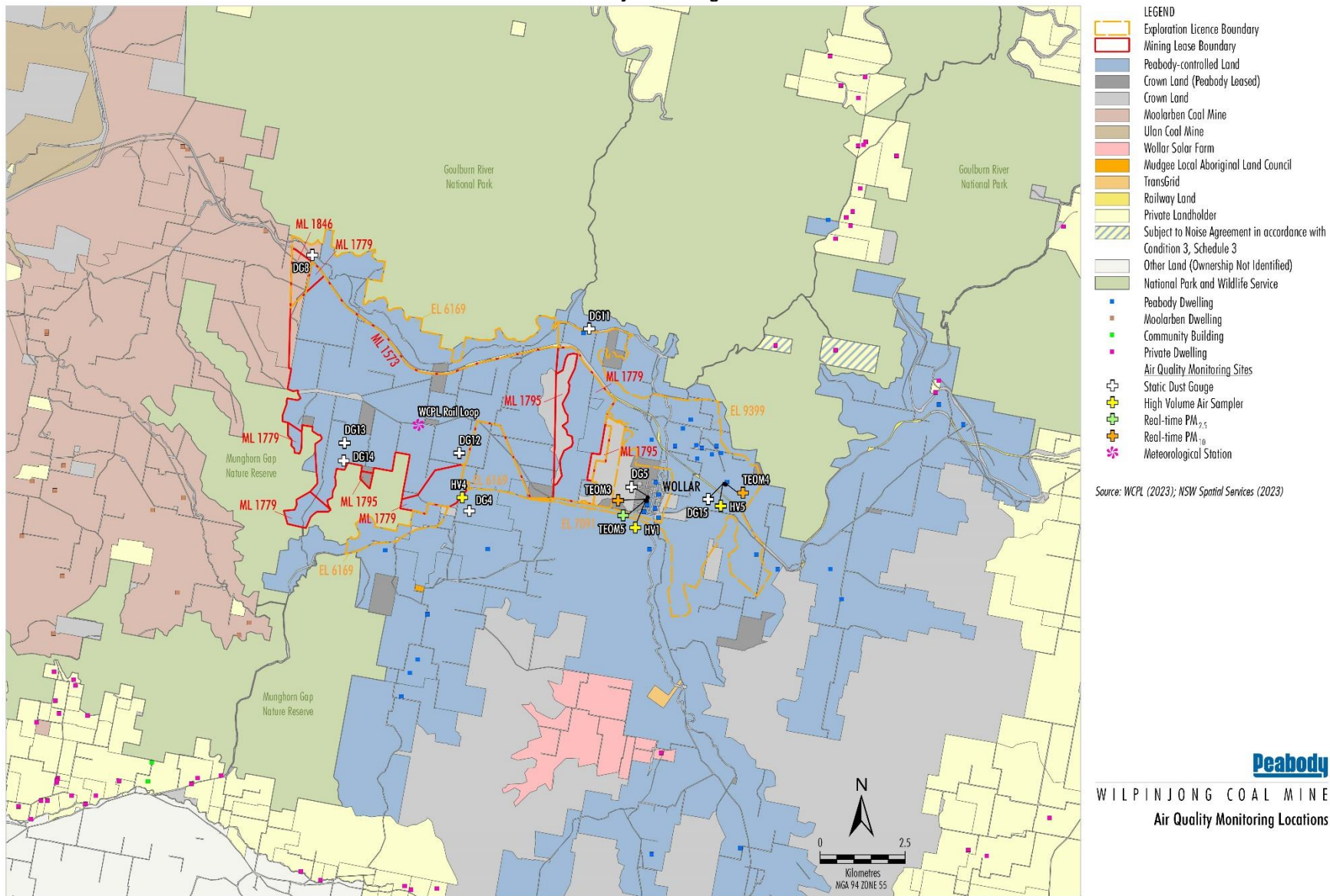
Summary PM_{2.5} Results

Monitoring Locations [#]	
EPL 12425 ID No.	29
Monitoring ID No.	TEOM 5
2019 Results	
PM2.5 (µg/m ³) recorded range*	1.1 – 196.5
PM2.5 (µg/m ³) annual average **	6.8
2020 Results	
PM2.5 (µg/m ³) recorded range*	9.15 – 196.45
PM2.5 (µg/m ³) annual average **	5.8
2021 Results	
PM2.5 (µg/m ³) recorded range*	0.2 – 82.4
PM2.5 (µg/m ³) annual average **	4.44
2022 Results	
PM2.5 (µg/m ³) recorded range	0.4-16.2
PM2.5 (µg/m ³) annual average	3.69

Monitoring Locations [#]	
EPL 12425 ID No.	29
Monitoring ID No.	TEOM 5
2023 Results	
PM2.5 (µg/m ³) recorded range	0.6-21.5
PM2.5 (µg/m ³) annual average	5.1

Notes: * Data presented is the range of minimum and maximum 24-hour averages and includes all extraordinary events. ** Annual averages exclude extraordinary events from 2019 - 2021.

Air Quality Monitoring Stations



WIL-12-11_EMS 2023_2024

Air Quality Monitoring Stations (Wollar)



Source: WCPL (2023); NSW Spatial Services (2023)

LEGEND	
Peabody-controlled Land	Noise Monitoring Sites
Crown Land (Peabody Leased) *	Attended Noise
Crown Land	Real-time Noise
Railway Land	Blasting Monitoring Sites
Subject to Noise Agreement in accordance with Condition 3, Schedule 3	Fixed Blast
Landholder Reference Number	Air Quality Monitoring Sites
Peabody Dwelling	Static Dust Gauge
Community Building	High Volume Air Sampler
Private Dwelling	Real-time PM _{2.5}
	Real-time PM ₁₀

* Special Lease/Licence Holder

Peabody
 WILPINJONG COAL MINE
 Wollar Environmental Monitoring Sites