

**APPENDIX 3B  
AIR QUALITY  
MONITORING DATA**

## Summary of Annual Average Dust Deposition 2011-2022

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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /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 <sup>2</sup> /month)	3.7	0.7		1.1		0.7	1.9	2.0	1.2	0.8

**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 PM<sub>10</sub> Results

Monitoring Locations <sup>#</sup>							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 <sup>^</sup>	HV4	HV5	TEOM1 <sup>^</sup>	TEOM3	TEOM4
2012 Results							
PM <sub>10</sub> (µg/m <sup>3</sup> ) recorded range*	2.8 – 21.7	-	12.0 – 21.8	**	3.4 - 60.3	**	**
PM <sub>10</sub> (µg/m <sup>3</sup> ) annual average	9.1	-	9.7	**	9.7	**	**
TSP (µg/m <sup>3</sup> ) recorded range*	-	1.9 – 47.0	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	18.8	-	-	-	-	-
2013 Results							
PM <sub>10</sub> (µg/m <sup>3</sup> ) 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 <sub>10</sub> (µg/m <sup>3</sup> ) annual average	10.84	-	12.4	15.71	18.5	13.1	16.8
TSP (µg/m <sup>3</sup> ) recorded range*	-	3.1 – 77.6	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	27.45	-	-	-	-	-
2014 Results							
PM <sub>10</sub> (µg/m <sup>3</sup> ) 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
PM <sub>10</sub> (µg/m <sup>3</sup> ) annual average	11.15	-	11.95	14.58	17.3	13.2	13.5
TSP (µg/m <sup>3</sup> ) recorded range*	-	7.20 – 59.0	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	23.09	-	-	-	-	-

Monitoring Locations <sup>#</sup>							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 <sup>^</sup>	HV4	HV5	TEOM1 <sup>^</sup>	TEOM3	TEOM4
2015 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average	9.99	-	11.52	11.68	14.1	11.26	14.16
TSP (µg/m <sup>3</sup> ) recorded range*	-	3.7 – 68.7	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	22.74	-	-	-	-	-
2016 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average	9.78	-	11.69	13.95	15.0	10.2	11.3
TSP (µg/m <sup>3</sup> ) recorded range*	-	3.9 – 82.0	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	27.59	-	-	-	-	-
2017 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average	12.2	-	16.7	16.6	18.4	9.5	12.8
TSP (µg/m <sup>3</sup> ) recorded range*	-	10.1 – 142.0	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	38.1	-	-	-	-	-
2018 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average	23.3	-	24.76	16.9	22.1	14.4	18.0
TSP (µg/m <sup>3</sup> ) recorded range*	-	5.6 – 237	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	45.7	-	-	-	-	-
2019 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average**	16.1	-	17.8	23.8	^^	14.6	22.9
TSP (µg/m <sup>3</sup> ) recorded range*	-	11.7 – 309	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	^^	-	-	-	-	-
2020 Results							
PM10 (µg/m <sup>3</sup> ) recorded range*	2.2 – 59.1	-	1.9 – 106	3.4 – 66.2	-	0 – 331.0	2.38 – 416.15
PM10 (µg/m <sup>3</sup> ) annual average**	13.52	-	18.71	17.37	-	26.5	19.58
TSP (µg/m <sup>3</sup> ) recorded range*	-	8.1 – 143	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	46.41	-	-	-	-	-
2021 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average**	9.50	-	14.77	8.6	-	8.6	11.91
TSP (µg/m <sup>3</sup> ) recorded range*	-	-	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	-	-	-	-	-	-

Monitoring Locations <sup>#</sup>							
EPL 12425 ID No.	13	-	20	27	-	25	28
Monitoring ID No.	HV1	HV3 <sup>^</sup>	HV4	HV5	TEOM1 <sup>^</sup>	TEOM3	TEOM4
2022 Results							
PM10 (µg/m <sup>3</sup> ) 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 <sup>3</sup> ) annual average	6.96	-	8.54	9.51	-	7.4	8.99
TSP (µg/m <sup>3</sup> ) recorded range*	-	-	-	-	-	-	-
TSP (µg/m <sup>3</sup> ) annual average	-	-	-	-	-	-	-

**Notes:** \* Data presented is the range of minimum and maximum 24-hour averages and includes all extraordinary events in 2019 and 2020. ^ 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.

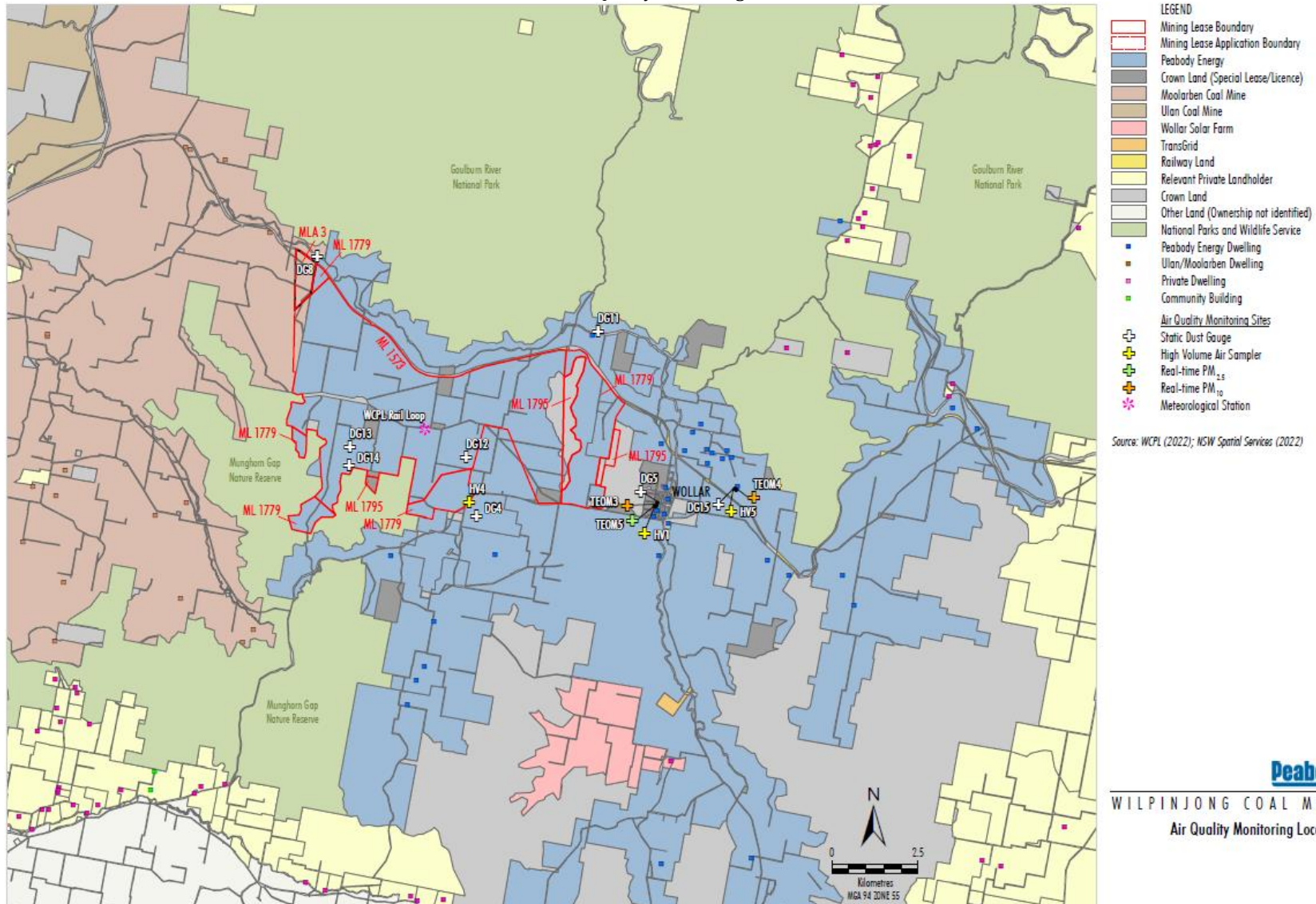
#### Summary PM<sub>2.5</sub> Results

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

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

\*\* Annual averages exclude extraordinary events from 2019 - 2021.

Air Quality Monitoring Stations



Air Quality Monitoring Stations (Wollar)



Source: WCPL (2022); NSW Spatial Services (2022)

LEGEND	
	Peabody Energy
	Crown Land (Special Lease/Licence)
	Crown Land
	Railway Land
	Pending Exchange of Contract
	Landholder Reference Number
	Peabody Energy Dwelling
	Community Building
	Private Dwelling
	<u>Noise Monitoring Sites</u>
	Attended Noise
	Real-time Noise
	<u>Blasting Monitoring Sites</u>
	Fixed Blast
	<u>Air Quality Monitoring Sites</u>
	Static Dust Gauge
	High Volume Air Sampler
	Real-time PM <sub>2.5</sub>
	Real-time PM <sub>10</sub>

# Special Lease/Licence Holder

**Peabody**  
 WILPINJONG COAL MINE  
 Wollar Environmental Monitoring Sites