



Monthly Environmental Monitoring Report

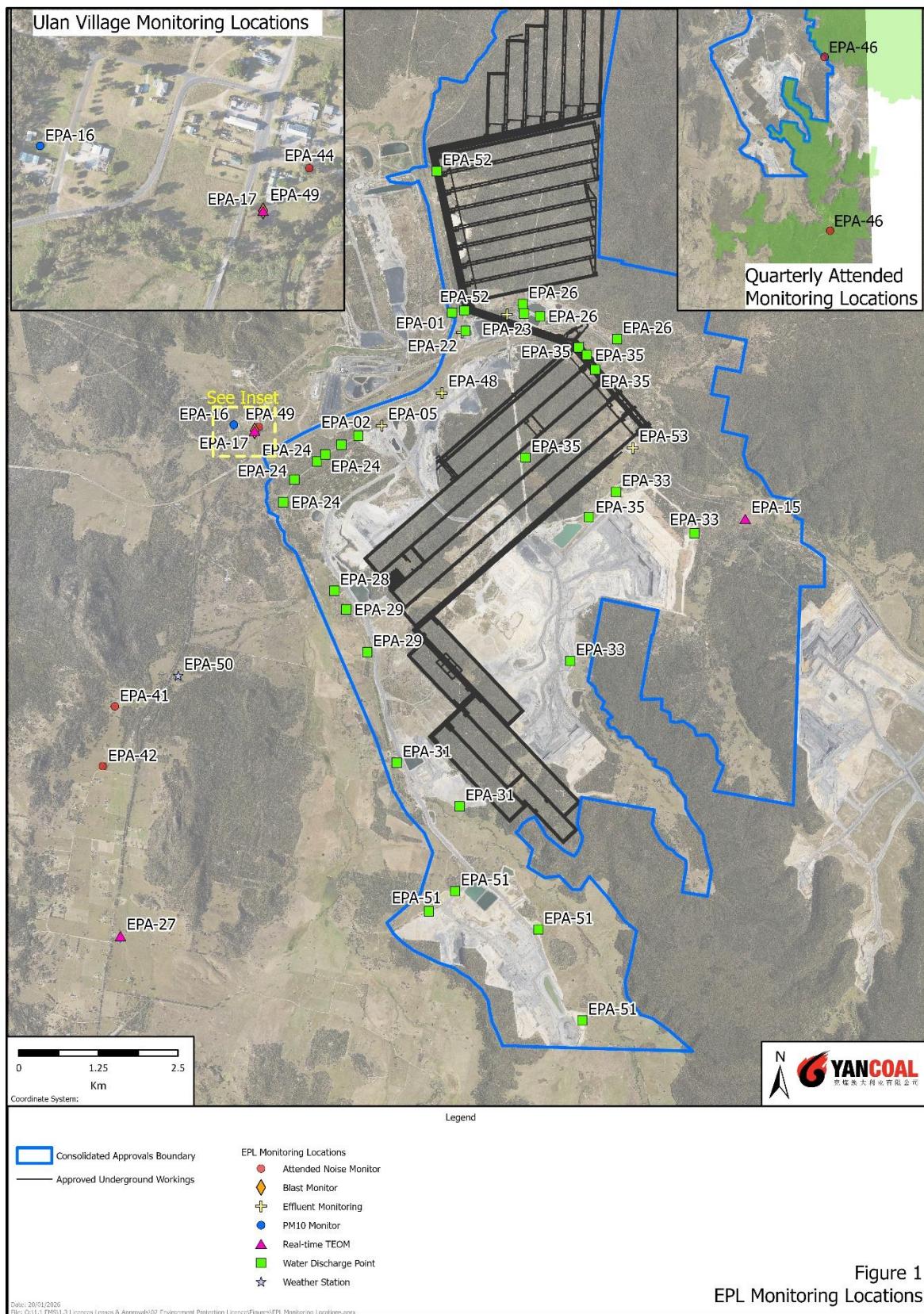
For the Month Ending 31 December 2025

MONTHLY ENVIRONMENTAL MONITORING REPORT

For the Month Ending 31 December 2025

Name of Operation	Moolarben Coal Complex
Name of License Holder	Moolarben Coal Operations Pty Ltd
Premises	Moolarben Coal Mine 12 Ulan-Wollar Rd, Ulan NSW 2850
Environmental Protection Licence Number	12932
EPL Link	https://apps.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicense.aspx?DOCID=324438&SYSUID=1&LICID=12932
Reporting Period	01 December 2025 to 31 December 2025
Date last sampled data obtained	08 January 2026
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Version	1
Author	N.Potgieter
Approver	R.Shanks

EPL 12932 MCO Environmental Monitoring Network



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Concentration Monitoring Summary

Air Quality Monitoring

EPL ID	Location	Pollutant	Unit of Measure	EPL Monitoring Frequency	No. of Samples collected and analysed annually	12 Month Rolling Average			Annual concentration limit	Exceedance (Yes/No)
						Min Value	Mean Value	Max Value		
16	PM01	PM10	µg/m³	Every 6 days	60	11.7	11.8	11.9	25	No
N/A	PM02	PM10	µg/m³	N/A	60	11.9	12.0	12.1	25	No
15	TEOM 6	PM10	µg/m³	Continuous	98.9%	20.4	21.0	21.2	N/A	N/A
17	TEOM 1	PM10	µg/m³	Continuous	99.2%	16.2	16.3	16.5	25	No
27	TEOM 7	PM10	µg/m³	Continuous	96.2%	8.9	9.1	9.2	25	No
27	TEOM 7	PM2.5	µg/m³	Continuous	96.2%	4.3	4.4	4.5	8	No
N/A	TEOM 4	PM10	µg/m³	N/A	97.5%	13.0	13.1	13.3	25	No

EPL ID	Location	Pollutant	Unit of Measure	EPL Monitoring Frequency	No. of Samples collected and analysed for the month	Monthly Data			24 hr concentration limit	Exceedance (Yes/No)
						Min Value	Mean Value	Max Value		
16	PM01	PM10	µg/m³	Every 6 days	5	4.1	13.5	23.0	50	No
N/A	PM02	PM10	µg/m³	N/A	5	3.9	12.5	21.7	50	No
15	TEOM 6	PM10	µg/m³	Continuous (24 Hr Average)	100%	8.6	30.0	77.1	N/A	N/A
17	TEOM 1	PM10	µg/m³	Continuous (24 Hr Average)	100%	6.6	20.0	44.9	50	No
27	TEOM 7	PM10	µg/m³	Continuous (24 Hr Average)	100%	3.2	12.7	23.9	50	No
27	TEOM 7	PM2.5	µg/m³	Continuous (24 Hr Average)	100%	1.2	7.1	16.4	25	No
N/A	TEOM 4	PM10	µg/m³	N/A (24 Hr Average)	96.8%	7.7	18.9	42.9	50	No

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Surface Water Quality Monitoring

EPL ID	Location	Pollutant	Unit of Measure	No. of Samples collected and analysed	Date Sampled	Results
N/A	SW01	Conductivity	µS/cm	1	10/12/2025	892.3
		pH	pH	1	10/12/2025	7.7
		Total Suspended Solids	mg/L	1	10/12/2025	<5
N/A	SW02	Conductivity	µS/cm	1	10/12/2025	915.5
		pH	pH	1	10/12/2025	7.7
		Total Suspended Solids	mg/L	1	10/12/2025	<5
N/A	SW04	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW05	Conductivity	µS/cm	1	10/12/2025	982.6
		pH	pH	1	10/12/2025	7.3
		Total Suspended Solids	mg/L	1	10/12/2025	8
N/A	SW07	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW08	Conductivity	µS/cm	1	10/12/2025	1989
		pH	pH	1	10/12/2025	7.1
		Total Suspended Solids	mg/L	1	10/12/2025	16
N/A	SW09	Conductivity	µS/cm	1	10/12/2025	2781
		pH	pH	1	10/12/2025	7.1
		Total Suspended Solids	mg/L	1	10/12/2025	16
N/A	SW12	Conductivity	µS/cm	1	10/12/2025	870.1
		pH	pH	1	10/12/2025	7.3
		Total Suspended Solids	mg/L	1	10/12/2025	12
N/A	SW15	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW16	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*

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EPL ID	Location	Pollutant	Unit of Measure	No. of Samples collected and analysed	Date Sampled	Results
N/A	SW17	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW18	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW22	Conductivity	µS/cm	1	10/12/2025	901.9
		pH	pH	1	10/12/2025	7.6
		Total Suspended Solids	mg/L	1	10/12/2025	<5
N/A	SW23	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*
N/A	SW24	Conductivity	µS/cm	0	10/12/2025	*
		pH	pH	0	10/12/2025	*
		Total Suspended Solids	mg/L	0	10/12/2025	*

* No flow

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Blasting

	Location	Pollutant	Unit of Measure	Frequency	No. of Blasts during the reporting period	Results			Limits dBL	Exceedance (Yes/No)
						Min Value	Mean Value	Max Value		
49	BM1 Ulan School	Blast Overpressure	dBBL	Every Blast	17	84.8	96.5	107.8	115 (95% of total Blasts over 12 months) 120 (100% of Blasts)	No
		Ground Vibration	mm/s	Every Blast		0.04	0.17	0.51	5mm/s (95% of Blasts over 12 months) 10mm/s (100% of Blasts)	No
N/A	BM5 Ridge Rd	Blast Overpressure	dBBL	Every Blast	17	83.4	96.8	108.4	115 (95% of total Blasts over 12 months) 120 (100% of Blasts)	No
		Ground Vibration	mm/s	Every Blast		0.05	0.11	0.32	5mm/s (95% of Blasts over 12 months) 10mm/s (100% of Blasts)	No
N/A	BM8 Moolarben Rd	Blast Overpressure	dBBL	Every Blast	17	84.8	92.3	103.8	115 (95% of total Blasts over 12 months) 120 (100% of Blasts)	No
		Ground Vibration	mm/s	Every Blast		0.03	0.10	0.29	5mm/s (95% of Blasts over 12 months) 10mm/s (100% of Blasts)	No

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Noise

EPL ID	Location	Site ID	Monitoring Type	Frequency	Measured Level ^{3,5,6} LAeq dB (15min)	Measured Level ^{4,5,6} LA1,1dB (1min)	Noise Criteria ¹	Monitoring Completed during the period	Exceedance (Yes/No) ¹
44	Ulan Public School	NA1	Compliance - Attended	Monthly	IA	-	Daytime (07:00 – 18:00) LAeq, 15minute: 35 dB	Yes	N/A ²
N/A	Cope Road (Receiver 258)	NA11	Management (Cumulative) - Attended	Quarterly	-	-	-	-	No
N/A	Lagoons Road	NA2	Validation - Attended	Annually	-	-	-	-	-
42	Winchester Crescent	NA12	Compliance/Validation - Attended	Monthly	IA	IA	Night time (22:00 – 07:00) LAeq,15minute: 35 dB LA1,1minute: 45 dB	Yes	No
N/A	Upper Ridge Road (Receiver 176)	NA3	Validation - Attended	Annually	-	-	-	-	-
41	Lower Ridge Road	NA6	Compliance -Attended	Monthly	IA	IA	Night time (22:00 – 07:00) LAeq,15minute: 37 dB LA1, 1minute: 45 dB	Yes	No
N/A	Moolarben Road (Receiver 28)	NA10	Validation - Attended	Annually	-	-	-	-	-
46	Goulburn River National Park	GRNP	Compliance -Attended	Annually	-	-	-	-	-
46	Munghorn Gap Nature Reserve	MGNR	Compliance -Attended	Annually	-	-	-	-	-

1. Noise limits are adjusted by +5 dB during 'very noise-enhancing meteorological conditions' in accordance with the NPfL.

2. Ulan School was in recess and not in use, therefore noise limits were not applicable in accordance with the consents.

3. Site-only $L_{Aeq,15min}$, includes modifying factor penalties, if applicable

4. Site-only $L_{A1,1min}$ based on measured site-only L_{Amax}

5. Where site-only noise levels are very low or are masked by other sources and are at least 5 dB lower than relevant limits, then a maximum estimate may be provided such as "<20 dB".

6. IA is Inaudible. When site only noise is noted as IA, there was no noise from the source of interest audible at the monitoring location.

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Effluent Discharge Points

EPL ID	Pollutant	Unit of Measure	No. of samples required by Licence	No. of Samples collected and analysed	Date Sampled	Result
5	BOD	mg/L	Quarterly		*	
	Nitrogen (total)	mg/L	Quarterly		*	
	Oil and Grease	mg/L	Quarterly		*	
	pH	pH	Quarterly		*	
	Phosphorus (total)	mg/L	Quarterly		*	
	Total Suspended Solids	mg/L	Quarterly		*	
22	BOD	mg/L	Quarterly		*	
	Nitrogen (total)	mg/L	Quarterly		*	
	Oil and Grease	mg/L	Quarterly		*	
	pH	pH	Quarterly		*	
	Phosphorus (total)	mg/L	Quarterly		*	
	Total Suspended Solids	mg/L	Quarterly		*	
23	BOD	mg/L	Quarterly		*	
	Nitrogen (total)	mg/L	Quarterly		*	
	Oil and Grease	mg/L	Quarterly		*	
	pH	pH	Quarterly		*	
	Phosphorus (total)	mg/L	Quarterly		*	
	Total Suspended Solids	mg/L	Quarterly		*	
48	BOD	mg/L	Quarterly		*	
	Nitrogen (total)	mg/L	Quarterly		*	
	Oil and Grease	mg/L	Quarterly		*	
	pH	pH	Quarterly		*	
	Phosphorus (total)	mg/L	Quarterly		*	
	Total Suspended Solids	mg/L	Quarterly		*	
53	BOD	mg/L	Quarterly		*	
	Nitrogen (total)	mg/L	Quarterly		*	
	Oil and Grease	mg/L	Quarterly		*	
	pH	pH	Quarterly		*	
	Phosphorus (total)	mg/L	Quarterly		*	
	Total Suspended Solids	mg/L	Quarterly		*	

*Not sampled in December, next sample in March 2026.

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Discharge Points

EPL ID	Pollutant	Unit of Measure	No. of samples required by Licence	No. of Samples collected and analysed	Min Value	Mean Value	Max Value	100 th percentile concentration limit	Exceedance (Yes/No)
1	Conductivity	µS/cm	Continuous during discharge	No licensed discharges during the period	619	No			
	Oil and Grease	mg/L	Weekly during discharge		10	No			
	pH	pH	Continuous during discharge		6.5-8.5	No			
	Total Suspended Solids	mg/L	Weekly during discharge		50	No			
	Turbidity	NTU	Continuous during discharge		25	No			
	Discharge Volume	Megalitres per day	Continuous during discharge		20 ¹	No			
2	Conductivity	µS/cm	Continuous during discharge	No licensed discharges during the period	619	NA			
	Oil and Grease	mg/L	Daily during discharge		10	NA			
	pH	pH	Continuous during discharge		6.5-8.5	NA			
	Total Suspended Solids	mg/L	Daily during discharge		50	NA			
	Turbidity	NTU	Continuous during discharge		25	NA			
	Discharge Volume	Megalitres per day	Continuous during discharge		NA	NA			
24	pH	pH	Daily during discharge	No licensed discharges during the period	6.5-8.5	NA			
	Total Suspended Solids	mg/L	Daily during discharge		50	NA			
	Turbidity	NTU	Daily during discharge		25	NA			
26	pH	pH	Daily during discharge	No licensed discharges during the period	6.5-8.5	NA			
	Total Suspended Solids	mg/L	Daily during discharge		50	NA			
	Turbidity	NTU	Daily during discharge		25	NA			
28	Conductivity	µS/cm	Continuous during discharge	No licensed discharges during the period	619	NA			
	Oil and Grease	mg/L	Daily during discharge		10	NA			
	pH	pH	Continuous during discharge		6.5-8.5	NA			
	Total Suspended Solids	mg/L	Daily during discharge		50	NA			
	Turbidity	NTU	Continuous during discharge		25	NA			

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	Discharge Volume	Kilolitres per day	Continuous during discharge					NA	NA
29	pH	pH	Daily during discharge	No licensed discharges during the period				6.5-8.5	NA
	Total Suspended Solids	mg/L	Daily during discharge					50	NA
	Turbidity	NTU	Daily during discharge					25	NA
	pH	pH	Daily during discharge					6.5-8.5	NA
31	Total Suspended Solids	mg/L	Daily during discharge	No licensed discharges during the period				50	NA
	Turbidity	NTU	Daily during discharge					25	NA
	pH	pH	Daily during discharge					6.5-8.5	NA
35	Total Suspended Solids	mg/L	Daily during discharge	No licensed discharges during the period				50	NA
	Turbidity	NTU	Daily during discharge					25	NA
	pH	pH	Daily during discharge					6.5-8.5	NA
51	Total Suspended Solids	mg/L	Daily during discharge	No licensed discharges during the period				50	NA
	Turbidity	NTU	Daily during discharge					25	NA
	pH	pH	Daily during discharge					6.5-8.5	NA

¹ Only applies when mining operations at the premises include that undertaken in the areas "UG4".