



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

October 2022

1 INTRODUCTION

The Maxwell Underground Coal Mine Project is owned by Maxwell Ventures (Management) Pty Limited. This report has been compiled to present environmental monitoring data for the Maxwell Underground Coal Mine Project Environment Protection Licence 1323. This report complies with Section 66(6) of the *Protection of the Environment Operations Act 1997*.

A summary of the Licence details is provided in **Table 1**.

Table 1. A summary of licence and report details

Environment Protection Licence Number	1323
Licensee Details	Maxwell Ventures (Management) Pty Limited Private Mail Bag 9 Muswellbrook NSW 2333
Premises	Maxwell Underground Coal Mine Project Thomas Mitchell Drive Muswellbrook NSW 2333
Link to the EPA Register	http://app.epa.nsw.gov.au/prpoeoapp/
Reporting Month	October 2022
Date of Publication	6 December 2022
Version	1
Correction Log	-

2 MONITORING RESULTS

Air quality monitoring results are provided in **Table 2**.

Blast monitoring results are provided in **Table 3**

Noise monitoring results are provided in **Table 4**.

Maps of monitoring locations are provided in **Appendix 1**.

Table 2. Air quality monitoring results for October 2022

EPA identification no.	Sampling point	Sampling period start date	Sampling period finished date	Unit of measure	Averaging period	Monitoring frequency	Minimum value	Mean value	Median value	Maximum value
8	ES-01	01/10/2022	31/10/2022	micrograms per cubic metre	5 minutes	Continuous	0	51	8	5591
9	ES-02	01/10/2022	31/10/2022	micrograms per cubic metre	5 minutes	Continuous	0	9	8	50
10	ES-03	01/10/2022	31/10/2022	micrograms per cubic metre	5 minutes	Continuous	0	3580	3798	4138
11	ES-04	01/10/2022	31/10/2022	micrograms per cubic metre	5 minutes	Continuous	0	10	9	134

As stated in previous reports, a large range of values from the E-Sampler at site ES-03 have been recorded and are deemed spurious. Monthly scheduled calibrations note a 'Solenoid error' on the operating screen; all other checks passed (leak check, temperature, pressure, flow, battery etc). The same scheduled calibrations for ES-02 recorded a 'Detector error' however there is less effect on the data. Due to the ongoing issues with the E-Samplers and a lack of alternative hire equipment, Malabar conducted a review of alternatives, obtained a quotation for a replacement and in June 2022 submitted an application to the EPA to vary the EPL to permit an alternative to the E-Sampler. Malabar has continued to closely monitor the situation with this equipment and received an EPL amendment to enable the replacement of the faulty equipment. In September 2022 Malabar issued a purchase order to a supplier for the provision of two new PALAS AQ Smart devices; following receipt of funds, the supplier advised that Goods were ordered on 17 October 2022; the lead time is estimated as being 6–8 weeks plus delivery time. An update will be provided in subsequent reports.

Table 3. Blast monitoring results for October 2022

EPA identification no.	Sampling point	Time and Date of blast	Date final report obtained	Unit of measure	Averaging period	Measured value	100 percentile limit	95 percentile limit	Exceedance (yes/no)	Observations
13	Monitoring location BM1	No blasting occurred during October 2022								
14	Monitoring location BM2									
15	Monitoring location BM3									

Table 4. Noise monitoring results for 17 October 2022

EPA identification no.	Sampling point	Day (L _A eq (15 minute))		Evening (L _A eq (15 minute))		Night (L _A eq (15 minute))		Night (L _{A1} (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	67	41	60	41	60	52	85	No	Project inaudible
17	NM2	44	48	40	46	40	46	52	59	No	Project inaudible
18	NM3	40	52	35	55	35	50	52	75	No	Project inaudible
-	NM4	40	66	35	66	35	63	52	87	No	Project inaudible
Additional Information											
Date of Final Report	15 November 2022										
Weather Conditions	Wind speed 2.9 – 9.0 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, insects, freight trains, and a nearby lawnmower. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 18 October 2022

EPA identification no.	Sampling point	Day (L _A eq (15 minute))		Evening (L _A eq (15 minute))		Night (L _A eq (15 minute))		Night (L _{A1} (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	70	41	65	41	61	52	86	No	Project inaudible
17	NM2	44	44	40	48	40	46	52	69	No	Project inaudible
18	NM3	40	55	35	54	35	50	52	71	No	Project inaudible
-	NM4	40	67	35	65	35	55	52	81	No	Project inaudible
Additional Information											
Date of Final Report	15 November 2022										
Weather Conditions	Wind speed 2.4 – 8.4 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, freight train, birds, frogs, and insects. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										


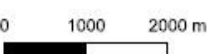
Table 6. Noise monitoring results for 19 October 2022

EPA identification no.	Sampling point	Day (L _A eq (15 minute))		Evening (L _A eq (15 minute))		Night (L _A eq (15 minute))		Night (L _{A1} (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	68	41	63	41	58	52	80	No	Project inaudible
17	NM2	44	45	40	44	40	46	52	58	No	Project inaudible
18	NM3	40	53	35	57	35	51	52	73	No	Project inaudible
-	NM4	40	67	35	69	35	59	52	82	No	Project inaudible
Additional Information											
Date of Final Report	15 November 2022										
Weather Conditions	Wind speed 1.2 – 3.6 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs, and aeroplanes. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

APPENDIX 1 – MAPS OF MONITORING LOCATIONS





 	<p>Legend</p> <p>Development Application Area</p> <ul style="list-style-type: none"> Development Application Area Indicative Surface Development Area Extent of Conventional Subsidence <p>Monitoring Locations</p> <ul style="list-style-type: none"> ● Attended Noise Monitoring ● Real-time Noise Monitor ● Blast Monitor ● Weather Station 	<p style="text-align: center;">Maxwell UG Project Noise and Blast Monitoring Locations</p> <p>Drawn by: DM Date: 7/2/22 CRS: GDA94/MGA zone 56 Aerial image: Google Satellite 2020</p>
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