



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

May 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	May 2022
Date of Publication	29 June 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 May 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	01/05/2022	31/05/2022	micrograms per cubic metre	5 minutes	Continuous	0	38	10	4805
9	ES-02	01/05/2022	31/05/2022	micrograms per cubic metre	5 minutes	Continuous	0	7	6	94
10	ES-03	01/05/2022	31/05/2022	micrograms per cubic metre	5 minutes	Continuous	0	1870	24	4306
11	ES-04	01/05/2022	31/05/2022	micrograms per cubic metre	5 minutes	Continuous	0	13	12	65

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. The scheduled calibration on 28/4/22 and 25/5/22 noted a 'Solenoid error' on the operating screen; all other checks passed (leak check, temperature, pressure, flow, battery etc). 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. The same scheduled calibrations for ES-02 recorded a 'Detector error' however there is less effect on the data; Malabar has continued to monitor the situation with this monitor with a review to replacing it when the application to the EPA to vary the EPL is approved.

Table 3. Blast monitoring results for May 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 May 2022								
14	Monitoring location BM2									
15	Monitoring location BM3									

Table 4. Noise monitoring results for 24 May 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	67	41	62	52	87	No	Project inaudible
17	NM2	44	38	40	39	40	38	52	45	No	Project inaudible
18	NM3	40	56	35	55	35	48	52	74	No	Project inaudible
-	NM4	40	71	35	66	35	64	52	91	No	Project inaudible
Additional Information											
Date of Final Report	20 June 2022										
Weather Conditions	Wind speed 0.9–5.0 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs, aeroplanes. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 25 May 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	69	41	53	41	53	52	82	No	Project inaudible
17	NM2	44	39	40	37	40	35	52	56	No	Project inaudible
18	NM3	40	57	35	67	35	53	52	72	No	Project inaudible
-	NM4	40	69	35	52	35	65	52	89	No	Project inaudible
Additional Information											
Date of Final Report	20 June 2022										
Weather Conditions	Wind speed 0.9–2.8 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										


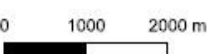
Table 6. Noise monitoring results for 26 May 2022

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	69	41	67	41	62	52	88	No	Project inaudible
17	NM2	44	49	40	38	40	34	52	41	No	Project inaudible
18	NM3	40	58	35	56	35	46	52	70	No	Project inaudible
-	NM4	40	71	35	67	35	68	52	90	No	Project inaudible
Additional Information											
Date of Final Report	20 June 2022										
Weather Conditions	Wind speed 0.6–4.0 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, and frogs. 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 (Red dashed line) Indicative Surface Development Area (Yellow fill) Extent of Conventional Subsidence (Blue dashed line) <p>Monitoring Locations</p> <ul style="list-style-type: none"> Attended Noise Monitoring (Red dot) Real-time Noise Monitor (Green dot) Blast Monitor (Blue dot) Weather Station (White dot) 	<p>Maxwell UG Project Noise and Blast Monitoring Locations</p> <hr/> <p>Drawn by: DM Date: 7/2/22 CRS: GDA94/MGA zone 56 Aerial image: Google Satellite 2020</p>
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