



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

June 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	June 2022
Date of Publication	28 July 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 June 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	01/06/2022	30/06/2022	micrograms per cubic metre	5 minutes	Continuous	0	9	6	390
9	ES-02	01/06/2022	30/06/2022	micrograms per cubic metre	5 minutes	Continuous	0	7	6	36
10	ES-03	01/06/2022	30/06/2022	micrograms per cubic metre	5 minutes	Continuous	0	2185	3840	4320
11	ES-04	01/06/2022	30/06/2022	micrograms per cubic metre	5 minutes	Continuous	0	12	11	49

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). 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 these monitors with a review to replacing them when the application to the EPA to vary the EPL is approved.

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

Table 4. Noise monitoring results for 20 June 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	66	41	63	52	86	No	Project inaudible
17	NM2	44	43	40	48	40	38	52	57	No	Project inaudible
18	NM3	40	54	35	55	35	44	52	70	No	Project inaudible
-	NM4	40	71	35	68	35	67	52	91	No	Project inaudible
Additional Information											
Date of Final Report	12 July 2022										
Weather Conditions	Wind speed 0.9–3.1 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs, a dog and trains. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 21 June 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	68	41	62	52	86	No	Project inaudible
17	NM2	44	45	40	41	40	40	52	64	No	Project inaudible
18	NM3	40	54	35	54	35	46	52	66	No	Project inaudible
-	NM4	40	70	35	70	35	68	52	90	No	Project inaudible
Additional Information											
Date of Final Report	12 July 2022										
Weather Conditions	Wind speed 1.2–4.0 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.										


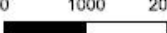
Table 6. Noise monitoring results for 22 June 2022

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	66	41	59	52	79	No	Project inaudible
17	NM2	44	46	40	45	40	38	52	66	No	Project inaudible
18	NM3	40	56	35	54	35	54	52	79	No	Project inaudible
-	NM4	40	70	35	68	35	67	52	91	No	Project inaudible
Additional Information											
Date of Final Report	12 July 2022										
Weather Conditions	Wind speed 0.6–3.7 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>0 1000 2000 m</p> 	<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 (Orange dot) 	<p>Maxwell UG Project</p> <p>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>