



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

July 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	July 2022
Date of Publication	22 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 July 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	01/07/2022	31/07/2022	micrograms per cubic metre	5 minutes	Continuous	0	38	7	5521
9	ES-02	01/07/2022	31/07/2022	micrograms per cubic metre	5 minutes	Continuous	0	6	5	33
10	ES-03	01/07/2022	31/07/2022	micrograms per cubic metre	5 minutes	Continuous	0	3197	3907	4251
11	ES-04	01/07/2022	31/07/2022	micrograms per cubic metre	5 minutes	Continuous	0	10	9	51

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, received an EPL amendment and is now in a position to replace the faulty equipment; an update will be provided in subsequent reports.

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

Table 4. Noise monitoring results for 19 July 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	66	41	67	52	96	No	Project inaudible
17	NM2	44	40	40	41	40	41	52	64	No	Project inaudible
18	NM3	40	56	35	58	35	52	52	76	No	Project inaudible
-	NM4	40	71	35	71	35	40	52	68	No	Project inaudible
Additional Information											
Date of Final Report	8 August 2022										
Weather Conditions	Wind speed 0.5–4.7 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs and an aeroplane. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 20 July 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	66	41	63	52	86	No	Project inaudible
17	NM2	44	42	40	41	40	41	52	60	No	Project inaudible
18	NM3	40	57	35	57	35	50	52	70	No	Project inaudible
-	NM4	40	70	35	57	35	69	52	93	No	Project inaudible
Additional Information											
Date of Final Report	8 August 2022										
Weather Conditions	Wind speed 0.5–4.7 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, and frogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 6. Noise monitoring results for 21 July 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	71	41	65	41	67	52	89	No	Project inaudible
17	NM2	44	48	40	46	40	44	52	62	No	Project inaudible
18	NM3	40	59	35	55	35	50	52	73	No	Project inaudible
-	NM4	40	74	35	67	35	68	52	91	No	Project inaudible
Additional Information											
Date of Final Report	8 August 2022										
Weather Conditions	Wind speed 2.9–8.5 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds and frogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

APPENDIX 1 – MAPS OF MONITORING LOCATIONS



0 1000 2000 m

Maxwell UG Project
Air Quality Monitoring Locations

Drawn by: DM
Date: [11/05/2021]
CRS: GDA94/MGA zone 56
Aerial Image: Google Satellite 2020





	<p>0 1000 2000 m</p> 	<p>Legend</p> <p>Development Application Area</p> <p>Indicative Surface Development Area</p> <p>Extent of Conventional Subsidence</p>	<p>Monitoring Locations:</p> <p>Attended Noise Monitoring</p> <p>Real-time Noise Monitor</p> <p>Blast Monitor</p> <p>Weather Station</p>	<p>Maxwell UG Project</p> <p>Noise and Blast Monitoring Locations</p>
				<p>Drawn by: DM</p> <p>Date: 7/2/22</p> <p>CRS: GDA94/MGA zone 56</p> <p>Aerial image: Google Satellite 2020</p>