



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

September 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	September 2022
Date of Publication	20 October 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 September 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	01/09/2022	30/09/2022	micrograms per cubic metre	5 minutes	Continuous	0	26	7	4315
9	ES-02	01/09/2022	30/09/2022	micrograms per cubic metre	5 minutes	Continuous	0	9	8	63
10	ES-03	01/09/2022	30/09/2022	micrograms per cubic metre	5 minutes	Continuous	0	3489	3864	4257
11	ES-04	01/09/2022	30/09/2022	micrograms per cubic metre	5 minutes	Continuous	0	10	9	38

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 these 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 September 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 September 2022								
14	Monitoring location BM2									
15	Monitoring location BM3									

Table 4. Noise monitoring results for 12 September 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	66	41	63	52	88	No	Project inaudible
17	NM2	44	43	40	41	40	40	52	71	No	Project inaudible
18	NM3	40	53	35	54	35	51	52	73	No	Project inaudible
-	NM4	40	71	35	69	35	66	52	89	No	Project inaudible
Additional Information											
Date of Final Report	10 October 2022										
Weather Conditions	Wind speed 1.9–5.1 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, dogs, and insects. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 13 September 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	65	41	62	52	88	No	Project inaudible
17	NM2	44	41	40	42	40	40	52	58	No	Project inaudible
18	NM3	40	56	35	55	35	53	52	79	No	Project inaudible
-	NM4	40	66	35	70	35	47	52	73	No	Project inaudible
Additional Information											
Date of Final Report	10 October 2022										
Weather Conditions	Wind speed 1.5–12.5 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.										


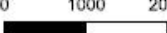
Table 6. Noise monitoring results for 14 September 2022

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	31	52	50	No	Project inaudible
17	NM2	44	40	40	40	40	41	52	68	No	Project inaudible
18	NM3	40	56	35	55	35	49	52	73	No	Project inaudible
-	NM4	40	69	35	65	35	66	52	90	No	Project inaudible
Additional Information											
Date of Final Report	10 October 2022										
Weather Conditions	Wind speed 2.1–5.9 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





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