



# Maxwell Underground Coal Mine Project

## Environmental Monitoring Data

### April 2023

## 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**

<b>Environment Protection Licence Number</b>	1323
<b>Licensee Details</b>	Maxwell Ventures (Management) Pty Limited Private Mail Bag 9 Muswellbrook NSW 2333
<b>Premises</b>	Maxwell Underground Coal Mine Project Thomas Mitchell Drive Muswellbrook NSW 2333
<b>Link to the EPA Register</b>	<a href="http://app.epa.nsw.gov.au/prpoeoapp/">http://app.epa.nsw.gov.au/prpoeoapp/</a>
<b>Reporting Month</b>	April 2023
<b>Date of Publication</b>	1 June 2023
<b>Version</b>	1
<b>Correction Log</b>	-

## 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**.

A map of the monitoring locations is provided in **Appendix 1**.

**Table 2. Air quality monitoring results for April 2023**

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	01/04/2023	30/04/2023	micrograms per cubic metre	5 minutes	Continuous	0	23	8	3982
9	ES-02	01/04/2023	30/04/2023	micrograms per cubic metre	5 minutes	Continuous	0	10	9	49
10	ES-03	01/04/2023	30/04/2023	micrograms per cubic metre	5 minutes	Continuous	2	8	7	18
11	ES-04	01/04/2023	30/04/2023	micrograms per cubic metre	5 minutes	Continuous	0	15	13	96

Results for sites ES-02 and ES-03 now include the new Palas AQ-Guard Smart devices, installed 27/1/23 for ES-02 and 30/1/23 for ES-03. Sites ES-01 and ES-04 continue to have the Met One E-Sampler device.

**Table 3. Blast monitoring results for April 2023**

EPA identification no.	Sampling point	Time and Date of blast	Date data obtained	Monitored variable	Unit of measure	Averaging period	Measured value*	100 percentile limit for all blasts during each reporting period	95 percentile limit for all blasts during reporting period	Exceedance (yes/no)	Observations
13	Monitoring location BM1 (Antiene)	No blast during the reporting period	-	Airblast overpressure	dB (Lin Peak)	Instantaneous	-	120	115	-	-
14	Monitoring location BM2 (Plashett)						-			-	
15	Monitoring location BM3 (Bowfield)						-			-	
13	Monitoring location BM1 (Antiene)			Ground vibration peak particle velocity	mm/second	Instantaneous	-	10	5	-	-
14	Monitoring location BM2 (Plashett)						-			-	
15	Monitoring location BM3 (Bowfield)						-			-	

\* The measured value presented is the maximum measured value 15 minutes prior to and 15 minutes after the blast. Whilst the blast monitor measures continuously, measured levels were either very low or did not exceed background levels, and hence no specific measurements can be attributed to the blast. The reporting period for the EPL is 1 May to 30 April each year.

**Table 4. Noise monitoring results for 25 April 2023**

EPA identification no.	Sampling point	Day (L <sub>A</sub> eq (15 minute))		Evening (L <sub>A</sub> eq (15 minute))		Night (L <sub>A</sub> eq (15 minute))		Night (L <sub>A1</sub> (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	59	41	61	41	60	52	83	No	Project inaudible
17	NM2	44	42	40	38	40	41	52	75	No	Project inaudible
18	NM3	40	56	35	52	35	51	52	71	No	Project inaudible
-	NM4	40	65	35	64	35	61	52	87	No	Project inaudible
<b>Additional Information</b>											
Date of Final Report	22 May 2023										
Weather Conditions	Wind speed 2.2 – 4.6 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, insects, and dogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

**Table 5. Noise monitoring results for 26 April 2023**

EPA identification no.	Sampling point	Day (L <sub>A</sub> eq (15 minute))		Evening (L <sub>A</sub> eq (15 minute))		Night (L <sub>A</sub> eq (15 minute))		Night (L <sub>A1</sub> (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	67	41	63	41	61	52	85	No	Project inaudible
17	NM2	44	41	40	36	40	35	52	59	No	Project inaudible
18	NM3	40	53	35	56	35	52	52	70	No	Project inaudible
-	NM4	40	66	35	66	35	33	52	63	No	Project inaudible
<b>Additional Information</b>											
Date of Final Report	22 May 2023										
Weather Conditions	Wind speed 0.9 – 6.2 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, insects, trains, and dogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

**Table 6. Noise monitoring results for 27 April 2023**

EPA identification no.	Sampling point	Day (L <sub>A</sub> eq (15 minute))		Evening (L <sub>A</sub> eq (15 minute))		Night (L <sub>A</sub> eq (15 minute))		Night (L <sub>A1</sub> (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	67	41	63	41	62	52	85	No	Project inaudible
17	NM2	44	44	40	43	40	38	52	71	No	Project inaudible
18	NM3	40	55	35	53	35	53	52	75	No	Project inaudible
-	NM4	40	67	35	66	35	61	52	86	No	Project inaudible
<b>Additional Information</b>											
Date of Final Report	22 May 2023										
Weather Conditions	Wind speed 0.9 – 4.8 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, insects, and trains. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

# APPENDIX 1 – MAP OF MONITORING LOCATIONS

