



# Maxwell Underground Coal Mine Project

## Environmental Monitoring Data

### August 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>	August 2023
<b>Date of Publication</b>	20 September 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 August 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	01/08/2023	31/08/2023	micrograms per cubic metre	5 minutes	Continuous	0	19	9	1005
9	ES-02	01/08/2023	31/08/2023	micrograms per cubic metre	1 minute	Continuous	0	12	10	908
10	ES-03	01/08/2023	31/08/2023	micrograms per cubic metre	1 minute	Continuous	0	12	9	320
11	ES-04	01/08/2023	31/08/2023	micrograms per cubic metre	5 minutes	Continuous	0	12	11	87

A Palas AQ-Guard Smart device was installed at site ES-02 on 27/1/23 and 30/1/23 at ES-03. Sites ES-01 and ES-04 continue to have the Met One E-Sampler device.

**Table 3. Blast monitoring results for August 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 2 August 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	65	41	55	52	83	No	Project inaudible
17	NM2	44	45	40	35	40	30	52	50	No	Project inaudible
18	NM3	40	57	35	58	35	44	52	64	No	Project inaudible
-	NM4	40	66	35	65	35	63	52	86	No	Project inaudible
<b>Additional Information</b>											
Date of Final Report	4 September 2023										
Weather Conditions	Wind speed 0.9 – 5.9 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, and a nearby water pump. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

**Table 5. Noise monitoring results for 3 August 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	65	41	63	41	57	52	87	No	Project inaudible
17	NM2	44	42	40	39	40	38	52	69	No	Project inaudible
18	NM3	40	58	35	55	35	54	52	75	No	Project inaudible
-	NM4	40	66	35	63	35	61	52	87	No	Project inaudible
Additional Information											
Date of Final Report	4 September 2023										
Weather Conditions	Wind speed 1.0 – 3.0 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, frogs, and a nearby water pump. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

**Table 6. Noise monitoring results for 4 August 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	68	41	62	41	56	52	83	No	Project inaudible
17	NM2	44	37	40	31	40	30	52	50	No	Project inaudible
18	NM3	40	58	35	59	35	49	52	63	No	Project inaudible
-	NM4	40	66	35	67	35	58	52	85	No	Project inaudible
<b>Additional Information</b>											
Date of Final Report	4 September 2023										
Weather Conditions	Wind speed 1.4 – 3.3 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 – MAP OF MONITORING LOCATIONS

