



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

December 2021

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	December 2021
Date of Publication	10 January 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 December 2021

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	01/12/2021	31/12/2021	micrograms per cubic metre	5 minutes	Continuous	0	24	10	2856
9	ES-02	01/12/2021	31/12/2021	micrograms per cubic metre	5 minutes	Continuous	0	10	8	57
10	ES-03	01/12/2021	31/12/2021	micrograms per cubic metre	5 minutes	Continuous	0	541	11	4113
11	ES-04	01/12/2021	31/12/2021	micrograms per cubic metre	5 minutes	Continuous	0	16	15	123

Table 3. Blast monitoring results for December 2021

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 December 2021								
14	Monitoring location BM2									
15	Monitoring location BM3									

Table 4. Noise monitoring results for 13 December 2021

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	61	41	52	41	55	52	79	No	Project inaudible
17	NM2	44	47	40	51	40	50	52	60	No	Project inaudible
18	NM3	40	53	35	63	35	65	52	93	No	Project inaudible
-	NM4	40	72	35	55	35	52	52	72	No	Project inaudible
Additional Information											
Date of Final Report	10 January 2022										
Weather Conditions	Wind speed 1.8–7.3 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, a lawnmower, frogs, traffic. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

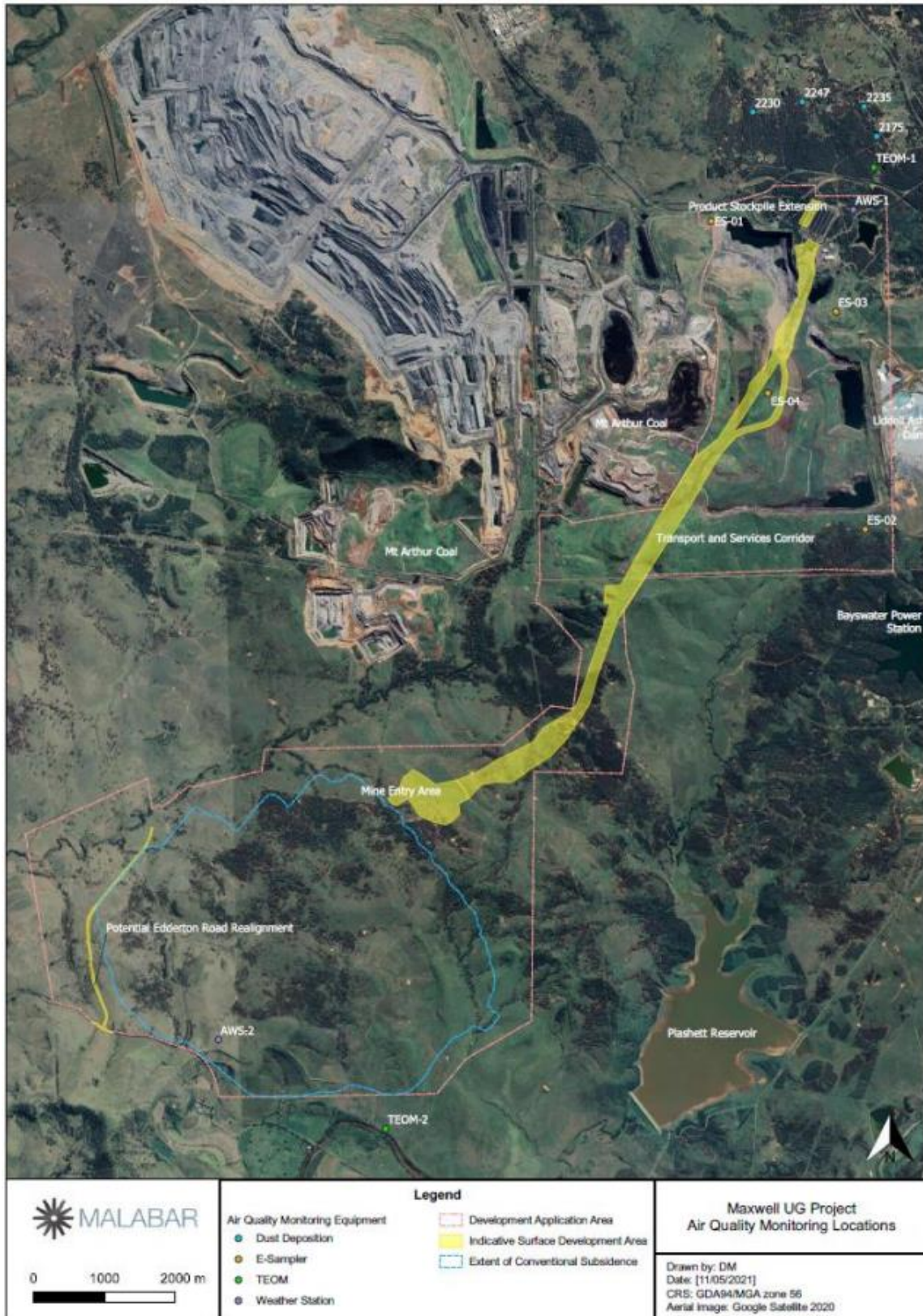
Table 5. Noise monitoring results for 14 December 2021

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	65	41	64	41	50	52	74	No	Project inaudible
17	NM2	44	40	40	43	40	48	52	54	No	Project inaudible
18	NM3	40	69	35	70	35	64	52	90	No	Project inaudible
-	NM4	40	54	35	53	35	50	52	71	No	Project inaudible
Additional Information											
Date of Final Report	10 January 2022										
Weather Conditions	Wind speed 1.8–7.3 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, a train, insects, & frogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 6. Noise monitoring results for 15 December 2021

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	69	52	96	No	Project inaudible
17	NM2	44	42	40	43	40	49	52	72	No	Project inaudible
18	NM3	40	69	35	64	35	60	52	79	No	Project inaudible
-	NM4	40	64	35	68	35	62	52	81	No	Project inaudible
Additional Information											
Date of Final Report	10 January 2022										
Weather Conditions	Wind speed 1.1–4.1 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.										

APPENDIX 1 – MAPS OF MONITORING LOCATIONS





 0 1000 2000 m 	Legend		Maxwell UG Project Noise and Blast Monitoring Locations
	Development Application Area Indicative Surface Development Area Extent of Conventional Subsidence	Monitoring Locations Attended Noise Monitoring Real-time Noise Monitor Blast Monitor Weather Station	