



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

February 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	February 2022
Date of Publication	10 March 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 February 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	01/02/2022	28/02/2022	micrograms per cubic metre	5 minutes	Continuous	0	17	14	158
9	ES-02	01/02/2022	28/02/2022	micrograms per cubic metre	5 minutes	Continuous	0	17	10	117
10	ES-03	01/02/2022	28/02/2022	micrograms per cubic metre	5 minutes	Continuous	0	274	12	4086
11	ES-04	01/02/2022	28/02/2022	micrograms per cubic metre	5 minutes	Continuous	0	14	13	47

As stated in the January 2022 report, a replacement sampler (a Thermo Scientific ADR1500) was installed at ES-03 on 3 February 2022. This was due to a large range of recorded values which were deemed spurious. A replacement E-Sampler was not available, hence a Thermo Scientific ADR 1500 was installed; this works on the same light scattering principle as the E-Sampler.

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

Table 4. Noise monitoring results for 21 February 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	65	41	62	41	40	52	60	No	Project inaudible
17	NM2	44	60	40	41	40	36	52	52	No	Project inaudible
18	NM3	40	54	35	51	35	59	52	70	No	Project inaudible
-	NM4	40	71	35	69	35	72	52	95	No	Project inaudible
Additional Information											
Date of Final Report	7 March 2022										
Weather Conditions	Wind speed 1.4–4.2 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs and cows. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

Table 5. Noise monitoring results for 22 February 2022

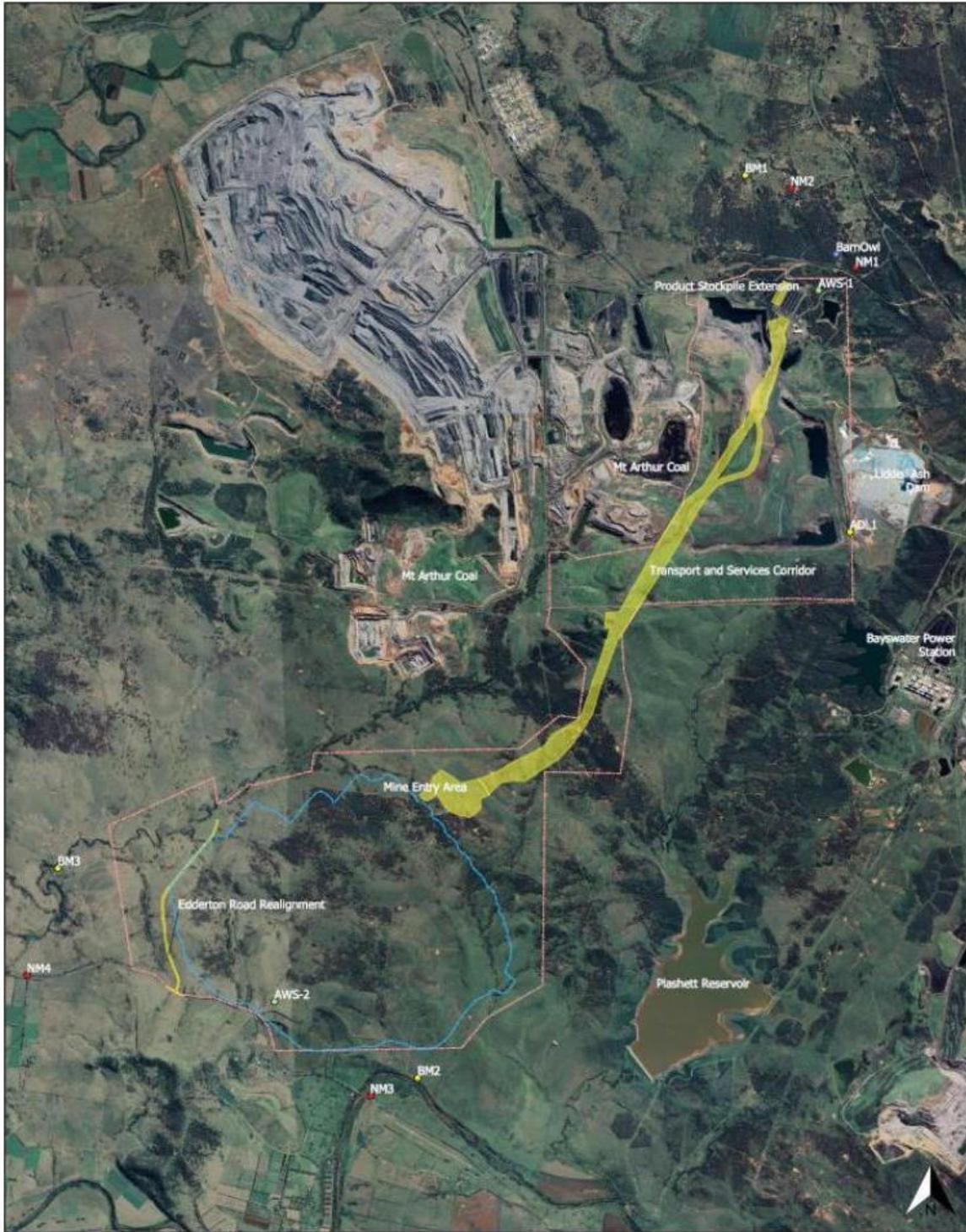
EPA identification no.	Sampling point	Day (L _A eq (15 minute))		Evening (L _A eq (15 minute))		Night (L _A eq (15 minute))		Night (L _{A1} (1 minute))		Exceedance (yes/no)	Observations
		Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level	Criteria	Noise Level		
16	NM1	45	68	41	63	41	41	52	86	No	Project inaudible
17	NM2	44	53	40	36	40	61	52	54	No	Project inaudible
18	NM3	40	56	35	56	35	49	52	68	No	Project inaudible
-	NM4	40	72	35	69	35	66	52	90	No	Project inaudible
Additional Information											
Date of Final Report	7 March 2022										
Weather Conditions	Wind speed 2.8–9.4 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.										

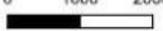
Table 6. Noise monitoring results for 23 February 2022

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	65	41	60	52	86	No	Project inaudible
17	NM2	44	44	40	45	40	38	52	57	No	Project inaudible
18	NM3	40	69	35	54	35	48	52	70	No	Project inaudible
-	NM4	40	55	35	67	35	68	52	90	No	Project inaudible
Additional Information											
Date of Final Report	7 March 2022										
Weather Conditions	Wind speed 1.4–10.2 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	