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Maxwell Underground Coal Mine Project

Environmental Monitoring Data

March 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	March 2022
Date of Publication	6 April 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 March 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	01/03/2022	31/03/2022	micrograms per cubic metre	5 minutes	Continuous	0	18	13	3462
9	ES-02	01/03/2022	31/03/2022	micrograms per cubic metre	5 minutes	Continuous	0	8	8	62
10	ES-03	01/03/2022	31/03/2022	micrograms per cubic metre	5 minutes	Continuous	0	19	4	1006
11	ES-04	01/03/2022	31/03/2022	micrograms per cubic metre	5 minutes	Continuous	0	11	11	46

As stated in the January 2022 report, a replacement sampler (a Thermo Scientific ADR-1500) 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. Due to an issue with the solar panel controller, the ADR-1500 did not record data from 28/03/2022 to 5/04/2022.

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

Table 4. Noise monitoring results for 16 March 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	67	41	64	41	59	52	82	No	Project inaudible
17	NM2	44	41	40	44	40	46	52	57	No	Project inaudible
18	NM3	40	54	35	56	35	54	52	70	No	Project inaudible
-	NM4	40	72	35	67	35	60	52	89	No	Project inaudible
Additional Information											
Date of Final Report	5 April 2022										
Weather Conditions	Wind speed 2.3–6.5 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.										

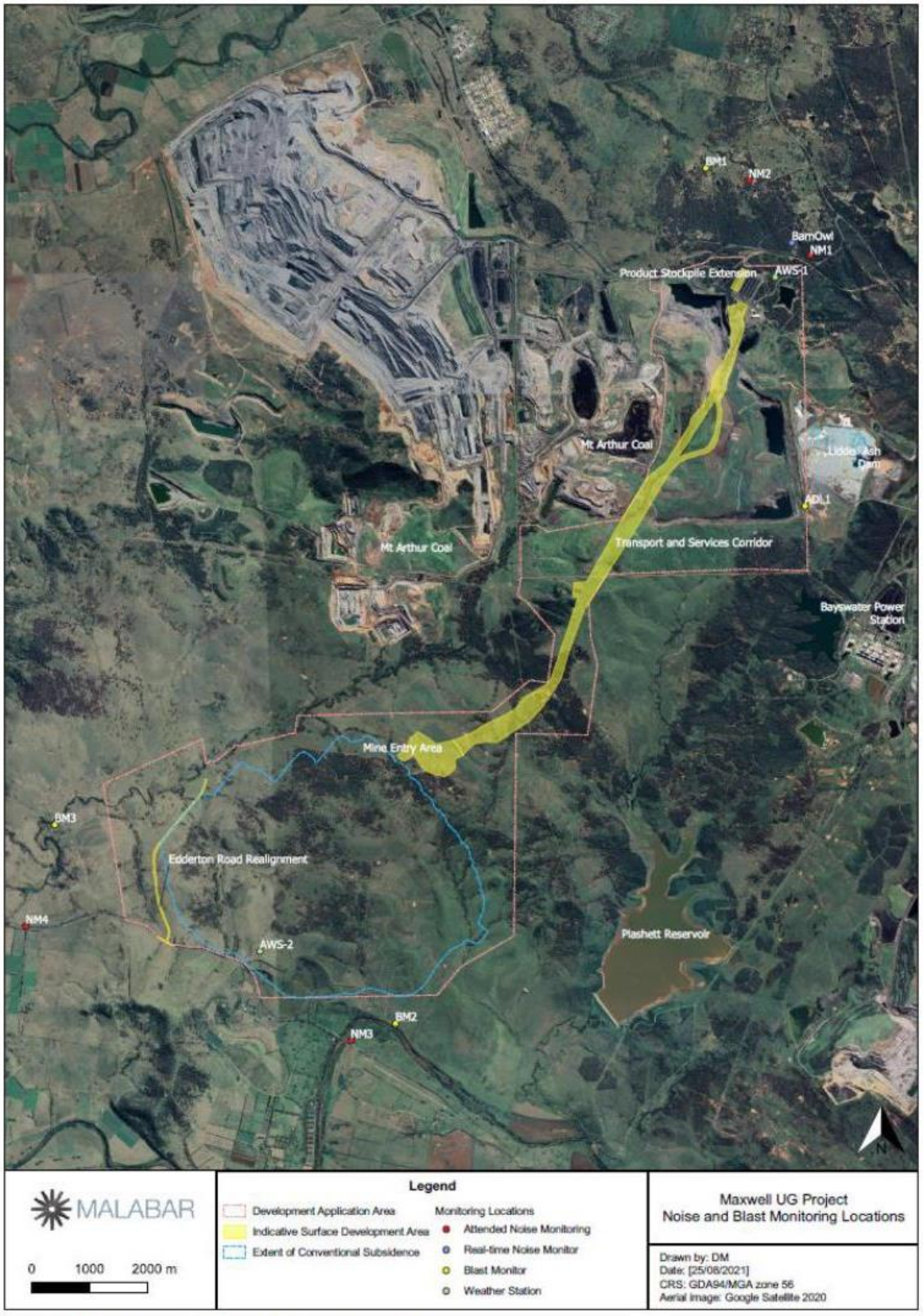
Table 5. Noise monitoring results for 17 March 2022

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	67	41	62	41	61	52	88	No	Project inaudible
17	NM2	44	52	40	44	40	44	52	53	No	Project inaudible
18	NM3	40	50	35	56	35	52	52	68	No	Project inaudible
-	NM4	40	71	35	70	35	64	52	89	No	Project inaudible
Additional Information											
Date of Final Report	5 April 2022										
Weather Conditions	Wind speed 2.0–3.2 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.										

Table 6. Noise monitoring results for 18 March 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	61	41	49	52	78	No	Project inaudible
17	NM2	44	42	40	41	40	45	52	60	No	Project inaudible
18	NM3	40	53	35	56	35	50	52	68	No	Project inaudible
-	NM4	40	72	35	69	35	57	52	86	No	Project inaudible
Additional Information											
Date of Final Report	5 April 2022										
Weather Conditions	Wind speed 1.6–6.1 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects, frogs, and dogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

APPENDIX 1 – MAPS OF MONITORING LOCATIONS


BM1
NM2
BarnOwl
NM1
Product Stockpile Extension
AWS-1
Mt Arthur Coal
Liddell Ash Dam
AD_1
Mt Arthur Coal
Transport and Services Corridor
Bayswater Power Station
Mine Entry Area
BM3
Edderton Road Realignment
NM4
AWS-2
Plashett Reservoir
BM2
NM3
N
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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: [25/08/2021]
CRS: GDA94/MGA zone 56
Aerial image: Google Satellite 2020

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