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Maxwell Underground Coal Mine Project

Environmental Monitoring Data

January 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	January 2022
Date of Publication	7 February 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 January 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	01/01/2022	31/01/2022	micrograms per cubic metre	5 minutes	Continuous	0	20	15	365
9	ES-02	01/01/2022	31/01/2022	micrograms per cubic metre	5 minutes	Continuous	0	11	11	51
10	ES-03	01/01/2022	31/01/2022	micrograms per cubic metre	5 minutes	Continuous	0	2561	3805	4176
11	ES-04	01/01/2022	31/01/2022	micrograms per cubic metre	5 minutes	Continuous	0	17	15	73

A replacement sampler has been sought for ES-03 due to the high values which are deemed spurious. A replacement E-Sampler was not available, hence a Thermo Scientific ADR 1500 was installed on 3 February 2022, this works on the same light scattering principle as the E-Sampler. Results will be presented in the February 2022 report.

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

Table 4. Noise monitoring results for 10 January 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	63	41	59	52	85	No	Project inaudible
17	NM2	44	44	40	58	40	43	52	56	No	Project inaudible
18	NM3	40	55	35	53	35	47	52	66	No	Project inaudible
-	NM4	40	71	35	70	35	66	52	90	No	Project inaudible
Additional Information											
Date of Final Report	21 January 2022										
Weather Conditions	Wind speed 1.2–4.8 m/s. No rain during monitoring.										
Notes	Measured noise sources included traffic, birds, insects and frogs. The Maxwell Underground Coal Mine Project was inaudible at all locations and times.										

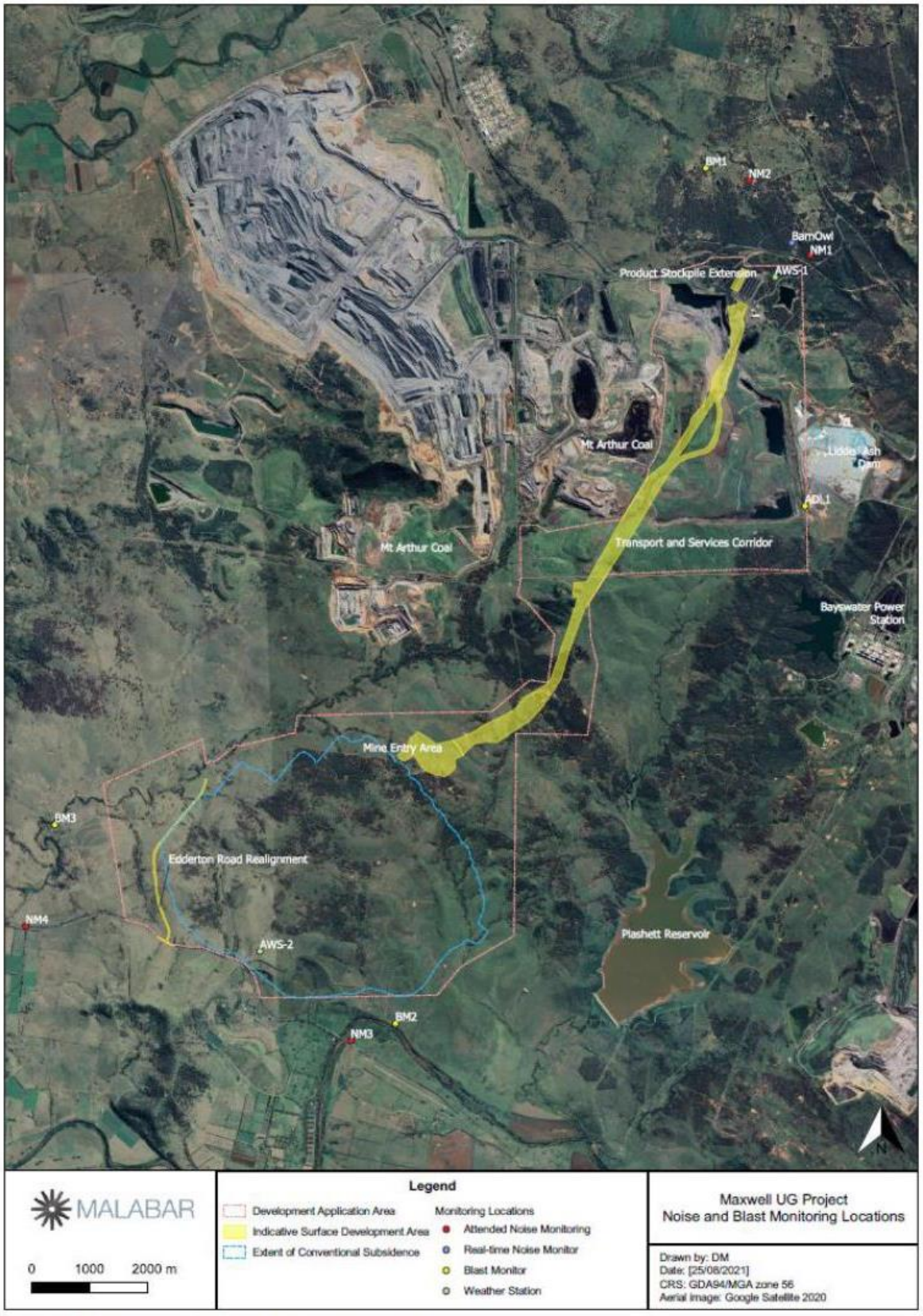
Table 5. Noise monitoring results for 11 January 2022

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	58	41	50	52	78	No	Project inaudible
17	NM2	44	46	40	54	40	43	52	56	No	Project inaudible
18	NM3	40	55	35	53	35	50	52	71	No	Project inaudible
-	NM4	40	72	35	70	35	65	52	92	No	Project inaudible
Additional Information											
Date of Final Report	21 January 2022										
Weather Conditions	Wind speed 1.2–4.2 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 12 January 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	66	41	64	41	60	52	87	No	Project inaudible
17	NM2	44	45	40	58	40	46	52	64	No	Project inaudible
18	NM3	40	71	35	55	35	44	52	65	No	Project inaudible
-	NM4	40	56	35	67	35	64	52	91	No	Project inaudible
Additional Information											
Date of Final Report	21 January 2022										
Weather Conditions	Wind speed 1.9–8.1 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


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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