



Maxwell Underground Coal Mine Project

Environmental Monitoring Data

September 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 | September 2021 |
| Date of Publication | 1 November 2021 |
| 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 September 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 | 01/09/2021 | 31/09/2021 | micrograms per cubic metre | 5 minutes | Continuous | 0 | 24 | 7 | 6503 |
| 9 | ES-02 | 01/09/2021 | 31/09/2021 | micrograms per cubic metre | 5 minutes | Continuous | 0 | 9 | 8 | 69 |
| 10 | ES-03 | 01/09/2021 | 31/09/2021 | micrograms per cubic metre | 5 minutes | Continuous | 0 | 52 | 7 | 4205 |
| 11 | ES-04 | 01/09/2021 | 31/09/2021 | micrograms per cubic metre | 5 minutes | Continuous | 0 | 12 | 10 | 68 |

Table 3. Blast monitoring results for September 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 September 2021 | | | | | | | | |
| 14 | Monitoring location BM2 | | | | | | | | | |
| 15 | Monitoring location BM3 | | | | | | | | | |

Table 4. Noise monitoring results for 20 September 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 | 69 | 41 | 49 | 41 | 55 | 52 | 76 | No | Project inaudible |
| 17 | NM2 | 44 | 53 | 40 | 42 | 40 | 40 | 52 | 50 | No | Project inaudible |
| 18 | NM3 | 40 | 56 | 35 | 54 | 35 | 58 | 52 | 81 | No | Project inaudible |
| Additional Information | | | | | | | | | | | |
| Date of Final Report | 28 October 2021 | | | | | | | | | | |
| Weather Conditions | Wind speed 1.7–5.5 m/s. No rain during monitoring. | | | | | | | | | | |
| Notes | Measured noise sources included traffic, birds, frogs, a nearby mine, insects, a nearby stream, residential, a lawn mower, cows. The Maxwell Underground Coal Mine Project was inaudible at all locations and times. | | | | | | | | | | |

Table 5. Noise monitoring results for 21 September 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 | 60 | 41 | 52 | 41 | 57 | 52 | 76 | No | Project inaudible |
| 17 | NM2 | 44 | 40 | 40 | 40 | 40 | 38 | 52 | 50 | No | Project inaudible |
| 18 | NM3 | 40 | 58 | 35 | 52 | 35 | 55 | 52 | 81 | No | Project inaudible |
| Additional Information | | | | | | | | | | | |
| Date of Final Report | 28 October 2021 | | | | | | | | | | |
| Weather Conditions | Wind speed 1.0–2.7 m/s. No rain during monitoring. | | | | | | | | | | |
| Notes | Measured noise sources included traffic, birds, frogs, a nearby mine, dogs, cows. The Maxwell Underground Coal Mine Project was inaudible at all locations and times. | | | | | | | | | | |

Table 6. Noise monitoring results for 22 September 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 | 59 | 41 | 51 | 41 | 41 | 52 | 50 | No | Project inaudible |
| 17 | NM2 | 44 | 46 | 40 | 42 | 40 | 39 | 52 | 46 | No | Project inaudible |
| 18 | NM3 | 40 | 51 | 35 | 54 | 35 | 30 | 52 | 52 | No | Project inaudible |
| Additional Information | | | | | | | | | | | |
| Date of Final Report | 28 October 2021 | | | | | | | | | | |
| Weather Conditions | Wind speed 0.9–3.0 m/s. No rain during monitoring. | | | | | | | | | | |
| Notes | Measured noise sources included traffic, aeroplanes, birds, frogs, a nearby mine. 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 Blast Monitoring Locations |
| | <ul style="list-style-type: none">  EPL1323 Premises Boundary  Extent of Underground Development  Blast Monitoring Locations | Drawn by: DM Date: [21/05/2021] CRS: GDA94/MGA zone 56 Aerial image: Google Satellite 2020 |



| | | |
|---|---|--|
|  <p>0 1000 2000 m</p>  | <p style="text-align: center;">Legend</p> <ul style="list-style-type: none">  EPL1323 Premises Boundary  Extent of Underground Development  Noise Monitoring Locations | <p style="text-align: center;">Maxwell UG Project Noise Monitoring Locations</p> <hr/> <p>Drawn by: DM Date: [28/07/2021] CRS: GDA94/MGA zone 56 Aerial image: Google Satellite 2020</p> |
|---|---|--|