

# 2025 Annual Review

March 2026



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## Distribution Control

| Company                                                                 | Position                                                    |
|-------------------------------------------------------------------------|-------------------------------------------------------------|
| Boggabri Coal Operation Pty Ltd (BCOPL)                                 | Environment Superintendent                                  |
| Department of Regional NSW – Mining Exploration and Geosciences         | Regional Environment Officer                                |
| Department of Regional NSW – Resources Regulator                        | Principal Inspector Environment & Rehabilitation Operations |
| Department of Planning, Housing and Infrastructure                      | Senior Planning Officer                                     |
| Department of Primary Industries – Agriculture                          | Area Manager North West                                     |
| Department of Climate Change, Energy, the Environment and Water – Water | Water Regulation Officer                                    |
| NSW Environment Protection Authority                                    | Regional Operations Officer Armidale                        |
| Forestry Corporation of NSW                                             | Forestry Occupancy Supervisor                               |
| Community Consultative Committee                                        | Chairperson                                                 |



## Annual Review / Annual Rehabilitation Report Title Block

| Field                                                                                                                                                                                                                                                                               | Item                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name of Operation                                                                                                                                                                                                                                                                   | Boggabri Coal Mine                                                                                                                                                                |
| Name of Operator                                                                                                                                                                                                                                                                    | Boggabri Coal Operations Pty Ltd                                                                                                                                                  |
| Development Consent/Project Approval #                                                                                                                                                                                                                                              | SSD 09_0182                                                                                                                                                                       |
| Name of Holder of Project Approval                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>Idemitsu Australia Pty Limited via its subsidiary company, Boggabri Coal Pty Ltd – 90%;</li> <li>NS Boggabri Pty Limited – 10%.</li> </ul> |
| Mining Lease #                                                                                                                                                                                                                                                                      | CL 368, ML 1755                                                                                                                                                                   |
| Name of Holder of Mining Leases                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Idemitsu Australia Pty Limited via its subsidiary company, Boggabri Coal Pty Ltd – 90%;</li> <li>NS Boggabri Pty Limited – 10%.</li> </ul> |
| Water Licence #                                                                                                                                                                                                                                                                     | See <b>Table 3-1</b> below for details                                                                                                                                            |
| Name of Holder of Water Access Licences                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Idemitsu Australia Pty Limited via its subsidiary company, Boggabri Coal Pty Ltd – 90%;</li> <li>NS Boggabri Pty Limited – 10%.</li> </ul> |
| Annual Rehabilitation Reporting Commencement Date                                                                                                                                                                                                                                   | 1 January 2025                                                                                                                                                                    |
| Annual Rehabilitation Reporting Completion Date                                                                                                                                                                                                                                     | 31 December 2025                                                                                                                                                                  |
| Annual Review Commencement Date                                                                                                                                                                                                                                                     | 1 January 2025                                                                                                                                                                    |
| Annual Review Completion Date                                                                                                                                                                                                                                                       | 31 December 2025                                                                                                                                                                  |
| I, Stewart Dunlop, certify that this audit report is a true and accurate record of the compliance status of Boggabri Coal Mine for the period 1 January 2023 to 31 December 2023 and that I am authorised to make this statement on behalf of Boggabri Coal Operations Pty Limited. |                                                                                                                                                                                   |
| Name of Authorised Reporting Officer                                                                                                                                                                                                                                                | Stewart Dunlop                                                                                                                                                                    |
| Title of Authorised Reporting Officer                                                                                                                                                                                                                                               | General Manager                                                                                                                                                                   |
| Signature of Authorised Reporting Officer                                                                                                                                                                                                                                           | <i>Stewart Dunlop</i>                                                                                                                                                             |
| Date                                                                                                                                                                                                                                                                                | 24 March 2026                                                                                                                                                                     |



# Table of Contents

|          |                                                       |           |
|----------|-------------------------------------------------------|-----------|
| <b>1</b> | <b>STATEMENT OF COMPLIANCE .....</b>                  | <b>10</b> |
| <b>2</b> | <b>INTRODUCTION .....</b>                             | <b>14</b> |
| 2.1      | Mine Operation Introduction and History .....         | 14        |
| 2.2      | Mine Contacts .....                                   | 14        |
| 2.3      | Purpose and Scope of Report.....                      | 15        |
| <b>3</b> | <b>APPROVALS .....</b>                                | <b>17</b> |
| 3.1      | Approvals, Licences and Mining Leases .....           | 17        |
| 3.2      | Compliance with SSD Conditions .....                  | 19        |
| 3.3      | Rehabilitation Reforms.....                           | 20        |
| <b>4</b> | <b>SUMMARY OF OPERATIONS .....</b>                    | <b>21</b> |
| 4.1      | Mining Preparation .....                              | 21        |
| 4.2      | Mining Operations .....                               | 21        |
| 4.2.1    | Equipment.....                                        | 21        |
| 4.2.2    | Activities.....                                       | 22        |
| 4.2.3    | Operational Closures During 2025 .....                | 22        |
| 4.2.4    | Pit Progression .....                                 | 22        |
| 4.3      | Production Statistics .....                           | 23        |
| 4.3.1    | Saline or Potentially Acid Forming Materials.....     | 24        |
| 4.4      | Exploration .....                                     | 24        |
| 4.5      | Construction Activities During 2025.....              | 24        |
| 4.6      | Next Reporting Period.....                            | 25        |
| 4.6.1    | Mining .....                                          | 25        |
| 4.6.2    | Exploration .....                                     | 25        |
| 4.6.3    | Construction.....                                     | 25        |
| 4.6.4    | Production Waste .....                                | 25        |
| <b>5</b> | <b>ACTIONS REQUIRED FROM 2024 ANNUAL REVIEW.....</b>  | <b>26</b> |
| <b>6</b> | <b>ENVIRONMENTAL MANAGEMENT AND PERFORMANCE .....</b> | <b>27</b> |
| 6.1      | Meteorology .....                                     | 29        |
| 6.1.1    | Environmental Management.....                         | 29        |
| 6.1.2    | Environmental Performance .....                       | 29        |
| 6.1.3    | Improvements and Initiatives .....                    | 33        |
| 6.2      | Air Quality.....                                      | 33        |
| 6.2.1    | Environmental Management.....                         | 33        |
| 6.2.2    | Environmental Performance .....                       | 35        |
| 6.2.3    | Improvements and Initiatives .....                    | 39        |

|          |                                    |           |
|----------|------------------------------------|-----------|
| 6.3      | Operational Noise .....            | 40        |
| 6.3.1    | Environmental Management.....      | 40        |
| 6.3.2    | Environmental Performance .....    | 40        |
| 6.3.3    | Improvements and Initiatives ..... | 44        |
| 6.4      | Blasting .....                     | 44        |
| 6.4.1    | Environmental Management.....      | 44        |
| 6.4.2    | Environmental Performance .....    | 45        |
| 6.4.3    | Improvements and Initiatives ..... | 48        |
| 6.5      | Biodiversity.....                  | 48        |
| 6.5.1    | Environmental Management.....      | 48        |
| 6.5.2    | Environmental Performance .....    | 49        |
| 6.5.3    | Improvements and Initiatives ..... | 57        |
| 6.6      | Hazardous Materials .....          | 58        |
| 6.6.1    | Environmental Management.....      | 58        |
| 6.6.2    | Environmental Performance .....    | 58        |
| 6.7      | Waste Management.....              | 60        |
| 6.7.1    | Environmental Management.....      | 60        |
| 6.7.2    | Environmental Performance .....    | 61        |
| 6.8      | Spontaneous Combustion.....        | 64        |
| 6.8.1    | Environmental Management.....      | 64        |
| 6.8.2    | Environmental Performance .....    | 64        |
| 6.9      | Heritage.....                      | 64        |
| 6.9.1    | Environmental Management.....      | 64        |
| 6.9.2    | Environmental Performance .....    | 65        |
| 6.9.3    | Results to Date .....              | 66        |
| 6.9.4    | Improvements and Initiatives ..... | 66        |
| 6.10     | Greenhouse Gases .....             | 67        |
| 6.10.1   | Environmental Management.....      | 67        |
| 6.10.2   | Environmental Performance .....    | 67        |
| 6.10.3   | Improvements and Initiatives ..... | 69        |
| 6.11     | Public Safety .....                | 69        |
| 6.11.1   | Environmental Management.....      | 69        |
| 6.11.2   | Environmental Performance .....    | 70        |
| 6.12     | Traffic .....                      | 70        |
| 6.12.1   | Environmental Management.....      | 70        |
| 6.12.2   | Environmental Performance .....    | 71        |
| 6.13     | Socio-economic.....                | 71        |
| 6.13.1   | Socio-economic Management.....     | 71        |
| 6.13.2   | Environmental Performance .....    | 72        |
| <b>7</b> | <b>WATER MANAGEMENT .....</b>      | <b>79</b> |

|           |                                                                |            |
|-----------|----------------------------------------------------------------|------------|
| 7.1       | Surface Water .....                                            | 79         |
| 7.1.1     | Environmental Management.....                                  | 80         |
| 7.1.2     | Environmental Performance .....                                | 82         |
| 7.1.3     | Improvements and Initiatives.....                              | 90         |
| 7.2       | Groundwater .....                                              | 90         |
| 7.2.1     | Environmental Management.....                                  | 90         |
| 7.2.2     | Environmental Performance .....                                | 98         |
| 7.2.3     | Improvements and Initiatives.....                              | 108        |
| <b>8</b>  | <b>REHABILITATION .....</b>                                    | <b>109</b> |
| 8.1       | Rehabilitation Methodology.....                                | 110        |
| 8.2       | Rehabilitation Progress.....                                   | 111        |
| 8.2.1     | Summary of Land Rehabilitation .....                           | 111        |
| 8.2.2     | 2025 Ecosystem Establishment .....                             | 111        |
| 8.2.3     | Rehabilitation Status.....                                     | 112        |
| 8.2.4     | Comparison with Forward Program Forecasts.....                 | 115        |
| 8.3       | Removal of Buildings .....                                     | 115        |
| 8.4       | Rehabilitation Biodiversity Monitoring.....                    | 115        |
| 8.4.1     | Summary of Findings.....                                       | 115        |
| 8.5       | Rehabilitation Improvements and Initiatives .....              | 117        |
| 8.6       | Rehabilitation in 2026 .....                                   | 118        |
| <b>9</b>  | <b>COMMUNITY .....</b>                                         | <b>119</b> |
| 9.1       | Community Programs and Investment.....                         | 119        |
| 9.2       | Community Consultative Committee.....                          | 121        |
| 9.3       | Complaints .....                                               | 122        |
| 9.3.1     | Management of Complaints.....                                  | 122        |
| 9.3.2     | Registered Environmental Complaints .....                      | 122        |
| 9.4       | Workforce Profile.....                                         | 122        |
| 9.4.1     | BCOPL Employees.....                                           | 122        |
| 9.4.2     | Mining Contractors.....                                        | 123        |
| <b>10</b> | <b>AUDITS.....</b>                                             | <b>124</b> |
| 10.1      | Independent Environmental Audit (2023) .....                   | 124        |
| 10.1.1    | Scope of Audit .....                                           | 124        |
| 10.1.2    | Audit Outcomes .....                                           | 124        |
| 10.1.3    | DPHI Review .....                                              | 124        |
| 10.1.4    | Status of Audit Recommendations .....                          | 124        |
| <b>11</b> | <b>INCIDENTS AND NON-COMPLIANCES.....</b>                      | <b>125</b> |
| <b>12</b> | <b>ACTIVITIES PROPOSED FOR NEXT ANNUAL REVIEW PERIOD .....</b> | <b>128</b> |
| <b>13</b> | <b>REFERENCES.....</b>                                         | <b>129</b> |
| <b>14</b> | <b>ABBREVIATIONS.....</b>                                      | <b>131</b> |



## 15 APPENDICES ..... 135

### List of Diagrams and Charts

|             |                                                                                |     |
|-------------|--------------------------------------------------------------------------------|-----|
| Figure 2-1: | Locality Map.....                                                              | 16  |
| Figure 6-1: | 2025 Monthly Temperature Records .....                                         | 30  |
| Figure 6-2: | 2025 Monthly Rainfall .....                                                    | 31  |
| Figure 6-3: | Comparison of 2024 and 2025 Rainfall .....                                     | 32  |
| Figure 6-4: | Glenhope HVAS PM10 Monitoring 2025 Results .....                               | 37  |
| Figure 6-5: | Wilberoi East PM10 TEOM Monitoring 2025 Results .....                          | 38  |
| Figure 6-6: | Summary of Peak Vibration Monitoring Results 2025 .....                        | 46  |
| Figure 6-7: | Blast Overpressure Results 2025.....                                           | 47  |
| Figure 6-8: | Sources of BCM Scope 1 and Scope 2 Emissions .....                             | 68  |
| Figure 7-1: | Long Term Surface Water Monitoring Results for pH .....                        | 84  |
| Figure 7-2: | Long Term Surface Water Monitoring Results for EC .....                        | 85  |
| Figure 7-3: | 2025 Monthly Dust Suppression Water Usage (ML).....                            | 87  |
| Figure 7-4: | Modelled vs Observed Site Water Inventory .....                                | 90  |
| Figure 7-5: | Long Term Groundwater Levels for all Bores.....                                | 99  |
| Figure 7-6: | Groundwater Trends in pH .....                                                 | 101 |
| Figure 7-7: | Groundwater Trends in Electrical Conductivity .....                            | 102 |
| Figure 7-8: | Additional Groundwater Bores November Results .....                            | 106 |
| Figure 8-1: | 2025 Established Rehabilitation (Sept 2025) .....                              | 112 |
| Figure 8-2: | Extent of Mining and Rehabilitation at the end of the 2024 Reporting Period... | 114 |

### List of Tables

|             |                                                                                                                  |    |
|-------------|------------------------------------------------------------------------------------------------------------------|----|
| Table 1-1:  | Statement of Compliance .....                                                                                    | 10 |
| Table 1-2:  | Non-Compliances During the Reporting Period .....                                                                | 11 |
| Table 1-3:  | Compliance Status Key for Table 1-2.....                                                                         | 13 |
| Table 2-1:  | BCM Mine Contacts.....                                                                                           | 14 |
| Table 3-1:  | Key Approvals, Consents, Mining Leases and Licences.....                                                         | 17 |
| Table 3-2:  | Compliance with Schedule 2 SSD Conditions.....                                                                   | 19 |
| Table 4-1:  | Equipment Fleet as at December 2025 .....                                                                        | 21 |
| Table 4-2:  | Production and Waste Rock Summary.....                                                                           | 23 |
| Table 4-3:  | Summary of Construction Activities during the Reporting Period .....                                             | 25 |
| Table 6-1:  | Key EMPs .....                                                                                                   | 28 |
| Table 6-2:  | MET Parameters.....                                                                                              | 29 |
| Table 6-3:  | Monthly Wind Speeds and Dominant Wind Directions (60 m AWS).....                                                 | 33 |
| Table 6-4:  | Air Quality Monitoring Sites .....                                                                               | 34 |
| Table 6-5:  | Depositional Dust – Annual Average Results.....                                                                  | 35 |
| Table 6-6:  | Current Attended Noise Monitoring Locations.....                                                                 | 41 |
| Table 6-7:  | Noise Limits .....                                                                                               | 41 |
| Table 6-8:  | Summary of Attended Noise Monitoring Results - dB(A) L <sub>Aeq</sub> (15 minutes) & L <sub>1</sub> (1 min)..... | 42 |
| Table 6-9:  | Animal Groups Encountered During Clearing Operations.....                                                        | 51 |
| Table 6-10: | Explosives and Hazardous Materials Licence/Notification Holders .....                                            | 59 |

|               |                                                                           |     |
|---------------|---------------------------------------------------------------------------|-----|
| Table 6-11:   | Diesel Fuel Consumption .....                                             | 59  |
| Table 6-12:   | Waste Disposal from 2021-2025 .....                                       | 61  |
| Table 6-13:   | BCOPL GHG and Energy Statistics 2025 .....                                | 67  |
| Table 6-14:   | Comparison of 2010 EA Emissions Predictions and 2024-25 NGER Report ..... | 68  |
| Table 6-15:   | Social Impact Monitoring Summary .....                                    | 73  |
| Table 6-16:   | Local School Enrolments 2011 - 2024.....                                  | 77  |
| Table 7-1:    | Surface Water Quality Monitoring Regime .....                             | 80  |
| Table 7-2:    | Surface Water Quality Testing Parameters .....                            | 81  |
| Table 7-3:    | Summary of Frequency Based Monitoring Results .....                       | 83  |
| Table 7-4:    | Water Take .....                                                          | 85  |
| Table 7-5:    | Predicted Water Demand .....                                              | 87  |
| Table 7-6:    | Water Storage Summary .....                                               | 88  |
| Table 7-7:    | Groundwater Quality Testing Parameters .....                              | 91  |
| Table 7-8:    | Groundwater Monitoring Bores.....                                         | 92  |
| Table 7-9:    | Additional Groundwater Monitoring Locations .....                         | 94  |
| Table 7-10:   | Minimum Measured Groundwater Levels .....                                 | 98  |
| Table 7-11:   | Groundwater Quality Trigger Values .....                                  | 100 |
| Table 7-12:   | Groundwater Quality Results .....                                         | 100 |
| Table 7-13:   | Results Summary for Analysis of Major Ions.....                           | 103 |
| Table 7-14:   | Results Summary for Analysis of Metals .....                              | 104 |
| Table 7-15:   | Results Summary for Analysis of Nutrients .....                           | 105 |
| Table 8-1:    | Rehabilitation Status.....                                                | 111 |
| Table 9-1:    | BCOPL Community Funding 2025 .....                                        | 119 |
| Table 9-2:    | Residential Locality of BCOPL Employees by LGA .....                      | 123 |
| Table 9-3:    | Residential Locality of Contractor Employees by LGA.....                  | 123 |
| Table 11-1:   | Notices and Warnings Received during the Reporting Period .....           | 125 |
| Table 11-2:   | Non-Compliances and Exceedances during 2025 .....                         | 126 |
| Table 12-1:   | Activities Proposed for Next Reporting Period .....                       | 128 |
| Table A-15-1: | Annual Review Requirements .....                                          | 137 |
| Table E-1:    | Exploration Drilling Holes 2025 .....                                     | 145 |
| Figure E2:    | Proposed Exploration 2026 .....                                           | 146 |

## Appendices

|            |                                                                     |     |
|------------|---------------------------------------------------------------------|-----|
| Appendix A | Annual Review Requirements.....                                     | 136 |
| Appendix B | Environmental Monitoring Location Maps.....                         | 140 |
| Appendix C | Biodiversity Monitoring Maps .....                                  | 142 |
| Appendix D | Regulator Correspondence .....                                      | 152 |
| Appendix E | BCM 2025 Actual and 2026 Proposed Exploration Drilling Program..... | 170 |
| Appendix F | 2023 BCM IEA Response Action Plan .....                             | 173 |
| Appendix G | Tree Clearing 2025 .....                                            | 184 |
| Appendix H | 2025 Site Water Balance .....                                       | 186 |
| Appendix I | Annual Rehabilitation Report .....                                  | 245 |

# 1 STATEMENT OF COMPLIANCE

In accordance with the requirements of the [Post-approval requirements for State significant mining developments – Annual Review Guideline](#) (NSW Government, 2015), a statement of compliance has been prepared to document the status of compliance with Boggabri Coal Mine's (BCM's) planning approval State Significant Development approval (SSD) 09\_0182 (including Statement of Commitments), mining leases (MLs) and other relevant approvals as at the end of the 2025 reporting period. **Table 1-1** identifies whether or not non-compliances occurred during the reporting period for each statutory approval. Where non-compliances are identified, further details are provided in **Table 1-2**. Non compliances have been colour-coded in that table, in accordance with the descriptions provided in the *Annual Review Guideline* (NSW Government, 2015).

**Table 1-1: Statement of Compliance**

| Approval                                                  | Were all conditions of the relevant approval(s) complied with during the reporting period? |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Project Approval 09_0182 (incl. Statement of Commitments) | No                                                                                         |
| Coal Lease 368                                            | No                                                                                         |
| Authorisation 355                                         | Yes                                                                                        |
| Authorisation 339                                         | No                                                                                         |
| Environment Protection Licence (EPL) 12407                | No                                                                                         |
| Water Access Licence (WAL) 12691                          | Yes                                                                                        |
| WAL 12767                                                 | Yes                                                                                        |
| WAL 15037                                                 | Yes                                                                                        |
| WAL 24103                                                 | Yes                                                                                        |
| WAL 29473                                                 | Yes                                                                                        |
| WAL 29562                                                 | Yes                                                                                        |
| WAL 2571                                                  | Yes                                                                                        |
| WAL 2572                                                  | Yes                                                                                        |
| WAL 2595                                                  | Yes                                                                                        |
| WAL 2596                                                  | Yes                                                                                        |
| WAL 36547                                                 | Yes                                                                                        |
| WAL 37519                                                 | Yes                                                                                        |
| WAL 37067                                                 | Yes                                                                                        |
| WAL 42234                                                 | Yes                                                                                        |
| WAL 44134                                                 | Yes                                                                                        |

**Table 1-2: Non-Compliances During the Reporting Period**

| Relevant Approval | Reference                   | Condition description                                       | Compliance Status       | Comment                                                                                                                                                                                                                                                                                                                                                                 | Addressed in Annual Review     |
|-------------------|-----------------------------|-------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| SSD 09_0182       | Schedule 3 Condition 10 (a) | Sound Power Level                                           | Non-compliance low risk | Sound power screening. Four units non-compliant.                                                                                                                                                                                                                                                                                                                        | Section 6.3.2.2 and Table 11-2 |
| SSD 09_0182       | Schedule 3 Condition 40     | Leard Forest Mining Precinct Regional Biodiversity Strategy | Non-Compliance Low Risk | <p><i>The non-compliance was identified during the IEA.</i></p> <p>The Auditor noted that the recommendation provided by Umwelt in the Leard Forest Regional Biodiversity Strategy in 2018 that a comprehensive review of the strategy should be undertaken by 31 December 2021 has not been completed. This is considered a non-compliance against this condition.</p> | Table 11-2 and Appendix F      |
| SSD 09_0182       | Schedule 3 Condition 27     | Air Quality                                                 | Non-Compliance Low Risk | Exceedance of maximum allowable 24h average PM10 February 2025 and October 2025.                                                                                                                                                                                                                                                                                        | Table 11-2 and Section 6.2.2.2 |
| SSD 09_0182       | Schedule 3 Condition 27     | Air Quality                                                 | Non-Compliance Low Risk | Compliance TEOM at 'Wilberoi East failed to record Reliable data from 23 January to 03 February 2025.                                                                                                                                                                                                                                                                   | Table 11-2 and Section 6.2.2.2 |

|                                                   |                                     |                                                                 |                                  |                                                                                                                                                         |                                           |
|---------------------------------------------------|-------------------------------------|-----------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>SSD 09_0182</b>                                | Schedule 3<br>Condition 54          | Eucalyptus<br>Forestry<br>Plantation Offset<br>Strategy         | Non-Compliance<br>Administrative | BCOPL has not prepared a Eucalyptus<br>Forestry Plantation Offset Strategy to<br>the satisfaction of NSW Forestry<br>Corporation of NSW (Forestry NSW). | <b>Table 11-2</b>                         |
| <b>Mining<br/>Regulation 2016<br/>Schedule 8A</b> | Clause 9 (a) and<br>(b) Schedule 8A | Rehabilitation                                                  | Non-compliance<br>Administrative | Failure to prepare the RMP in the<br>'form' approved by the Secretary.                                                                                  | <b>Table 11-2</b>                         |
| <b>EPL-12407</b>                                  | Condition P1.1                      | Ambient Air<br>Quality Monitoring                               | Non-Compliance<br>Low Risk       | Exceedance of the short term PM <sub>10</sub><br>impact assessment criteria at the<br>Glenhope HVAS (High Volume Air<br>Sampler) on 14 November 2025.   | <b>Table 11-2 and Section<br/>6.2.2.1</b> |
| <b>EPL-12407<br/>SSD 09_0182</b>                  | Schedule 3<br>Condition 15          | Blasting                                                        | Non-Compliance<br>Low Risk       | Recorded an air blast overpressure<br>level of 121.2dB. representing an<br>exceedance of 1.2 dB above the<br>maximum allowable limit of 120db.          | <b>Table 11-2 and Section<br/>6.4.2.3</b> |
| <b>Authorisation<br/>339</b>                      | Schedule 2<br>Condition 8           | A339<br>Environmental<br>Rehabilitation<br>Compliance<br>Report | Non-Compliance<br>Administrative | Failed to submit Environmental and<br>Rehabilitation Compliance Report<br>for 2023-2024.                                                                | <b>Table 11-1 and Table<br/>11-2</b>      |



**Table 1-3: Compliance Status Key for Table 1-2**

| Risk Level                    | Colour code   | Description                                                                                                                                                                                                                                  |
|-------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High                          | Non-compliant | Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence                                                                                                                         |
| Medium                        | Non-complaint | Non-compliance with: <ul style="list-style-type: none"> <li>• Potential for serious environmental consequences, but is unlikely to occur; or</li> <li>• Potential for moderate environmental consequences, but is likely to occur</li> </ul> |
| Low                           | Non-compliant | Non-compliance with: <ul style="list-style-type: none"> <li>• Potential for moderate environmental consequences, but is unlikely to occur; or</li> <li>• Potential for low environmental consequences, but is likely to occur</li> </ul>     |
| Administrative non-compliance | Non-compliant | Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)                                                         |

## 2 INTRODUCTION

### 2.1 Mine Operation Introduction and History

BCM is an open cut coal mine located 15 km north-east of the township of Boggabri in north-western New South Wales (NSW). BCM is managed by Boggabri Coal Operations Pty Ltd (BCOPL) on behalf of Idemitsu Australia Pty Ltd (IA) and its joint venture partners. BCOPL is owned by IA, a subsidiary of Japanese company, Idemitsu Kosan Pty Ltd. BCM is owned by the following joint venture partners:

IA via its subsidiary company, Boggabri Coal Pty Ltd – 90%;

NS Boggabri Pty Limited – 10%.

Environmental assessment first commenced at BCM in 1976 followed by grant of approval for the project in 1989, and the commencement of operations in 2006. Truck and excavator operations produce a crushed and screened export quality thermal coal and pulverised coal injection product, which is transported from the mine via rail to the Port of Newcastle, for export to overseas markets.

In 2009, BCOPL lodged a major project application under the former Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Project Approval (PA) 09\_0182, was granted by the NSW Planning Assessment Commission (now Independent Planning Commission) in June 2012, allowing for extraction of up to 8.6 Million tonnes per annum (Mtpa) of run of mine (ROM) coal from BCM until the end of 2033 (the Project).

Under PA 09\_0182, a new rail load-out facility and rail spur was constructed. Operation of this infrastructure commenced in December 2014. This has eliminated routine road transport of product coal between the mine infrastructure area (MIA) and the Boggabri Coal Terminal. All product coal is currently transported from site via rail. A new Coal Handling and Preparation Plant (CHPP) was commissioned in mid-2015, enabling beneficiation of ROM coal required for the mine to reach the approved production rates. The grant of PA 09\_0182 also facilitates the upgrade of the overburden and coal production fleet and other ancillary infrastructure, as well as the option of a dragline.

Ten modifications to PA 09\_0182 have been lodged since granting of the original approval. One of these modifications (Mod 1) was subsequently withdrawn. MOD 11 was most recently approved by the Department of Planning Housing and Infrastructure (DPHI) on 19 July 2024.

On 20 June 2019, a delegate of the Minister declared the PA 09\_0182, as modified to be “State Significant Development” under Clause 6 of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, for the purposes of the EP&A Act. Accordingly, from 20 June 2019, PA 09\_0182 is known as SSD 09\_0182.

### 2.2 Mine Contacts

**Table 2-1 BCM Mine Contacts**

|                                           |                                          |
|-------------------------------------------|------------------------------------------|
| <b>General Manager Operations:</b>        | Stewart Dunlop                           |
| <b>Company:</b>                           | Boggabri Coal Operations Pty Limited     |
| <b>Address:</b>                           | 386 Leard Forest Rd, Boggabri, NSW, 2382 |
| <b>Phone:</b>                             | 02 6749 6000                             |
| <b>Environment and Community Manager:</b> | Alex Williams                            |

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| <b>Company:</b>                               | Boggabri Coal Operations Pty Limited     |
| <b>Address:</b>                               | 386 Leard Forest Rd, Boggabri, NSW, 2382 |
| <b>Phone:</b>                                 | 02 6749 6000                             |
| <b>Environment Operations Superintendent:</b> | Sarah Torrance                           |
| <b>Company:</b>                               | Boggabri Coal Operations Pty Limited     |
| <b>Address:</b>                               | 386 Leard Forest Rd, Boggabri, NSW, 2382 |
| <b>Phone:</b>                                 | 02 6749 6000                             |

### 2.3 Purpose and Scope of Report

This Annual Review discusses the environmental performance of BCOPL and its contractors, in relation to compliance with the conditions of SSD 09\_0182, and other relevant leases, licences and approvals. It provides a summary of operational and environmental management activities undertaken at the BCM during the reporting period (1 January to 31 December 2025) and provides a review against planned works, as described in the Forward Program, and predicted impacts documented in the *Continuation of Boggabri Coal Mine Environmental Assessment* (EA) (Hansen Bailey, 2010) and relevant modification documentation. The Annual Review also covers community relations and addresses mine development and rehabilitation undertaken during the reporting period.

The Annual Review has been prepared in accordance with the following:

Schedule 5, Condition 4 of SSD 09\_0182;

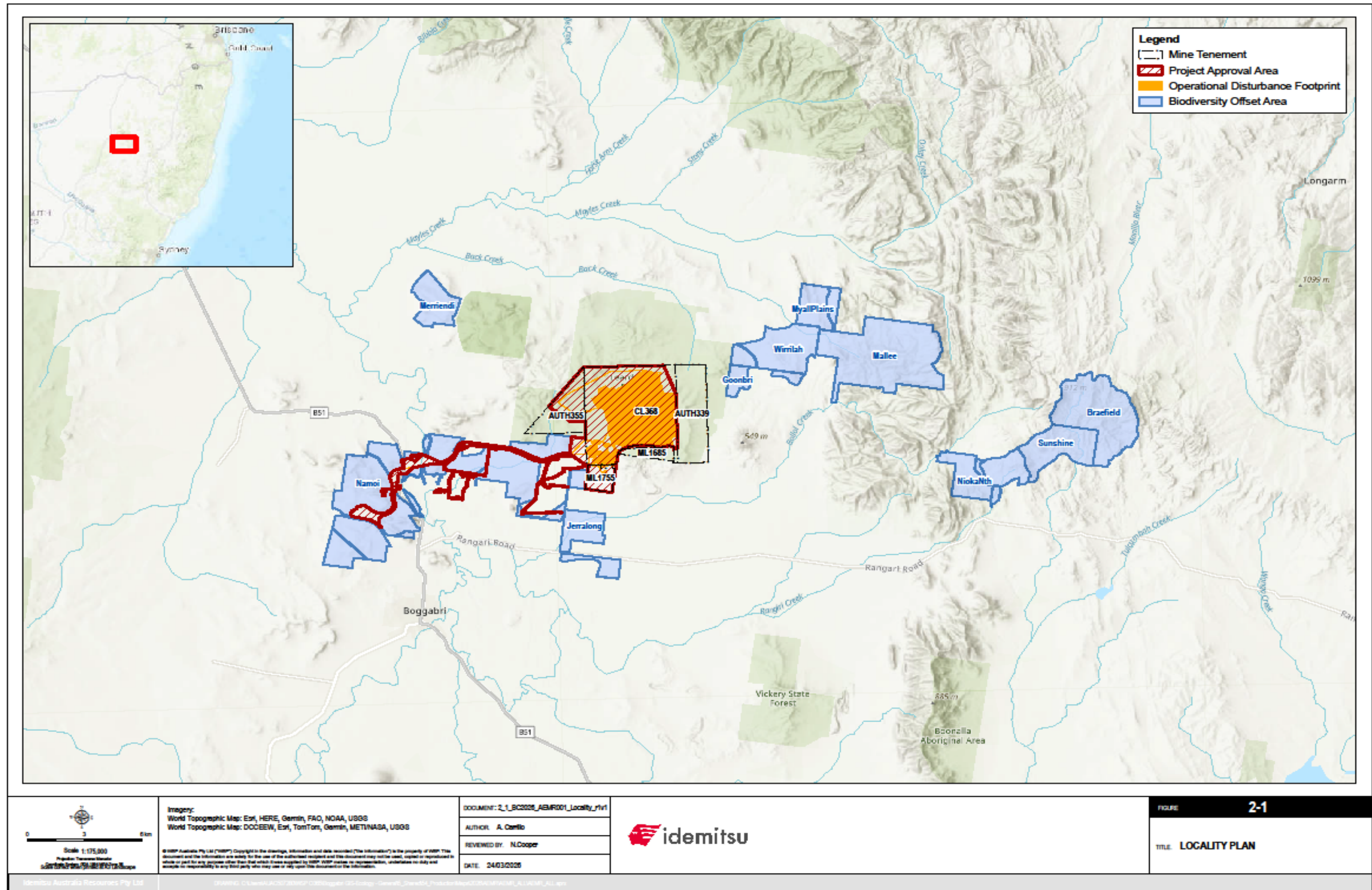
[Post-approval requirements for State significant mining developments – Annual Review Guideline](#) (Annual Review Guideline) (NSW Government, 2015);

Coal Lease 368 (CL 368) and Mining Lease 1755 (ML 1755); and

Rehabilitation Management Plan (RMP) and Forward Program (dated 31 March 2023).

Key requirements of these approvals are described in **Appendix A**. A map illustrating the mine locality and BCM Project Boundary is provided in **Figure 2-1**, while figures illustrating the relevant monitoring points and land ownership are included within **Appendix B**. Offset properties for BCM are identified on the figures provided in **Appendix C**.

Figure 2-1: Locality Map



## 3 APPROVALS

### 3.1 Approvals, Licences and Mining Leases

**Table 3-1** summarises the key mining leases and approvals currently held by IA and its joint venture partners which are relevant to the operations at BCM.

**Table 3-1: Key Approvals, Consents, Mining Leases and Licences**

| Description                                                | Date Granted/<br>Commencement Date | Expiry / Duration                         |
|------------------------------------------------------------|------------------------------------|-------------------------------------------|
| <b>Project Approvals</b>                                   |                                    |                                           |
| SSD 09_0182 (as modified)                                  | 18-Jul-12                          | 31-Dec-36                                 |
| EPBC Act Approval 2009/5256 (as varied)                    | 11-Feb-13                          | 31-Dec-53                                 |
| EPBC Referral 2021/8875<br>(Regarding SSD 09_0182 (MOD 8)) | 19-Dec-24                          | 31-Dec-53                                 |
| <b>Coal Leases/Mining Leases</b>                           |                                    |                                           |
| Coal Lease CL 368                                          | 15-Nov-90                          | 14-Nov-32                                 |
| Mining Lease ML1755                                        | 30-Jun-17                          | 30-Jun-38                                 |
| Mining Lease Application 586                               | Converted to ML 1883               |                                           |
| Mining Lease ML 1883                                       | 24-Sep-24                          | 24-Sep-45                                 |
| <b>Mining Leases/Authorisations</b>                        |                                    |                                           |
| Authorisation A 355                                        | 19-Jul-84                          | 19-07-28                                  |
| Authorisation A 339                                        | 11-Apr-84                          | 11-Apr-25                                 |
| <b>Environment Protection Licence</b>                      |                                    |                                           |
| EPL 12407                                                  | 11-Jan-06                          | In perpetuity<br>(Anniversary 11 January) |
| <b>Water Licences</b>                                      |                                    |                                           |
| WAL12691                                                   | 1-Nov-06                           | In perpetuity                             |
| WAL12767                                                   | 1-Nov-06                           | In perpetuity                             |
| WAL15037                                                   | 1-Nov-06                           | In perpetuity                             |
| WAL24103                                                   | 29-Jun-11                          | In perpetuity                             |
| WAL29473                                                   | 16-Jan-12                          | In perpetuity                             |
| WAL29562                                                   | 16-Jan-12                          | In perpetuity                             |



| Description                                           | Date Granted/<br>Commencement Date | Expiry / Duration |
|-------------------------------------------------------|------------------------------------|-------------------|
| WAL2571                                               | 1-Jul-04                           | In perpetuity     |
| WAL2572                                               | 1-Jul-04                           | In perpetuity     |
| WAL2595                                               | 1-Jul-04                           | In perpetuity     |
| WAL2596                                               | 1-Jul-04                           | In perpetuity     |
| WAL36547                                              | 17-Jan-14                          | In perpetuity     |
| WAL37519                                              | 16-Feb-16                          | In perpetuity     |
| WAL42234                                              | 9-Jan-19                           | In perpetuity     |
| WAL 37067                                             | 18-Feb-15                          | In perpetuity     |
| WAL44134                                              | 21-Apr-22                          | In perpetuity     |
| <b>Rehabilitation reforms</b>                         |                                    |                   |
| Forward Program                                       | 1-Jan-25                           | 31-Dec-27         |
| <b>Radiation Licences</b>                             |                                    |                   |
| Licence No. 5083602                                   | 14-Jun-17                          | 14-Jun-26         |
| <b>Council Approvals</b>                              |                                    |                   |
| CC 04-04-2012 Mod1                                    | 22-Oct-12                          | In perpetuity     |
| CC 02-03-2012                                         | 6-Jun-12                           | In perpetuity     |
| CC 10-01-2012 Mod1                                    | 1-Jun-12                           | In perpetuity     |
| OC 09-10-2013                                         | 19-Nov-13                          | In perpetuity     |
| OC 02-04-2013                                         | 9-Apr-13                           | In perpetuity     |
| OC 01-03-2013                                         | 28-Mar-13                          | In perpetuity     |
| Part 5 Determination –<br>Goonbri Road Upgrade        | 28-Mar-14                          | In perpetuity     |
| <b>Forestry Corporation of NSW Agreements/Permits</b> |                                    |                   |
| Forestry Compensation Agreement                       | 15-May-09                          | 14-Nov-32         |
| Land Access and Compensation<br>Arrangement           | 15-May-09                          | 14-Nov-32         |
| <b>Crown Lands Licences</b>                           |                                    |                   |
| RI 507102                                             | 12-Nov-12                          | 14-Nov-32         |



| Description | Date Granted/<br>Commencement Date | Expiry / Duration |
|-------------|------------------------------------|-------------------|
| RI 533986   | 5-Jun-14                           | 14-Nov-32         |

### 3.2 Compliance with SSD Conditions

**Table 3-2** provides a summary of the compliance with relevant production, processing and transport limits specified in the project approval (SSD 09\_0182) during the 2025 reporting period.

**Table 3-2: Compliance with Schedule 2 SSD Conditions**

| SSD Condition No. and Description                                                                                                                                                                                                                                                                                                                                                                                                                                | Compliance Response                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. The Proponent may undertake mining operations 24 hours a day, 7 days a week.                                                                                                                                                                                                                                                                                                                                                                                  | Compliant.                                                                                                                                                                                 |
| 8. The Proponent shall not extract more than 3.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) while ever coal is being transported along the private haul road to the coal loader, unless a road safety audit at the intersections of Leard Forest Road and Therribri Road has been completed in consultation with Council and RMS, and any recommended actions implemented to the satisfaction of the Secretary. | Not triggered – transport of product coal by road was ceased following the completion of the Boggabri Rail Spur Line. Product coal from BCM was transported via the rail spur during 2025. |
| 9. The Proponent shall not extract more than 4.5 million tonnes of ROM coal from the site in any calendar year (on a pro rata monthly basis) or undertake mining operations outside the disturbance area approved under DA36/88 MOD 2, unless the Biodiversity Management Plan required under condition 49 of Schedule 3 has been approved by the Secretary.                                                                                                     | Compliant –The BMP has been approved.                                                                                                                                                      |
| 10. The Proponent shall not extract more than 8.6 million tonnes of ROM coal from the site in any calendar year.                                                                                                                                                                                                                                                                                                                                                 | Compliant                                                                                                                                                                                  |
| 11. The Proponent may process up to 4.2 million tonnes of ROM coal in the CHPP in any calendar year.                                                                                                                                                                                                                                                                                                                                                             | Compliant – 3.7 Mt of ROM coal was processed in the CHPP during 2025.                                                                                                                      |
| 11A. The Proponent shall not process any coal from the Tarrawonga coal mine unless it has demonstrated that adequate water license are held to account for the required water use associated with processing this coal, to the satisfaction of the Secretary.                                                                                                                                                                                                    | Not triggered – no coal was processed from the Tarrawonga Coal Mine in 2025.                                                                                                               |
| 12. The Proponent may transport up to 10 million tonnes of product coal via the Boggabri Rail Spur Line in any calendar year; comprising:<br>(a) 8.6 million tonnes of product coal from the Boggabri coal mine in any calendar year.<br>(b) 3 million tonnes of product coal from the Tarrawonga coal mine in any calendar year.                                                                                                                                | Compliant – 6.8 Mt of product coal from the BCM was transported by rail in 2025. No coal from the Tarrawonga Coal Mine was received at BCM for transport during 2025.                      |

### 3.3 Rehabilitation Reforms

BCOPL have developed a 'Rehabilitation Management Plan' (BCOPL, 2024) (2024 RMP). The 2024 RMP includes a Rehabilitation Risk Assessment, Rehabilitation Objectives and proposed Rehabilitation Completion Criteria as well as a Final Landform and Rehabilitation Plan, referred to as the 'Rehabilitation Outcome Documents', required under the Rehabilitation Reforms. In addition to this, BCOPL has prepared an Annual Rehabilitation Report (**Appendix I**) which reports on the progress of mining and rehabilitation activities against the 2025 to 2027 Forward Program (BCOPL, 2025).

BCOPL has lodged the '2026 Bogabri Coal Forward Program for the period from 2026 through until 2028' (BCOPL, 2026) to the Resources Regulator. The updated Forward Program includes a schedule of mining activities and the spatial progression of rehabilitation activities for the next three years to ensure and demonstrate that rehabilitation is occurring as soon as reasonably practicable following disturbance.

## 4 SUMMARY OF OPERATIONS

### 4.1 Mining Preparation

Vegetation is cleared in advance of mining activities in accordance with the following documents:

- Clearing and Fauna Management Protocol, which forms Appendix B of the approved Biodiversity Management Plan (BMP); and
- Heritage Management Plan (HMP).

The adopted clearing protocol follows a two-stage clearing process to minimise impacts on native biodiversity. Prior to the removal of vegetation, trained ecologists survey the areas proposed for clearing (refer to **Section 6.4.2.3**). Archaeological survey and salvage are also undertaken as part of the clearing process to identify and recover artefacts within the approved disturbance limits (refer to **Section 6.8.1**).

Topsoil is then stripped in accordance with the approved Soil Management Protocol and BMP. Stripped topsoil is preferentially hauled directly to re-profiled rehabilitation areas. Where re-profiled areas are not ready to receive topsoil, the topsoil is hauled to a temporary stockpile location where it is stored for future transport to rehabilitation locations.

During 2025, 117,117 m<sup>3</sup> of topsoil and 389,089 m<sup>3</sup> of subsoil were stockpiled. As at the end of Dec 2025, a total of 1,819,656m<sup>3</sup> of topsoil and 936,096m<sup>3</sup> of subsoil materials were stored in soil stockpiles across BCM.

### 4.2 Mining Operations

#### 4.2.1 Equipment

Truck and excavator operations continued to be undertaken throughout the reporting period. The mining equipment fleet as of December 2025 is listed in **Table 4-1**.

**Table 4-1: Equipment Fleet as at December 2025**

| Equipment         | Number in Fleet |
|-------------------|-----------------|
| Haul Truck        | 57              |
| Excavators        | 9               |
| Front end Loaders | 3               |
| Dozers            | 19              |
| Graders           | 4               |
| Water Carts       | 5               |
| Service Trucks    | 5               |
| Drills            | 5               |
| Scraper           | 1               |
| <b>TOTAL</b>      | <b>108</b>      |

#### 4.2.2 Activities

Mining activities undertaken at BCM during the reporting period included:

- Drilling and blasting of overburden;
- Overburden removal by large hydraulic excavators, front-end loaders and dozers;
- Haulage of waste to pit emplacement areas;
- Extraction of coal using large hydraulic excavators, front-end loaders, dozers and rear dump trucks;
- Movement of coal directly to a bypass crusher as product coal or stockpiled on ROM pads for further blending and crushing; and
- Coal processing through the CHPP; and
- Loading product coal to trains for transport to the Port of Newcastle for export.

Apart from the items identified within **Section 1.0**, mining activities at BCM were compliant with the requirements of SSD 09\_0182, including no clearing of native vegetation within 250 m of Maules Creek Coal Mine (MCCM) lease boundary.

#### 4.2.3 Operational Closures During 2025

Operational closures and lost production were experienced over 42.7 days in 2025 due to adverse weather conditions.

#### 4.2.4 Pit Progression

Modification 8 has been approved, which has taken mining from eight seams to eleven seams, including the Herndale, Onavale, Teston, Thornfield, Braymont, Bollol Creek, Jeralong, Merriown, down to the Templemoreseam.

Pit progression continued in the Main C-Pit with mining and overburden emplacement progressing in a north-western direction. E-Pit mining has been completed and is being progressively backfilled in a north westerly direction. Mining activities have commenced in the boxcut below Merriown, coaling activities have not yet commenced.

The Jeralong Pit, Merriown Pit (Pit 1), Bollol Creek Pits, Pit B (5), and Pit A were completed in 2009, 2010, 2013, 2014 and 2017, respectively. These pits have previously been progressively backfilled with waste in accordance with the Conceptual Final Landform design within Appendix 9 of SSD 09\_0182 (as modified by MOD 8).

Pit C is a north progressing continuation of the Bollol Creek Pit and Pit A. Operations commenced in June 2013. Progression is along the Merriown Seam in a northerly direction along 60 m wide east - west orientated mining strips, for the upper seams down to the Jeralong Seam and 60 m wide strips for the Merriown Seam. Pit C will be backfilled from the south to the north in line with pit progression.

Pit E is a pit adjacent to the northeastern corner of Pit A. E-Pit mining has been completed and the pit is being progressively backfilled in a northerly direction.

##### 4.2.4.1 Production Waste

Waste emplacement areas have been progressed by in-pit dumping to completed pits to a maximum Reduced Level (RL) of 400 m in accordance with the Conceptual Final Landform design within Appendix 9 of SSD 09\_0182. The main emplacement areas are immediately bounded by the Merriown and Bollol Creek

Pits to the east and southeast, the Jeralong and Bollol Creek Pits to the north and the surface mine limit to the West and South (Figure 8-2).

### 4.3 Production Statistics

From January to December 2025, mine production at BCM was carried out by BCOPL personnel and mine contractors. Mining was undertaken generally in accordance with the 2025 Forward Program and site work standards and procedures, which have been developed to ensure ongoing compliance with the approved management plans.

A summary of production figures for the 2025 calendar year in relation to the previous 2024 calendar year and those forecast for the 2026 calendar year is provided in **Table 4-2** below.

**Table 4-2: Production and Waste Rock Summary**

| Material                      | Project Approval Limit | Reporting Period (Calendar Year) |               |                  |
|-------------------------------|------------------------|----------------------------------|---------------|------------------|
|                               |                        | 2024 (actual)                    | 2025 (actual) | 2026 (predicted) |
| Waste Rock/ Overburden (Mbcm) | N/A                    | 57.6                             | 56.1          | 66.4             |
| ROM Coal (Mt)                 | 8.6                    | 8.6                              | 7.32          | 8.05             |
| Reject Material (Mt)          | N/A                    | 1.4                              | 1.2           | 1.4              |
| Stripped Topsoil (kbcm)       | N/A                    | 173                              | 472           | 506              |
| Saleable Product (Mt)         | 8.6 (by rail)          | 7.1                              | 6.76          | 7.0              |

Mining operations during the 2025 calendar year remained below the ROM coal and railed product coal limits specified in SSD 09\_0182. Specific conditions from Schedule 2 of SSD 09\_0182 are presented in **Table 3-2** with responses on the compliance of each also provided.

#### 4.3.1 Saline or Potentially Acid Forming Materials

BCOPL monitors and manages the reject materials generated through its operations in accordance with the BCM Reject Potentially Acid Forming (PAF) Testing Procedure (October 2016).

In January 2020, routine monitoring identified a reject sample with potentially acid forming qualities. This result was encountered from the sampling of the reject material from a special non-product typical sample (grab sample) of BR11-12 coal. In an operational setting, this coal would typically be co-blended with other non-PAF forming feed coals and limestone to manage water quality and maintain lower product sulphur and reject acid potential. Reject materials from the processing of this coal sequence were appropriately managed and co-disposed deep within the pit void as described in the Rehabilitation Management Plan (RMP) and Forward Program.

To improve monitoring techniques, a reject sampler was installed and commissioned within the CHPP in September 2020. In line with the commissioning of this infrastructure, a static geochemical and physical testing program for fortnightly reject composites was implemented in coordination with RGS Environmental Consultants Pty Limited, to monitor the variability in reject characteristics.

RGS Environmental Consultants Pty Ltd (RGS) undertook analysis of 18 coal reject samples collected during 2025. These samples were taken from a variety of coal seam blends used to generate coal reject materials at the CHPP. Four composite samples were prepared using 17 of the 18 individual coal reject samples.

The findings of the geochemical assessment were that coal reject materials have elevated sulfur levels, appreciable Acid Neutralising Capacity (ANC), and have a variable factor of safety with respect to potential generation of Acid and Metalliferous Drainage (AMD). Approximately 32 % of the overall total of 117 coal reject samples are classified as Non-Acid Forming (NAF), while around 27 % are classified as Potentially Acid Forming (PAF). The remainder (41 %) are classified as Uncertain. No correlation has been found between the coal seam blends processed at the CHPP and the acid forming potential of the coal reject samples.

Initial surface runoff and seepage from bulk coal reject materials is expected to be pH neutral to slightly alkaline, with low salinity. However, acidity and salinity may increase over time due to sulfide oxidation, if coal reject materials are exposed to ongoing oxidising surface conditions. Overall, the risk of significant water quality impacts from coal reject materials, if managed in the open pit using current procedures, is considered low.

#### 4.4 Exploration

BCOPL continued an exploration drilling programme throughout 2025, to improve knowledge of coal quality and structure for modelling purposes.

A total of 18 exploration holes were drilled by BCOPL during the reporting period. Details of the BCM's borehole drilling during 2025 and relevant figure is provided in **Appendix E**.

#### 4.5 Construction Activities During 2025

A summary of construction activities undertaken during the reporting period and their completion status is provided in **Table 4-3**.



**Table 4-3: Summary of Construction Activities during the Reporting Period**

| Infrastructure                     | Commencement Date | Completion Date |
|------------------------------------|-------------------|-----------------|
| Fuel Farm Relocation and expansion | April 2024        | Ongoing         |
| Pit Edge Maintenance Bay           | April 2024        | July 2025       |
| MIA Workshop Extension             | June 2025         | Ongoing         |
| Mine water dam 11                  | Dec 2024          | Dec 2025        |

## 4.6 Next Reporting Period

### 4.6.1 Mining

During 2026, mining activity will involve the continuation of extraction within Pits C. Mining will advance in a northerly direction through Pit C. Mining will advance towards the north utilising 60 m wide mining strips. Backfilling of the completed mining void will continue as mining proceeds northward in C pit and will continue into E-pit now extraction in this pit has been finalised.

The progression of mining operations is scheduled to result in approximately 8.77 of new disturbance along the northern extents of the mine plan. The mining operations will advance into the area currently occupied by mine water dam MW5 for which a new dam is scheduled to be constructed during the reporting period.

### 4.6.2 Exploration

Exploration proposed for 2026 includes the drilling of 38 holes. The exploration programme will continue to improve knowledge of coal quality, structure, geotechnical, geochemical and fugitive emission calculation purposes.

### 4.6.3 Construction

Construction activities proposed in 2026 reporting period include completion of the fuel farm relocation and extension of the HV workshop.

### 4.6.4 Production Waste

During 2026, coal reject materials will continue to be co-disposed within the pit void with overburden in a planned manner in accordance with the process described within the 2026 Forward Program. Trucks are loaded with reject materials at the Rejects Bin adjacent to the CHPP and transport the reject materials to the operational pit for co-disposal with overburden materials in the overburden emplacement area. A temporary reject transfer area adjacent to the ROM pad is also used to manage the relocation of coarse reject from the CHPP to the mining void. An Emergency Tailings Facility (ETF) is also available to store fine rejects, in the unlikely event this is required. All reject materials co-disposed with overburden is covered with at least 5 m of inert overburden.

Heavy earthmoving tyres are re-treaded and reused where possible. However, where these tyres are no longer able to be safely used within the operations, they will be buried in pit in accordance with site procedures and Environmental Protection Licence (EPL) 12407. Following a tyre recycling trial in 2024, BCOPL will continue to recycle tyres up to 51 inches 2026.

## 5 ACTIONS REQUIRED FROM 2024 ANNUAL REVIEW

The 2024 Annual Review was provided to the DPHI on 31 March 2025. The 2024 Annual Review was approved on 19 August 2025 and sent to the NSW Environmental Protection Authority (EPA), NSW Department of Primary Industries (DPI) - Land and Natural Resources, DCCEEW – Water (formerly DPE-Water), Department of Regional NSW – Resources Regulator (Resources Regulator), Forestry NSW and the Narrabri Shire Council (NSC). No comments were received from DPHI regarding actions to be addressed in 2025 Annual Review. Correspondence received from DPHI in August 2025 confirmed that the 2024 Annual Review satisfied the Annual Review Guideline requirements (see **Appendix A**).

## 6 ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

The Environment Management Strategy (EMS) provides the strategic framework for environmental management at BCM. The EMS:

- Outlines all relevant statutory leases, licences and approvals that apply to BCM;
- Details key plans, procedures, management plans and other documents that will be implemented to ensure compliance with all relevant leases, licences and approvals;
- Describes the key processes that will be implemented to:
  - Communicate with community and government stakeholders;
  - Manage community complaints;
  - Resolve disputes; and
  - Respond to non-compliance incidents and emergencies;
- Outlines BCM's monitoring, reporting and auditing requirements; and
- Outlines relevant roles, responsibilities and accountabilities relevant to environment management for all BCOPL employees and contractors.

A suite of environmental management plans (EMPs) has been developed to guide environmental management at BCM. They have been developed in accordance with the EMS, SSD 09\_0182 and other statutory requirements. The revision status of approved key EMPs, as required by SSD 09\_0182, is summarised in **Table 6-1**. Following approval of MOD 8 on the 22 January 2024, BCOPL revised and updated many of the required management plans for DPHI approval.

BCOPL maintains a register to capture and track details of when documents have been updated including the requirement for the review and revision of management plans.

**Table 6-1: Key EMPs**

| Management Plan                                          | DPHI Approved version    | BCOPL Revision          |
|----------------------------------------------------------|--------------------------|-------------------------|
| Air Quality and Greenhouse Gas Management Plan (AQGHGMP) | March 2024 (rev 8)       |                         |
| Biodiversity Management Plan (BMP)                       | October 2018 (Rev 12)    | Under Review            |
| Biodiversity Offset Strategy                             | March 2019 (Rev G)       | Under Review            |
| Blast Fume Management Protocol                           | March 2024 (rev 4)       |                         |
| Blast Management Plan (BLMP)                             | March 2024 (rev 6)       |                         |
| Environment Management Strategy (EMS)                    | April 2024 (Rev 3)       |                         |
| Groundwater Management Plan (GWMP)                       | September 2025 (Rev 7.6) |                         |
| Heritage Management Plan (HMP)                           | June 2024 (rev 9)        |                         |
| Noise Management Plan (NMP)                              | June 2024 (Rev 15)       |                         |
| Pollution Incident Response Management Plan              | N/A                      | September 2025 (Rev 15) |
| Rehabilitation Strategy                                  | June 2024 (Rev 2)        | Under Review            |
| Site Water Balance (SWB)                                 | N/A                      | October 2025 (16)       |
| Social Impact Management Plan (SIMP)                     | August 2021 (Rev 7)      |                         |
| Surface Water Management Plan (SWMP)                     | November 2025 (Rev 10)   |                         |
| Traffic Management Plan (TMP)                            | December 2025 (Rev 5)    |                         |
| Water Management Plan (WMP)                              | September 2025 (Rev 9.2) |                         |

\* Based on internal final approval date

## 6.1 Meteorology

### 6.1.1 Environmental Management

SSD 09\_0182 (Schedule 3, Condition 32) requires a permanent meteorological station to be installed and maintained for the life of the BCM. The station must comply with the requirements of the *Approved Methods for Sampling of Air Pollutants in New South Wales* Guideline (EPA, 2022).

As such, a meteorological monitoring station (MET) has been established to continuously measure and record wind speed, wind direction, temperature, solar radiation and rainfall at BCM. The location of the BCM MET is shown on the Environmental Monitoring Location Plan in **Appendix B**.

The MET provides real-time data to BCOPL employees and contractors. Meteorological data is used for assessing compliance, proactive dust and noise management, and for investigative and reporting requirements.

The parameters recorded by the BCM MET and the method are outlined in **Table 6-2**.

**Table 6-2: MET Parameters**

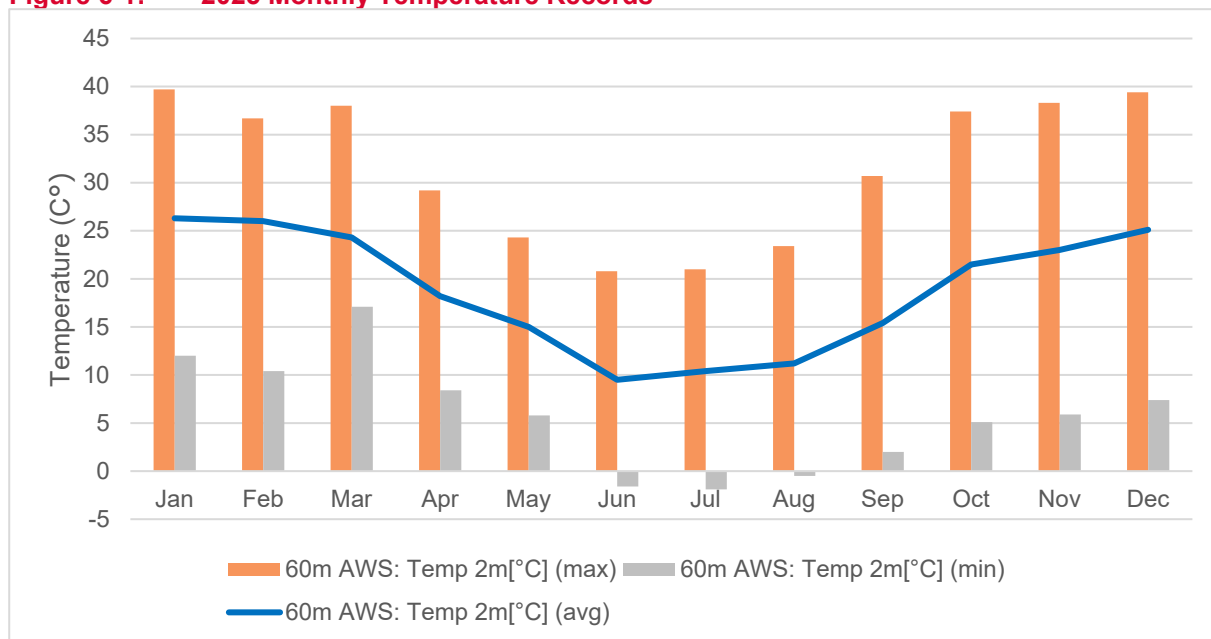
| Parameter                                          | Units            | Frequency  | Averaging Period |
|----------------------------------------------------|------------------|------------|------------------|
| Temperature at 2 m                                 | °C               | Continuous | 15 minute        |
| Temperature at 10 m                                | °C               | Continuous | 15 minute        |
| Wind direction at 10 m                             | °                | Continuous | 15 minute        |
| Sigma theta at 10 m                                | °                | Continuous | 15 minute        |
| Rainfall                                           | mm/hr.           | Continuous | 1 hour           |
| Solar radiation                                    | W/m <sup>2</sup> | Continuous | 15 minute        |
| Additional requirements:<br>– Siting & Measurement | N/A              | N/A        | N/A              |

### 6.1.2 Environmental Performance

#### 6.1.2.1 Temperature

Maximum, minimum and average temperatures are calculated daily from the 15 minute recordings. **Figure 6-1** shows average monthly temperature records for the reporting period (2 m MET recordings). Compared to the previous reporting period, the average minimum and maximum temperatures are notably higher in summer.

**Figure 6-1: 2025 Monthly Temperature Records**

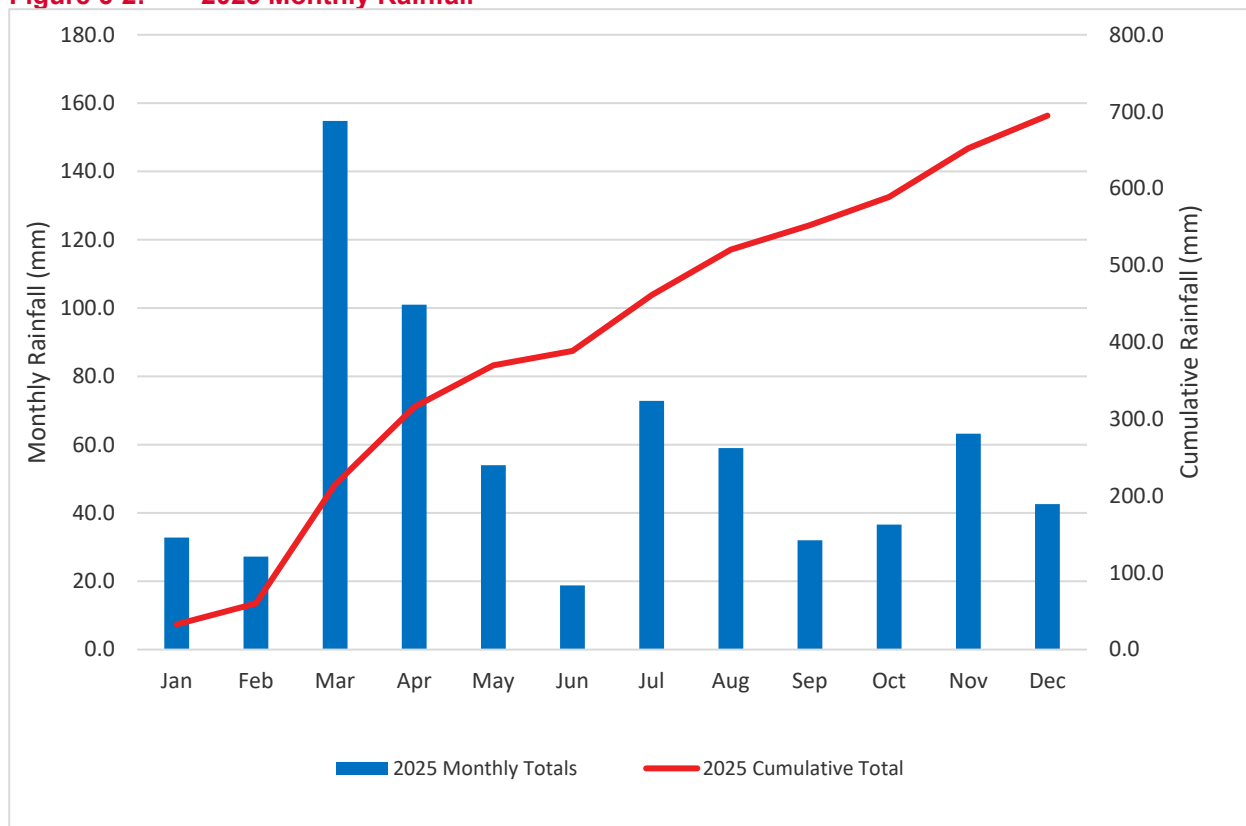


#### 6.1.2.2 Rainfall

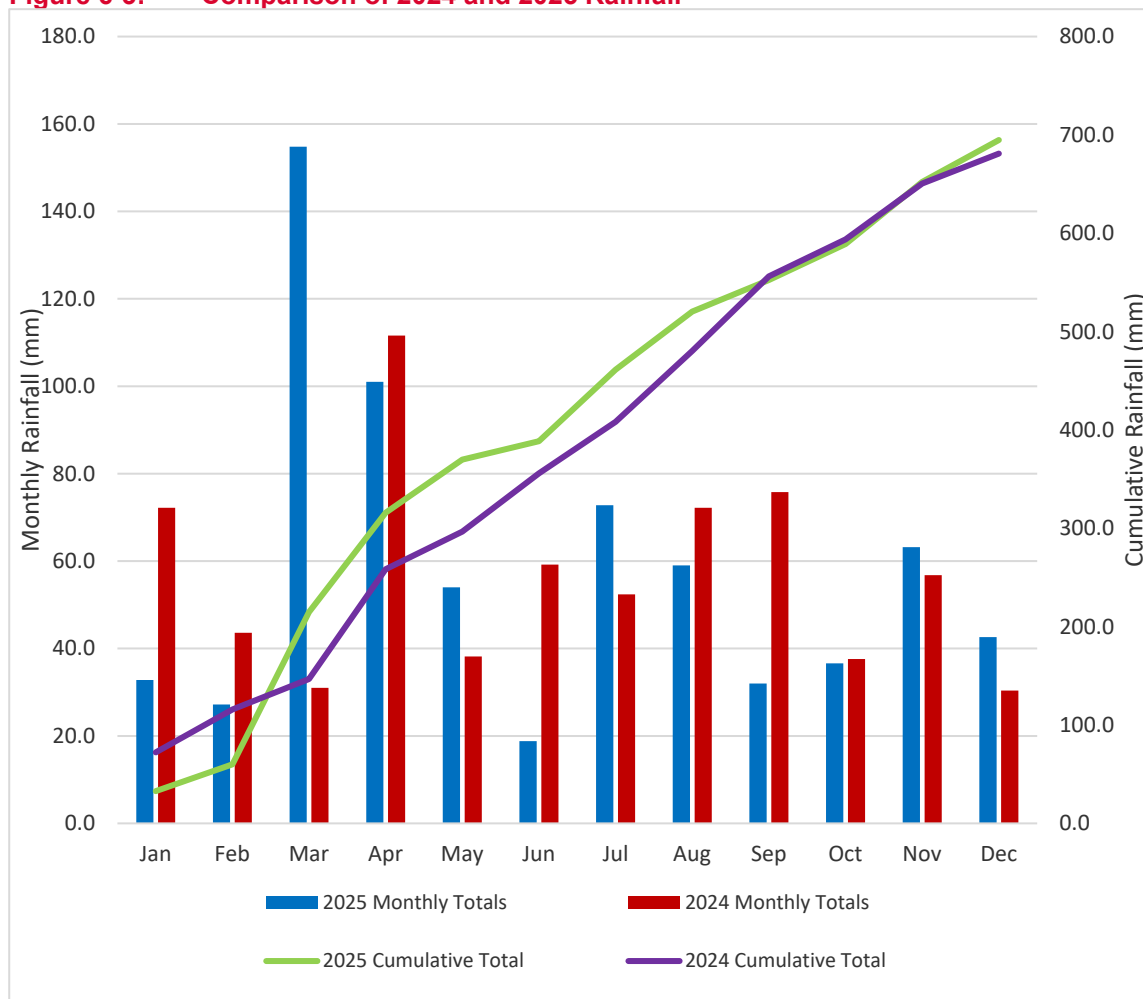
Rainfall is measured using an RG5 type flow-through monitor, with a 15 minute recording interval. Monthly rainfall totals for the 2025 reporting period are presented in **Figure 6-2**. A comparison of 2024-2025 rainfall is shown in **Figure 6-3**.



**Figure 6-2: 2025 Monthly Rainfall**



**Figure 6-3: Comparison of 2024 and 2025 Rainfall**



### 6.1.2.3 Wind

Wind speed and direction are important parameters for the planning and preparation of blasting activities, investigating noise and dust complaints, and assessing cumulative impacts as a result of other coal mines operating in the region. Wind data for the 2025 reporting period are provided in **Table 6-3**. Wind speed values are displayed as metres per second (m/s).

The prevailing wind conditions during the 2025 reporting period were relatively consistent with the historical data as presented in the 2010 EA (Hansen Bailey, 2010) which indicate BCM predominately receives wind from the south-east in summer and the north and north-west in winter. Autumn and spring months experienced a combination of these wind conditions. The meteorological data from MET identified that average monthly wind speed generally did not exceed 3 m/s.

**Table 6-3 Monthly Wind Speeds and Dominant Wind Directions (60 m AWS)**

| Month  | Average Wind Speed (m/s) | Maximum Wind Speed Recorded (m/s) | Dominant Wind Directions |
|--------|--------------------------|-----------------------------------|--------------------------|
| Jan-25 | 2.8                      | 10.5                              | SSE                      |
| Feb-25 | 2.2                      | 9.9                               | SE                       |
| Mar-25 | 2.9                      | 10.2                              | SE                       |
| Apr-25 | 1.7                      | 7.4                               | SE                       |
| May-25 | 1.7                      | 8.4                               | SSE                      |
| Jun-25 | 1.2                      | 8.8                               | NW                       |
| Jul-25 | 1.8                      | 6.8                               | NW                       |
| Aug-25 | 1.6                      | 9.02                              | SSE                      |
| Sep-25 | 1.6                      | 9.6                               | NNW                      |
| Oct-25 | 1.9                      | 9.7                               | NW                       |
| Nov-25 | 2.1                      | 9.8                               | NW                       |
| Dec-25 | 2.2                      | 10.9                              | NNW                      |

### 6.1.3 Improvements and Initiatives

Building on the work completed during the previous reporting periods, BCOPL continued to implement and refine the real-time air quality and noise management system at the BCM. This included ongoing utilisation of real-time meteorological data and weather forecasting software to guide the day-to-day implementation of reactive and proactive noise and air quality management and mitigation measures. In 2025 BCOPL continued the maintenance schedule for monitoring equipment which saw all sensors on the 60m tower replaced in 2024.

## 6.2 Air Quality

### 6.2.1 Environmental Management

Air quality management at BCM is undertaken in accordance with the approved AQGHGMP. Through implementation of the AQGHGMP, BCOPL execute a range of mitigation measures for air quality that have proved to be effective at managing dust impacts, demonstrated by generally maintaining compliance with criteria specified in SSD 09\_0182. During the reporting period, mitigation measures included the following:

- Visual assessments of mining and coal transport areas to identify dust sources and modify operations as required;
- Revegetating disturbed areas of the rail corridor;
- Implementation of product coal handling controls to minimise dust generation;
- Maintaining unsealed surfaces and trafficable areas in good condition;
- Installation and maintenance of dust suppression equipment on drill rigs;

- Implementing good practice blast design to minimise dust and plan blasting to suit meteorological conditions; and
- Monitoring meteorological conditions to plan and modify operations as required.

These mitigation measures continued to be employed during 2025.

BCOPL implements an air quality monitoring program to measure concentrations of depositional dust, Particulate Matter less than 10 microns ( $\mu\text{m}$ ) ( $\text{PM}_{10}$ ) and Particulate Matter less than 2.5  $\mu\text{m}$  ( $\text{PM}_{2.5}$ ) in the vicinity of the BCM.

Depositional dust monitoring provides an indication of levels of dust in the atmosphere measured in  $\text{g}/\text{m}^2/\text{month}$  of insoluble matter using depositional dust gauges.  $\text{PM}_{10}$  monitoring utilises High Volume Air Sampler (HVAS) and tapered element oscillating microbalance (TEOM) monitoring units, whilst  $\text{PM}_{2.5}$  is measured only using a TEOM monitoring unit.

The current air quality monitoring program includes 3 depositional dust gauges, two HVAS, four TEOMs, and up to four portable real-time  $\text{PM}_{10}$  monitors details of which are provided in **Table 6-4**. A figure showing the location of each air quality monitoring site is provided in **Appendix B**.

**Table 6-4: Air Quality Monitoring Sites**

| Site ID                            | To be used for compliance monitoring? | Type                                            | Units                              | Frequency    |
|------------------------------------|---------------------------------------|-------------------------------------------------|------------------------------------|--------------|
| D4-Greenhills                      | Yes                                   | Deposited dust gauge                            | $\text{g}/\text{m}^2/\text{month}$ | Monthly      |
| D5-Goonbri                         | Yes                                   | Deposited dust gauge                            | $\text{g}/\text{m}^2/\text{month}$ | Monthly      |
| D6-Onavale                         | Yes                                   | Deposited dust gauge                            | $\text{g}/\text{m}^2/\text{month}$ | Monthly      |
| Glenhope                           | Yes                                   | HVAS ( $\text{PM}_{10}$ )                       | $\mu\text{g}/\text{m}^3$           | Every 6 days |
| Victoria Park                      | No                                    | HVAS ( $\text{PM}_{10}$ )                       | $\mu\text{g}/\text{m}^3$           | Every 6 days |
| Tarrawonga                         | No                                    | TEOM ( $\text{PM}_{10}$ )                       | $\mu\text{g}/\text{m}^3$           | Continuous   |
| Wilberoi East                      | Yes                                   | TEOM ( $\text{PM}_{10}$ and $\text{PM}_{2.5}$ ) | $\mu\text{g}/\text{m}^3$           | Continuous   |
| Velyama                            | No                                    | TEOM ( $\text{PM}_{10}$ )                       | $\mu\text{g}/\text{m}^3$           | Continuous   |
| Goonbri                            | No                                    | TEOM ( $\text{PM}_{10}$ )                       | $\mu\text{g}/\text{m}^3$           | Continuous   |
| BTM Complex Portable Samplers (x4) | No                                    | TEOM ( $\text{PM}_{10}$ and $\text{PM}_{2.5}$ ) | $\mu\text{g}/\text{m}^3$           | Continuous   |

Monitoring data is routinely compared to the air quality assessment criteria provided within SSD 09\_0182 and the EPL. Exceedances of the relevant air quality assessment criteria is considered an 'incident' under SSD 09\_0182 and the Secretary will be notified as soon as practicable after the proponent becomes aware of the incident. Exceedances of the criteria can be attributed to variations in weather conditions, these

‘extraordinary events’ can be justified with evidence from meteorological monitoring from the site and surrounding areas. This evidence is logged in the incident register.

## 6.2.2 Environmental Performance

### 6.2.2.1 Depositional Dust

BCM's depositional dust monitoring is undertaken monthly at three monitoring sites: D4, D5 and D6 (refer to **Appendix B**). D5 is located on land owned by BCOPL, while D4 and D6 are located on land owned by Whitehaven Coal Pty Limited. All three sites are used for compliance monitoring.

In accordance with SSD 09\_0182 (Schedule 3, Condition 27), the annual average depositional dust must not exceed the limit of 4 g/m<sup>2</sup>/month at any residence on privately owned land, or on more than 25 percent of any privately-owned land. Given that there are no criteria specified for non-privately owned land, the results have been assessed against these criteria for consistency, despite land being mine-owned.

Sampling and analysis of depositional dust data is undertaken in accordance with *AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air – Determination of Particulate Matter – Deposited Matter – Gravimetric Method*.

#### 6.2.2.1.1 Results

Depositional dust samples were subject to visual analysis by a NATA accredited laboratory to determine sample contamination by naturally occurring impurities. **Table 6-5** presents the corrected results following visual analysis of the three dust monitors.

The results indicate that all depositional dust gauges remained below the criterion for the annual average during 2025.

**Table 6-5 Depositional Dust – Annual Average Results**

| Monitoring Point | Annual average limit (g/m <sup>2</sup> /month) | Corrected annual average* (g/m <sup>2</sup> /month) |
|------------------|------------------------------------------------|-----------------------------------------------------|
| D4               | 4                                              | 1.2                                                 |
| D5               | 4                                              | 0.7                                                 |
| D6               | 4                                              | 1.0                                                 |

\* Annual average applies to 2025 calendar year.

The results for D4 and D5 are above the predicted levels documented in the EA (i.e. 0.5 and 0.6 g/m<sup>2</sup>/month) for the closest corresponding year of operations (Year 10). It is important to note that since the 2010 EA was prepared, further approvals for mining operations within the BCM, Tarrawonga Coal Mine (TCM) and MCCM Complex (collectively referred to as the BTM Complex) have been granted which have subsequently resulted in increased background dust deposition levels. D6 is located outside the area assessed in the EA and no predictions were provided.

D4 and D5 samples were omitted for August and April respectively due to sample jars being damaged in transit. This has resulted in no sample data for these two sampling periods.

All dust gauge results for the 2025 reporting period remained below the relevant assessment criteria specified in EPL12407. Further the depositional dust levels recorded during the 2025 reporting period remain within the range of historical results.

#### 6.2.2.2 PM<sub>10</sub> and PM<sub>2.5</sub>

BCM monitors PM<sub>10</sub> dust compliance through one HVAS unit (Glenhope) and one TEOM (Wilberoi East) (see **Appendix B**). PM<sub>10</sub> monitoring using a HVAS unit is undertaken for a period of 24 hours every 6 days. PM<sub>10</sub> and PM<sub>2.5</sub> monitoring using a TEOM unit records continuous data and provides a 24hr average and an annual average for comparison with the relevant air quality assessment criteria.

##### 6.2.2.2.1 Results

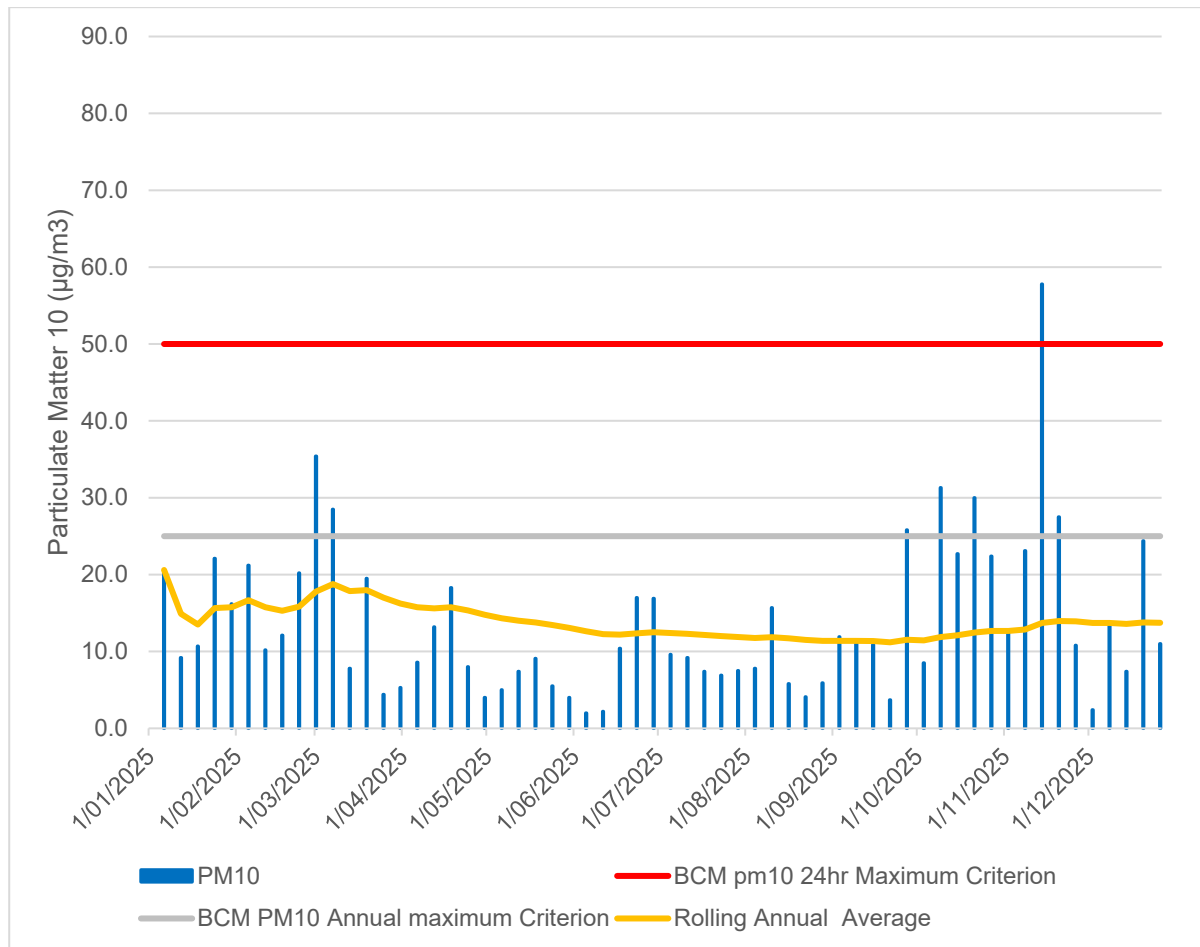
**Figure 6-4** provides the results for the Glenhope HVAS unit whilst the PM<sub>10</sub> monitoring results from the Wilberoi East TEOM unit over the reporting period are provided in **Figure 6-5**. In accordance with SSD 09\_0182, the short-term concentration limit for PM<sub>10</sub> over each 24-hour period is 50 µg/m<sup>3</sup> while the long-term concentration limit for the annual average is 25 µg/m<sup>3</sup>.

Following a quarterly calibration on 23 January 2025, the Wilberoi East compliance TEOM began to report negative numbers. Monitoring contractors re-calibrated the unit before changing it to a temporary unit on 4 February 2025. The compliance unit was determined to have malfunctioned due to an electrical fault, possibly due to a lightning strike. A brand-new unit was installed on 23 April 2025. Despite this interruption, BCOPL captured 94.8% of available data

A PM<sub>10</sub> level of 57.8 µg/m<sup>3</sup> was recorded on 14 November 2025 at Glenhope HVAS, which was deemed to be caused by non-mining-related activities during the 2025 reporting period. This was reported to DPHI through the Major Projects Portal and has been included in the 2026 EPA Annual Return.

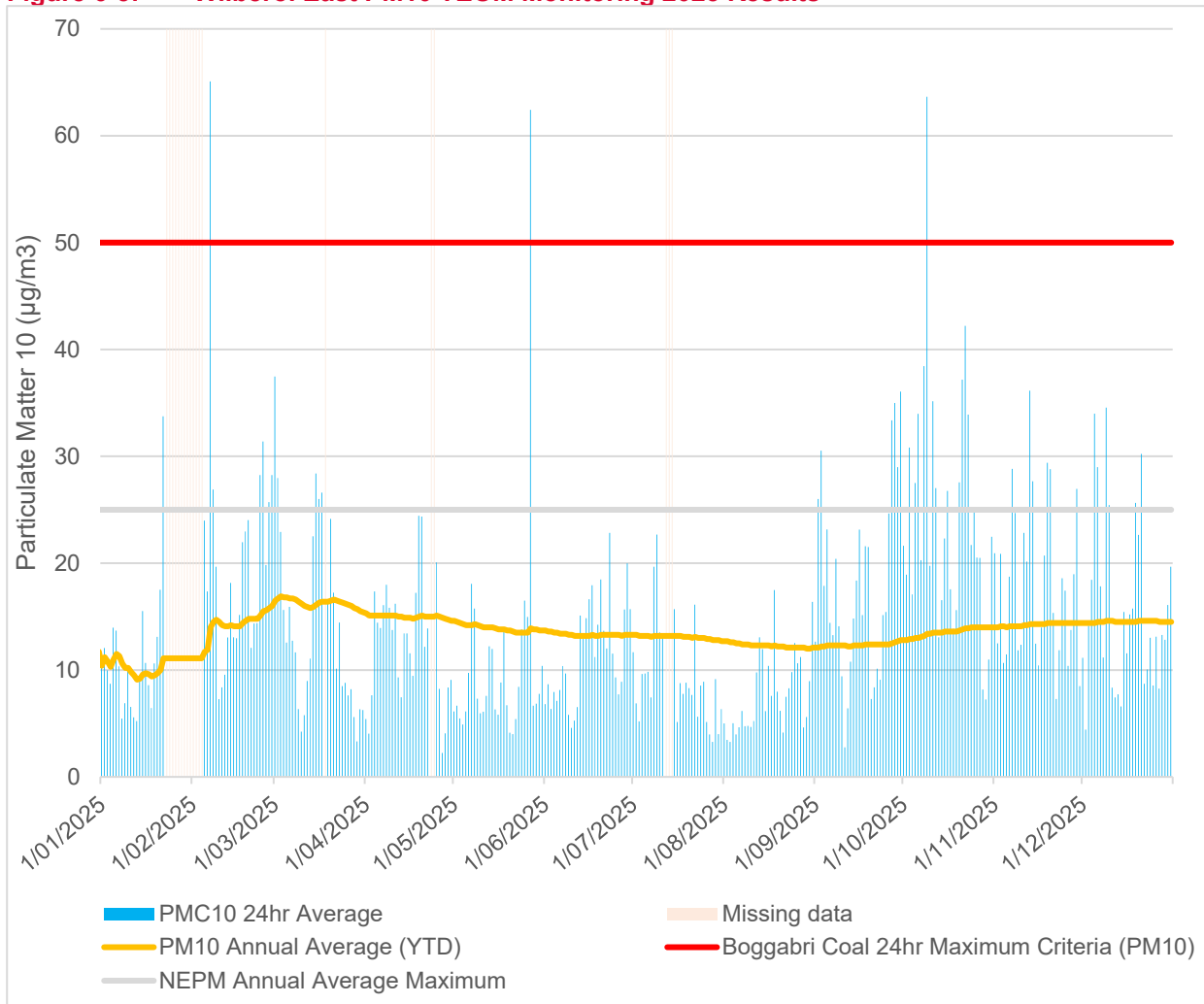
The Wilberoi East compliance TEOM recorded three potential exceedances in 2025. Following robust investigations, the exceedance on 7 February and 9 October were found to be a result of local farming activities. The exceedance on 27 May was due to a regional dust storm. All three potential exceedances were reported to DPHI through the Major Projects Portal.

**Figure 6-4: Glenhope HVAS PM10 Monitoring 2025 Results**





**Figure 6-5: Wilberoi East PM10 TEOM Monitoring 2025 Results**



### 6.2.2.3 Total Suspended Particulates

The ambient air quality criterion for Total Suspended Particulates (TSP) specified within Table 9 of SSD 09\_0182 (annual average 90 µg/m³) is based on a value derived by the National Health and Medical Research Council in 1996. There is an established relationship between TSP concentration and the concentration of PM<sub>10</sub>. In areas where coal mining is a significant component of the local particulate emission inventory, PM<sub>10</sub> typically comprises ~40% of the TSP (SPCC, 1986 and others).

As prior studies have confirmed that the long-term average PM<sub>10</sub> to TSP ratio is close to 0.4:1, that is, 40% of TSP is comprised of PM<sub>10</sub>, inversely, the relationship between TSP and PM<sub>10</sub> can be written as:  $TSP = PM_{10} \times 2.5$ . Due to the nature of the relationship between TSP and PM<sub>10</sub> levels, the TSP criterion of 90 µg/m³ (annual average) will always be satisfied when the long-term PM<sub>10</sub> criterion of 25 µg/m³ is satisfied.

In consideration of the historical PM<sub>10</sub> monitoring undertaken for the BCM (i.e. results have historically been significantly below the PM<sub>10</sub> annual average criteria), BCOPPL consider that compliance with the long-term annual average TSP criteria can be demonstrated via the application of the known relationship between PM<sub>10</sub>

and TSP. The calculation of TSP is based on the available data at the Merriown HVAS monitoring location and Glenhope HVAS monitoring location.

The results indicate the annual average TSP at the Glenhope HVAS ( $20 \mu\text{g}/\text{m}^3$ ) is below the TSP air quality criterion in SSD 09\_0182 of  $90 \mu\text{g}/\text{m}^3$  for the reporting period.

#### **6.2.2.4 Odour**

There is no requirement to conduct odour monitoring at BCM. It is considered that there is an exceptionally low risk of odour generation as a result of BCM's operations.

#### **6.2.2.5 Long Term Trend Analysis**

It is noted that air quality results are generally higher than what was predicted within the 2010 EA (Hansen Bailey, 2010). This is due to the fact the 2010 EA was assessed prior to surrounding mines being approved (MCCM and TCM). Therefore, BCM's cumulative assessment did not take into consideration the impact these approvals would have on the surrounding air quality. Whilst the 2025 results are generally marginally higher than that predicted for Year 10 of the 2010 EA, it is noted that the monitoring results continue to comply with the required criteria at all neighbouring privately owned residences. In accordance with SSD 09\_0182, a long term trend analysis of air quality monitoring results at BCM has been undertaken using data from 2015 to 2025 to identify any trends in the monitoring. The results indicate the following:

- Depositional dust monitoring results have been generally consistent since mining operations commenced. There have been no exceedances of the annual depositional dust criteria between the commencement of mining operations and as at end of 2025;
- $\text{PM}_{10}$  concentrations were slightly higher between 2017 and 2019, coinciding with drought conditions and lower than average rainfall during this period. The drought conditions experienced between 2017 and 2019 led to increases in the number of days when the 24-hour average  $\text{PM}_{10}$  concentration exceeded  $50 \mu\text{g}/\text{m}^3$  and increased annual average  $\text{PM}_{10}$  concentrations. The elevated  $\text{PM}_{10}$  concentrations were observed across many locations in NSW and were not unique to BCM. Concentrations decreased during 2020 and 2022, coinciding with increased rainfall.
- There are seasonal variations with higher  $\text{PM}_{10}$  concentrations generally occurring in the warmer months; and
- Annual average TSP concentrations were clearly higher in 2018 and 2019 than in the preceding five years. Again, this outcome was influenced by the drought conditions and lower than average rainfall. The increases in TSP concentrations were not unique to the area.

#### **6.2.3 Improvements and Initiatives**

BCOPL continued to implement and refine the real-time air quality management system at BCM during the reporting period. In 2025 BCOPL continued reporting  $\text{PM}_{2.5}$  on the company website in both daily operations and monthly summaries.

During the 2025 reporting period BCOPL replaced the compliance TEOM at Wilberoi East as well as replacing both HVAS units at Glenhope and Victoria Park.

The real-time air quality management system continued to send alerts throughout the reporting period when required. These alarms resulted in a review of operations to appropriately manage emissions from the BCM to remain within the relevant criteria.

## 6.3 Operational Noise

### 6.3.1 Environmental Management

Operational noise is managed by BCOPL in accordance with the approved Noise Management Plan (NMP) and EPL 12407. Revision 15 of the NMP was approved by the DPHI in July 2024.

The NMP covers all operational activities with the potential to generate noise at the BCM. It details specific noise management and mitigation measures, outlines monitoring and reporting requirements and provides clear definition of the roles and responsibilities for noise management. Blast management is detailed in **Section 6.4**.

BCOPL proactively implements a range of noise mitigation measures for operational activities at BCM. Mitigation measures for BCM are included in Table 5.1 of the NMP. During the reporting period, these included the following:

- Implementing an annual monitoring plan to ensure the effectiveness of attenuated plant is maintained;
- Enforcing speed limits for product trucks in accordance with the NMP;
- Progressive replacement of components of the existing fleet found to be generating excessive noise;
- Maintaining plant and equipment to manufacturer's standards;
- Placement of spoil in strategic locations to enhance noise screening;
- Scheduling noisy activities between 7 am and 6 pm where possible;
- Selecting alarms, horns and warning devices such as reverse squawkers which produce the lowest possible noise level within safety requirements;
- Monitoring weather conditions on a daily basis;
- Screening or partially enclosing conveyor belt motors at the coal handling area; and
- Ensuring train loading chute and bins are closed.

BCOPL engaged acoustic consultants to undertake attended noise monitoring in 2025 on a monthly basis at locations defined in the NMP to adequately assess the noise impacts related to BCM. Prior to 2016, this was undertaken quarterly.

In addition, Sound Power Level (SPL) monitoring is undertaken annually, in accordance with SSD 09\_0182, to assess the performance of mine plant against the SPL utilised within the modelling in the 2010 EA. SPL monitoring for 2025 was conducted on 3 April, 19, 25-29 September, 22 October, 6-7 November, 17-18 December. Results of this monitoring is presented in **Section 6.3.2.2**.

### 6.3.2 Environmental Performance

#### 6.3.2.1 Attended Noise Monitoring

Monthly attended noise monitoring surveys were carried out during 2025. Each monthly survey was undertaken during the night-time period only. Prior to 2016, three measurements were undertaken at each location during each time period (day, evening and night) on a quarterly basis. Due to the uniformity of noise limits across day, evening and night periods, an alternative monitoring methodology involving one fifteen-

minute measurement at each location during the night period, on a monthly basis, was agreed with DPHI and the EPA. This alternative method was adopted from January 2016 onwards.

The monthly monitoring was undertaken at the three locations in **Table 6-6** as per the requirements of the NMP and EPL 12407. The results are presented in the following sections.

**Table 6-6: Current Attended Noise Monitoring Locations**

| Noise Monitoring Site ID | Current Monitoring Location           |
|--------------------------|---------------------------------------|
| N2                       | Sylvania, Dripping Rock Road          |
| N3                       | Picton, Dripping Rock Road            |
| N4                       | Barbers Lagoon, Boggabri-Manilla Road |

The conditions of SSD 09\_0182 specify that BCM's operational noise limits apply to all nominated private residences, except for those that are either subject to a noise agreement with BCM, or subject to acquisition or noise mitigation upon request.

BCM's operational noise limits are 35 dB(A)  $L_{Aeq}$  (15 minutes) for day, evening and night time periods which are defined as follows:

- Day – 7 am to 6 pm Monday to Saturday and 8am to 6pm on Sunday and public holidays;
- Evening – 6 pm to 10 pm; and
- Night – Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.

In addition to the above, the noise levels during the night period must not exceed the sleep disturbance level specified as 45dB(A)  $L_1$  (1 min), at any residence. Operational noise limits are specified in **Table 6-7**.

**Table 6-7: Noise Limits**

| Location                        | Operational Noise Impact Criteria |                                  |                                | Sleep Disturbance Criteria<br>Night $L_{Aeq}$ (1 min) | Cumulative Noise Criteria (BTM complex)<br>Day, Evening, Night, $L_{Aeq}$ (15 min) |
|---------------------------------|-----------------------------------|----------------------------------|--------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------|
|                                 | Day<br>$L_{Aeq}$<br>(15 min)      | Evening<br>$L_{Aeq}$<br>(15 min) | Night<br>$L_{Aeq}$<br>(15 min) |                                                       |                                                                                    |
| All privately-owned residences* | 35 dB(A)                          | 35 dB(A)                         | 35 dB(A)                       | 45 dB(A)                                              | 40 dB(A)                                                                           |

\*Noise criteria does not apply if BCOPL has an agreement with the owner(s) of the relevant residence to generate higher noise levels

Table 5 in Schedule 3 of SSD 09\_0182 also specifies long-term intrusive noise goals at all privately owned existing residences, which concur with the limits specified in **Table 6-7**.

### 6.3.2.1.1 Results

A summary of the attended noise monitoring results is provided in **Table 6-8**. This includes all monthly monitoring conducted in 2025.

Noise levels assessed as part of the monitoring program remained within the relevant operational noise and sleep disturbance criteria. The monitored noise levels also remained below the maximum noise levels predicted in the noise assessment completed for the 2010 EA.

Applicable meteorological conditions for “Year 10” of the EA were experienced on 17 occasions during noise monitoring. As monitored noise was inaudible or below measured levels the data therefore is not comparable to the EA predictions.

Attended noise monitoring also considered the assessment of cumulative noise from the BTM Complex and confirmed the noise levels were within the cumulative noise criteria specified under SSD 09\_0182 (refer to **Table 6-7**).

**Table 6-8: Summary of Attended Noise Monitoring Results - dB(A) L<sub>Aeq</sub> (15 minutes) & L<sub>1</sub> (1 min)**

|         | Sylvania (N2)                            |                                                    | Picton (N3)                              |                                                    | Barbers Lagoon (N4)                      |                                                    |
|---------|------------------------------------------|----------------------------------------------------|------------------------------------------|----------------------------------------------------|------------------------------------------|----------------------------------------------------|
|         | Criteria dB(A) Leq (15 min) <sup>@</sup> | Criteria dB(A) L <sub>1</sub> (1 min) <sup>#</sup> | Criteria dB(A) Leq (15 min) <sup>@</sup> | Criteria dB(A) L <sub>1</sub> (1 min) <sup>#</sup> | Criteria dB(A) Leq (15 min) <sup>@</sup> | Criteria dB(A) L <sub>1</sub> (1 min) <sup>#</sup> |
|         | 35                                       | 45                                                 | 35                                       | 45                                                 | 35                                       | 45                                                 |
| 22-Jan  | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 6-Feb   | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 12-Mar  | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 9-Apr   | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 6-May   | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 11- Jun | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 3-Jul   | <25                                      | 32                                                 | <20                                      | <20                                                | ^                                        | ^                                                  |
| 11-Aug  | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 8-Sep   | <20                                      | <20                                                | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 29-Oct  | <20                                      | <20                                                | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 18-Nov  | ^                                        | ^                                                  | ^                                        | ^                                                  | ^                                        | ^                                                  |
| 2-Dec   | <20                                      | <20                                                | ^                                        | ^                                                  | ^                                        | ^                                                  |

^ BCM Inaudible

@ Operational noise impact criteria

# Sleep disturbance noise criteria

### 6.3.2.2 Sound Power Screening

Schedule 3, Condition 10 of SSD 09\_0182 requires BCOPL to:

- (a) Conduct an annual testing program of the attenuated plant on site to ensure that the attenuation remains effective;*
- (b) Restore the effectiveness of any attenuation if it is found to be defective; and*
- (c) Report on the results of any testing and/or attenuation work within the Annual Review.'*

The annual sound power screening was undertaken throughout the 2025 reporting period and is available on BCM's website. The results of this monitoring were then compared against the SPLs used within the noise modelling for the 2010 EA. The plant assessed for sound power screening consisted of the following:

- Liebherr 9800 (EX132)
- Caterpillar MD6250 (DR311, DR313, DR314)
- Atlas Copco DML (DR315)
- Caterpillar 24M (GR062, GR064)
- Komatsu WA1200 (WL188)
- Komatsu D475A (TD084, TD086)
- Caterpillar 854K (WD001)
- Komatsu HD785 (WC059)
- Caterpillar 789D (WC045, WC046, WC047)
- Komatsu 930E-4 (DT291, DT720-DT757)
- Komatsu 930E-5 (DT807, DT808, DT809, DT810)
- Hitachi EH3500 (DT305, DT307, DT308, DT316, DT317, DT319, DT320, DT321, DT322, DT324)
- Caterpillar 775G (TK828, TK829)

Overall sound power screening results which exceeded the relevant criterion by 2 dB or less are considered minor and not significant enough to require additional investigation. Results that exceeded the relevant criteria by 3 dB or more were considered significant. Sound power results have been assessed against sound powers used in modelling for the 2010 EA. Any difference in screening results for the same plant between consecutive years of +3 dB or more would trigger a more detailed analysis of results (third octave band results analysis) and potentially follow-up machine inspection and/or additional testing.

#### 6.3.2.2.1 Methodology

The measurement and calculation methodology adopted for the 2025 sound power screening was undertaken using the methods described in AS ISO 6393 and AS ISO 6395. Haul Truck dynamic testing has been adjusted to Uphill Loaded and Downhill Unloaded. Water Cart and Service Cart dynamic testing has been adjusted to Uphill and Downhill Loaded (Thearle Engineering, 2025).

#### 6.3.2.2.2 Results

A number of plant exceeded 2010 modelling levels by 1dBA – 5dBA. The units that exceeded will be modified with further attenuation and re-tested within the next 12 months. All other plant tested in the annual sound

power level screening for 2025 were compliant with sound power levels used in the 2010 EA (Hansen Bailey 2010). Individual results, atmospheric testing conditions and testing equipment information is available on BCM's website.

### 6.3.2.3 Noise Model Validation

In accordance with SSD 09\_0182 Schedule 3, Condition 13 (f), BCOPL commissions an independent acoustic consultant annually to complete a validation of the noise model used in the Continuation of Boggabri Coal Mine Acoustic Impact Assessment (2010 AIA) (Bridges Acoustics, 2010). This involved comparing 2025 attended noise monitoring results with modelled noise impacts for the 2010 AIA. Predictions from Year 10<sup>1</sup> of the 2010 AIA were utilised, as that stage best aligns with the current operations (EMM, 2024).

Attended environmental noise monitoring was conducted in accordance with Australian Standard AS1055 '*Acoustics, Description and Measurement of Environmental Noise*', relevant NSW EPA requirements, and the BCM NMP. Meteorological data was obtained from the BCM's automatic weather station which allowed correlation of atmospheric parameters with measured noise levels.

Of the 36 measurements conducted in 2025, 17 measurements occurred during meteorological conditions corresponding with modelled conditions, allowing for validation of the modelled predictions. During these 17 measurements, BCM was either inaudible or lower than predicted.

### 6.3.2.4 Long Term Trend Analysis

Attended compliance monitoring results indicate a trend towards reduced noise levels from BCM over time. Noise levels have decreased at N1 and N2 since 2016 while N3 noise levels have remained low. All attended results since September 2018 have been either inaudible, or, at levels significantly lower than criterion.

Full compliance with approved noise limits has been achieved since 2015. Further, since SSD 09\_0182 was granted in 2012, there have been a total of 10 complaints requested that received relating to noise, none of which can be directly attributed to BCM's operations.

## 6.3.3 Improvements and Initiatives

BCOPL developed specialised attenuation specifically to fit 9800 excavators. This attenuation was testing in annual SPL testing and passed. The attenuation will now be fit to the remaining 9800 excavators over the course of the next 12 months.

## 6.4 Blasting

### 6.4.1 Environmental Management

Blast operations at BCM are managed in accordance with the approved Blast Management Plan (BLMP), which covers blasting activities associated with mining. The BLMP and Blast Fume Management Protocol (BFMP) was updated and approved in March 2024. Drill and blast design at BCM focuses on the following objectives:

- Control of air blast and ground vibration;
- Minimising fly-rock;
- Optimising fragmentation;

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<sup>1</sup> Predictions were made for Year 5, Year 10, Year 15 and Year 20 of operations.

- Reducing coal seam damage; and
- Reducing blast fume.

Blast fume is managed in accordance with BCM's BFMP. The BFMP was prepared to satisfy the conditions of SSD 09\_0182 in order to establish management measures for control of fume-related emissions from blasting operations. The BFMP is based on the Australian Explosive Industry and Safety Group's *Code of Good Practice: Prevention and Management of Blast Generated NOx Gases in Surface Blasting, Edition 2*. It describes site specific monitoring and rating/recording for blast fume events as well as incident response procedures.

## **6.4.2 Environmental Performance**

### **6.4.2.1 Blast Events**

SSD 09\_0182 permits blasting to occur only between 9:00 am and 5:00 pm Monday to Saturday, at a rate of up to one blast per day and an average of up to four blasts per week (when averaged over the calendar year), unless otherwise exempted.

#### **6.4.2.1.1 Results**

Blasting events at BCM did not occur more than once a day at any time during the reporting period. All blasting operations were conducted between the approved times of 9:00 am – 5:00 pm Monday to Saturday. No temporary road closures were required due to proximity of blasting.

A total of 91 blasting events occurred during the 2025 reporting period, which remains within the permitted blasting limits over the calendar year.

### **6.4.2.2 Blast Peak Vibration**

Monitoring of peak vibration was conducted at Goonbri (MP1) and Wilberoi East (MP3) during the entire 2025 reporting period (refer to **Appendix B**).

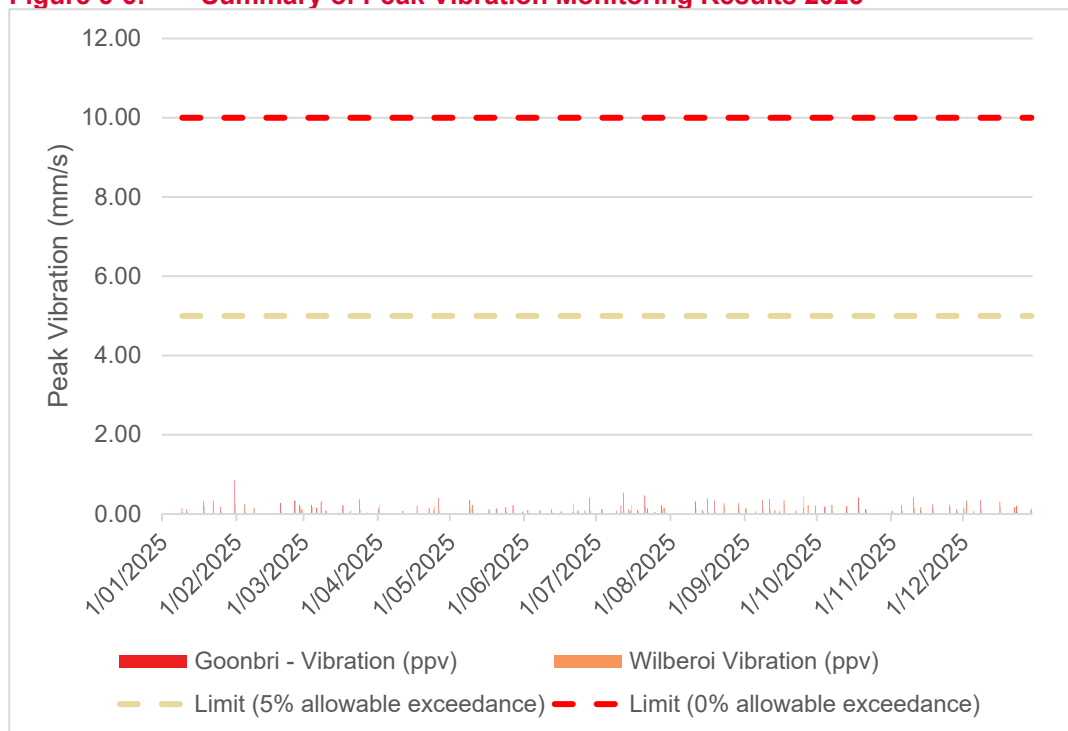
The applicable criteria within SSD 09\_0182, EPL, and CL368 for peak vibration are 10 mm/second at any privately owned residence, and 5 mm/second at any noise sensitive location for up to 5 percent of all blast events occurring within the reporting period.

#### **6.4.2.2.1 Results**

Blast monitoring results indicate blasts complied with the vibration limits of 5 mm/second (exceedance allowed for 5% of the blasts) and peak vibration of 10 mm/second (refer to **Figure 6-6**). Blasting results show there were zero instances of vibration exceeding allowable or peak limits during the 2025 reporting period.



**Figure 6-6: Summary of Peak Vibration Monitoring Results 2025**



### 6.4.2.3 Blast Overpressure

Monitoring of blast overpressure was conducted at Goonbri (MP1) and Wilberoi East (MP3) during the entire 2025 reporting period (refer to **Appendix B**).

The applicable criteria for airblast overpressure under SSD 09\_0182 are 120 dB(A) at any noise sensitive location (residence on privately owned land), and 115 dB(A) for up to 5 percent of all blast events conducted during the reporting period.

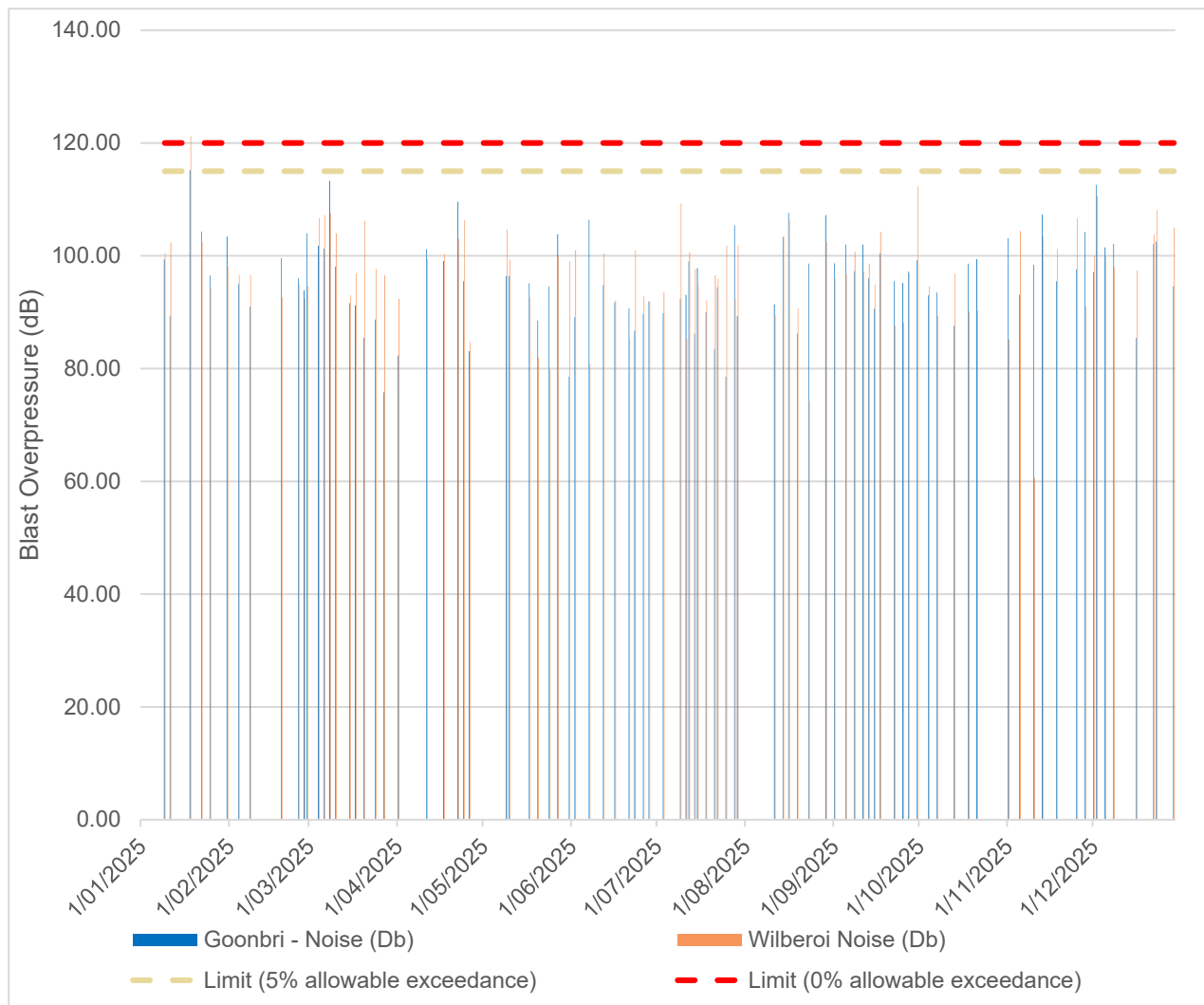
#### 6.4.2.3.1 Results

**Figure 6-7** illustrates the blast overpressure monitoring results for the 2025 reporting period.

During the reporting period one blast exceeded both the 115 dB criteria at Goonbri and the 120 dB criteria at Wilberoi East. The elevated readings occurred on 18 January 2025 and recorded an overpressure reading of 115.2 dB and 120.2 dB at Goonbri and Wilberoi East, respectively. BCOPL engaged Terrock Consulting Engineers to conduct an independent investigation into the incident. Terrock concluded the airblast overpressure results were due to wind-gusts occurring before the period of airblast arrival at the monitoring units. This investigation was presented to DPHI who agreed with the assessment.

BCOPL complied with all its blast overpressure criteria during the 2015, 2016, 2017, 2018, 2020 2021, 2023, 2024 and 2025 reporting periods. One exceedance of the 120 dB(A) criteria occurred in the 2019, 2022 and 2025 reporting periods.

**Figure 6-7: Blast Overpressure Results 2025**



#### 6.4.2.4 Blast fume

Blast fume at BCM is managed and monitored in accordance with the Blast Fume Management Protocol (2024). Blast fume was monitored by BCOPL for all blast events that occurred during the reporting period.

A fume risk rating system is utilised at BCM to categorise fume events. This is based on the fume rating system detailed in the *Code of Good Practice: Prevention and Management of Blast Generated NOx Gases in Surface Blasting, Edition 2* (AEISG, 2011).

##### 6.4.2.4.1 Results

A total of 18 blast fume events were recorded during the reporting period. None of the fume events were categorised as a Level 3C fume event or higher as such no notification was required. All blast fume events recorded remained within the relevant criteria during the 2025 reporting period.

#### 6.4.2.5 Blast Monitoring Results

All blast monitoring results are provided on BCOPL's website for the 2025 reporting period.

#### 6.4.3 Improvements and Initiatives

In 2025 BCOPL trialed new products and methodology to improve blasting safety and efficiency. In June 2025 BCOPL implemented the use of aero bags for setting up blast decks at targeted depths. BCOPL conducted trials in 2025 around concurrent blasting methodology. These trials were successful and has allowed for the firing of multiple shots as one blast event with less than 3 seconds delay, as per our procedures.

### 6.5 Biodiversity

#### 6.5.1 Environmental Management

Biodiversity at Boggabri Coal Mine (BCM) is managed in accordance with the approved Biodiversity Management Plan (BMP). The BMP provides a framework for managing biodiversity values within the Project Boundary, Biodiversity Offset Areas (BOAs) and wider locality.

The BMP guides the management of potential risks to biodiversity as a result of the BCM. Specifically, the BMP aims to:

- Provide details of the parties responsible for monitoring, reviewing, and implementing the BMP;
- Ensure compliance with all legislative requirements, statutory approvals/licences and corporate responsibilities of Boggabri Coal Operations Pty Limited (BCOPL);
- Describe the measures (short, medium and long-term) to be implemented to manage remnant vegetation and habitat within the project boundary and BOAs, including detailed performance and completion criteria;
- Describe the practical management strategies (including procedures) to be implemented to manage impacts on flora and fauna, maximising salvage and beneficial use of resources in areas to be impacted for habitat enhancement, rehabilitate creeks, drainage lines and disturbed areas, control weeds and pests; and
- Describe biodiversity monitoring and reporting requirements.

No impacts outside those predicted in the Environmental Assessment (EA) have occurred during the reporting period, indicating the management strategies specified by the BMP and implemented across the site are adequate to address potential impacts.

BCM's biodiversity offset requirements are outlined in the Boggabri Coal Mine Biodiversity Offset Strategy (WSP, 2018) (BOS). The BOS guides the implementation of BOAs. It identifies potential suitable offsets to adequately compensate the Project's impacts on local biodiversity, ensuring the Project complies with legislative and Project Approval (PA) offset requirements.

The BOS was revised in 2018 in accordance with Schedule 3, Condition 43 of the PA to incorporate an additional 1000 ha of offsets. The revised strategy also included additional offset requirements identified in Condition 39, Table 15 of the PA. This BOS was prepared to accurately reflect the final offset areas to be subject to formal in perpetuity conservation in accordance with Schedule 3 Condition 47 of the PA. In 2019, BCM commenced formal negotiations with the NSW Biodiversity Conservation Trust regarding formal in perpetuity conservation agreements for 8009.6 ha committed as biodiversity offset to meet the PA. This process was ongoing through 2025, with several site visits by representatives of the NSW Biodiversity Conservation Trust for formal commitments and approvals under the new legislative apparatus.

BCOPL has implemented a range of biodiversity monitoring activities since the commencement of operations, in addition to those studies completed for the EA. Biodiversity monitoring has included the following programs or studies undertaken by WSP:

- Vegetation clearing monitoring (undertaken in conjunction with the annual tree clearing program) – completed in 2025;
- Leard State Forest annual biodiversity monitoring (an annual program of comprehensive flora and fauna surveys) – completed in 2025;
- Leard State Forest biodiversity corridor monitoring (a program to monitor biodiversity within a vegetation corridor between BCM and Maules Creek Coal Mine) – completed in 2025;
- BOA monitoring (an annual program to assess the progress of the BOAs in achieving biodiversity targets), including autumn Box Gum Woodland monitoring – completed in 2025;
- Targeted seasonal threatened species surveys for Regent Honeyeater, Swift Parrot and Corben's Long-eared Bat – completed in 2025;
- Mine rehabilitation biodiversity monitoring (an annual program based on flora and fauna surveys to assess the progress of mine rehabilitation areas in achieving rehabilitation targets) – completed in 2025;
- Stygofauna monitoring (an annual program designed to monitor groundwater monitoring bores along the Nagero Creek and Namoi River floodplain for Stygofauna) – completed in 2025; and
- Stream and riparian vegetation health assessment and terrestrial vegetation monitoring within the locality of MOD5 (an annual program monitoring riparian vegetation health in accordance with BCM Surface Water and Groundwater Management Plans) – completed in 2025.

The following sections summarise activities related to biodiversity management, provide updates on key biodiversity studies undertaken during the reporting period, and summarises the performance of BCOPL in meeting requirements of the PA and internal management plans.

## 6.5.2 Environmental Performance

### 6.5.2.1 Environmental Management Correspondence

Correspondence with MCCM and TMC has been undertaken on a regular basis to discuss cooperative management and protection of the vegetated corridor and Leard Forest Regional Biodiversity Strategy.

The *Leard Forest Regional Biodiversity Strategy (Stage 2 – Strategy Report)* (RBS) (Umwelt, 2017) was prepared to provide a strategic framework for the management and implementation of the BTM Complex biodiversity offset programs and to provide guidance for co-ordinated management with other land managers within the region. To achieve coordinated and successful biodiversity management within the region, the RBS specifies that the BTM Complex must prepare an 'Annual Summary Report' detailing the overall biodiversity performance and outcomes of biodiversity offsets.

An Annual Summary Report would summarise activities completed across the BTM Complex as they pertained to natural regeneration, seed collection and propagation, active revegetation, pest management, mine rehabilitation, biodiversity management consultation, biodiversity offset monitoring methodologies and biodiversity offset performance and outcomes (vegetation community attributes, key weed attributes, fauna monitoring results, threatened flora and fauna monitoring results).

### 6.5.2.2 Commonwealth Consent Fauna Surveys

In accordance with the Commonwealth Department of Climate Change, Energy, the Environment and Water Conditions of Approval 13C and 14, BCOPL have commissioned annual surveys across BCM biodiversity offset lands for *Nyctophilus corbeni* (Corben's Long-eared Bat), *Anthochaera phrygia* (Regent Honeyeater) and *Lathamus discolor* (Swift Parrot). Targeted surveys for Regent Honeyeater and Swift Parrot were undertaken during May and July 2025, whilst surveys for Corben's Long-eared Bat were undertaken in November and December 2025.

Annual targeted threatened species surveys were undertaken for Regent Honeyeater and Swift Parrot with consideration of the Commonwealth Survey Guidelines for Australia's Threatened Birds (Department of Environment Water Heritage and the Arts 2010). Surveys were completed in Leard State Forest, the Leard State Forest biodiversity corridor and across the BOAs, extending from the Western offset (Merriendi BOA), through the Namoi offsets (Namoi BOA, Jerralong BOA), Central offsets (Goonbri BOA, Wirrilah BOA, Myall Plains BOA, Mallee BOA) and Eastern offsets (Nioka North BOA, Sunshine BOA, Braefield BOA). The key objective of these surveys is to determine if the threatened species are using winter blossom resources. *Eucalyptus albens* (White Box) is an important source of winter blossom resources in the western slopes region of NSW and it occurs widely across the BOAs and throughout Leard State Forest surrounding BCM.

White Box stands in Leard State Forest and across the BOAs in late May and late July 2025 exhibited patchy occurrences of blossom, with most trees across almost all areas showing no evidence of blossom and those with blossom producing only 5-10% of their flowering capacity. A single Swift Parrot was recorded within a White Box stand in high quality White Box shrubby woodland at the northern boundary of the Sunshine BOA. Attendances to the meagre occurrences of blossom were limited to occasional increased attendances by resident nectivorous species. Targeted surveys for Corben's Long-eared Bat were also undertaken within the BOAs, with a total of six species of insectivorous bat were recorded across the Eastern offset areas, the Namoi Offset and the Western Offset Area during the monitoring period. No Corben's Long-eared Bats were recorded.

### 6.5.2.3 Vegetation Clearing

Vegetation clearing for the reporting period commenced on 17 February 2025 and ended 5 March 2025, inclusive of pre-clearing surveys, and Stage 1 and Stage 2 clearing operations. The program included the removal of vegetation from the forecasted active mining area for the 2054 period. The extent of clearing totalled 11.8 ha of vegetation, encompassing three vegetation communities, being White Box grassy woodland of the Nandewar Bioregion and Brigalow Belt South Bioregion (PCT 1383), White Cypress Pine-Narrow-leaved Ironbark shrub/grass open forest of the western Nandewar Bioregion (PCT1313), and Narrow-leaved Ironbark shrubby woodland of the Brigalow Belt South Bioregion (PCT 1381). These vegetation communities were consistent with the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grasslands threatened ecological community listed as Critically Endangered under the EPBC Act and BC Act.

### 6.5.2.4 Vegetation Clearing Ecological Monitoring

As with previous years, the 2025 tree-clearing program was undertaken in conjunction with a team of qualified ecologists to ensure, as far as practicable, the safe removal and relocation of native fauna. Pre-clearing and relocation surveys completed prior to the commencement of the clearing activities recorded 520 habitat, hollow-bearing and/or significant trees within the 2025 tree clearing area. These trees were marked with fluorescent pink paint in preparation for the two-stage clearing process.

During Stage 1 and Stage 2 clearing operations, 60 animals were successfully relocated, 125 animals were observed from habitat trees and evaded capture, and 6 animals were killed or euthanised as a result of clearing operations (**Table 6-9**). The most abundant groups of animals encountered during 2025 clearing operations were reptiles (161 individuals).

To minimise stress to displaced native animals, all individuals were appropriately retained and released into designated fauna relocations sites at the earliest practicable time following capture. It is anticipated that the number of microchiropteran bats, either relocated or evading capture, is likely to be higher, with numerous microbats observed within existing hollow-bearing trees or being present in broken hollow branches that were safely relocated to the designated fauna relocation sites.

**Table 6-9: Animal Groups Encountered During Clearing Operations**

| Fauna Group           | Number of Individuals Recorded |          |                       |       |
|-----------------------|--------------------------------|----------|-----------------------|-------|
|                       | Relocated                      | Observed | Deceased / Euthanised | Total |
| Reptiles              | 59                             | 97       | 5                     | 161   |
| Microchiropteran bats | 1                              | 21       | 1                     | 23    |
| Birds                 | 0                              | 0        | 0                     | 0     |
| Amphibians            |                                | 1        | 0                     | 1     |
| Mammals               | 0                              | 6        | 0                     | 6     |
| Total                 | 60                             | 125      | 6                     | 191   |

The attendance of ecologist's supervising tree clearing greatly enhanced the likelihood of survival for the above listed species.

The rigorous fauna surveys undertaken as part of the BCM tree clearing program are regarded as a key practice in minimising harm to fauna prior to clearing activities and reducing the mine's impact on biodiversity.

The tree clearing program involved the salvage of woody debris, including fallen timber, felled hollow trees, and bush rock for later use in restoration areas in the BOAs and mine rehabilitation areas.

#### 6.5.2.5 Stygofauna Surveys

The 2025 stygofauna sampling event was completed in September 2025 with a total of 11 groundwater bores sampled. Potential Stygofauna species were detected at Belleview bore, Cooboobindi bore, Coobobindi House bore and MWP05. *Bilibathynella* was recorded at Cooboobindi House bore for the first time.

This increases the number of sites/bores stygofauna have been collected from and confirms the distribution across the region. Stygofauna specimens are currently undergoing taxonomic review.

#### 6.5.2.6 Annual Leard State Forest Biological Monitoring

A tailored biological monitoring program for BCM was established in 2006, prior to mining. The annual monitoring program undertaken by qualified ecologists aims to identify and assess potential impacts to biodiversity within Leard State Forest as a result of mining activities. It focuses on native vegetation, fauna habitat, invertebrates, birds and microbats within the forest.

The monitoring program is based on the 'Beyond BACI' monitoring design, incorporating four replicate survey sites within the Leard State Forest (the potential impact location) and four survey sites in each of two reference locations (Central Offset Area and the Namoi Offset Area (Rocklea property)). The reference locations contain homogenous vegetation considered to be analogous with that of the Leard State Forest, and its relative absence of impacts associated with BCM.

Survey sites within Leard State Forest were selected where possible to represent each of the two main vegetation types likely to be impacted by mining – Ironbark Shrubby Woodland/Open Forest and White Box Grassy Woodland. These sites were located at varying distances around the area of mining. Likewise, survey sites at the reference locations/ control sites were selected, where possible, within vegetation types like those found in Leard State Forest, or at a minimum, with similar vegetation structures. Surveys at each site would typically include:

- Two 100 m transects surveys of plant species richness and cover abundance;
- Two 100 m transects for invertebrates each containing 10 pitfall traps;
- Two nights of microbat ultrasonic recordings on non-consecutive nights using ultrasonic recording units set to record from dusk;
- Two 20-minute area bird censuses within an 80 m radius (approximately 2 ha) of fixed monitoring sites on non-consecutive mornings; and
- A reference photograph for each transect.

#### 6.5.2.6.1 Results

- Vegetation across the monitoring locations retained a high level of native plant species richness and moderate to low diversity of exotic species. The Leard State Forest site showed the highest level of native plant species richness, followed by the Central Offset Area and the Rocklea property. Monitoring sites associated with the Rocklea Property recorded the highest mean exotic species richness followed by the Central Offset Area. The Leard State Forest recorded the lowest exotic species diversity.
- Although *Tylophora linearis* has previously been recorded from monitoring site LSF3 and ROC2, no threatened flora species were recorded during the field survey in September 2025. *Tylophora linearis* is listed as Endangered under both the NSW BC Act and Commonwealth EPBC Act. It is commonly recorded throughout Leard State Forest and the broader locality including some locations within the Central Offset Area and Rocklea property;
- Dry woodland habitat associated with Leard State Forest and the two reference locations provided important habitat for a variety of woodland specialists and generalist species of bird. A total of 76 species of bird were recorded during replicate monitoring surveys with Weebill, Rufous Whistler, Striated Pardalote, White-throated Treecreeper, Yellow-faced Honeyeater and Yellow Thornbill commonly recorded. Mean diurnal bird species richness was similar between the potential impact location (Leard State Forest) and the two control locations.
- Eight threatened species of bird listed as Vulnerable under the NSW BC Act were recorded during duplicate surveys at replicate monitoring sites. These include Brown Treecreeper (eastern subspecies), Diamond Firetail, Dusky Woodswallow, Grey-crowned Babbler, Little Lorikeet, Speckled Warbler, Turquoise Parrot and Varied Sittella.
- BCOPPL is still awaiting results from the bat surveys that were conducted during the reporting period and will report these results in the 2026 Annual Review.

#### 6.5.2.7 Annual Leard State Forest Biodiversity Corridor Monitoring

The Leard State Forest biodiversity corridor refers to a vegetated boundary corridor that occurs in Leard State Forest between BCM and MCCM. This corridor forms a part of the larger East-West Corridor (as detailed in the BMP) representing the vegetation corridor between the Nandewar Range, BCM BOAs, Leard State Forest and the Namoi River.



The purpose of the corridor monitoring is to gain an understanding of biodiversity values within the Leard State Forest corridor and to identify any potential changes to these values as a result of the works being undertaken at BCM.

Monitoring was completed for Swift Parrot and Regent Honeyeater in May and July, general biodiversity in September and micro-bats in November 2025. Monitoring targeted native vegetation, bird and microbat assemblages with the following general survey methodologies completed at replicate monitoring sites:

- Photographic point monitoring;
- One 20-minute area search within 80 m (approximately 2 ha) of fixed monitoring sites;
- One night of microbat recordings using Anabat Express Bat Detector units;
- Two consecutive nights of passive infra-red/motion sensor camera detection; and
- One BioBanking plot (LC4 and LC6 only).

#### 6.5.2.7.1 Results

A total of 98 species of plant were recorded from seven replicate monitoring sites associated with the corridor, including 92 native species (94%) and six exotic species (6%). No threatened species of plant were recorded during the 2025 monitoring event. Despite this, *Tylophora linearis* (listed as Vulnerable under the BC Act and Endangered under the EPBC Act) is known to occur within the biodiversity corridor.

Photographic monitoring and BBAM vegetation plots completed at each of the monitoring sites indicate that the native vegetation structure, function, and condition within the biodiversity corridor are all high. This is supported by most vegetation attributes meeting, being within or exceeding the BBAM benchmark values in spring 2025. The only exception to this was native groundcover attributes associated with 'grass' cover, which naturally fluctuate over time.

A total of 38 species of bird were recorded from replicate monitoring sites, the composition of which suggest vegetation retains structural complexity capable of providing habitat to woodland and generalist species of bird common the region.

Six threatened species of bird which are listed as Vulnerable under the BC Act, were recorded from the corridor. Replicate monitoring site LC4 recorded the highest number of birds with a mean diurnal bird species richness of 17 (as averaged from two 20-minute surveys) during the 2025 monitoring period;

Targeted Swift Parrot and Regent Honeyeater surveys were conducted in the corridor (and wider Leard State Forest and BCM BOAs) over two discrete sampling periods in May and July 2025. The Swift Parrot and Regent Honeyeater were not recorded from habitats associated with the corridor during these surveys; and

A total of 14 insectivorous bats were collectively recorded across the vegetation corridor during the 2024 sampling period. Insectivorous bat species richness and species activity in 2024 saw a reduction from observations made in 2023, however both attributes remained above the Leard State Forest benchmarks. Four threatened species of insectivorous bat listed as Vulnerable under the NSW BC Act were recorded during duplicate surveys at replicate monitoring sites, including Eastern Bent-winged Bat, Eastern Cave Bat, Eastern Falsistrelle and Yellow-bellied Sheath-tail-bat.

#### 6.5.2.8 Annual Stream and Riparian Vegetation Health & Terrestrial GDE Monitoring within the Locality of MOD5

The BCM is largely contained within the catchment of an unnamed ephemeral drainage line commonly known as 'Nagero Creek'. A small area to the south of the Project is also located within the catchment of Bollol Creek. Nagero Creek and Bollol Creek are both small tributaries of the Namoi River. The Namoi River is the main watershed for the region and is part of the Murray Darling Basin system and managed under two Water



Sharing Plans. BCOPL holds existing licences under the *Water Management Act 2000* for the extraction of both surface water and groundwater associated with this watershed.

The purpose of this program is to monitor stream and riparian vegetation health due to the potential for impacts on surface water and groundwater systems. Survey methodologies for the 2025 monitoring program were completed over two sessions being Autumn (6-13 May 2025) and Spring (9-14 November 2025 and 14-12 December 2025) at five replicate monitoring sites, incorporating:

- Quantitative transect/plots (one BioBanking plot)
- Stream characteristics (for example channel size, composition, flow category, clarity etcetera – stream health monitoring locations only).
- Photographic monitoring.

Monitoring of terrestrial vegetation in the locality of MOD5 was also completed in conjunction with the stream and riparian health monitoring program in 2025. The purpose of this monitoring is to assess the impacts of the MOD5 borefield on terrestrial native vegetation health and composition within the locality of MOD5 and its proposed draw down impacts associated with groundwater extraction. Survey methodologies for the 2025 monitoring program were completed over Autumn and Spring at the 15 replicate monitoring sites (including the five stream and riparian health monitoring sites), incorporating:

- Quantitative transect/plots (one BioBanking plot).
- Photographic monitoring.

#### **6.5.2.8.1 Results**

The results from the 2025 monitoring program confirmed that the composition and health of riparian and terrestrial vegetation had remained relatively consistent since the 2018 baseline monitoring program. More specifically, vegetation attributes associated with floristic composition, structure and functionality monitored were consistent with or only showed slight increases/decreases in values compared to the 2018 baseline. The fluctuations in vegetation attribute values observed across the monitoring locations is likely attributable to climatic conditions experienced in the region, which has encompassed the cyclic nature from severe drought to major flood events. Nevertheless, these fluctuations were within the boundaries of the probable mean, as predicted by the standard error. It is considered unlikely that these changes in vegetation attributes are due to impacts associated with the Project.

A substantial proportion of vegetation attributes across all sites failed to meet the BBAM benchmark values for their respective vegetation type, however this is not dissimilar to the results of the 2018 baseline data. This was largely attributed to past land uses (predominantly agriculture), which have cleared canopy and midstory components and heavily disturbed the soil profile leading to the dominance of exotic species in the groundcover.

Similarly, stream characteristics of Nagero Creek and the Namoi River were relatively consistent with the 2018 baseline monitoring results. Exceptions to these included changes in attributes that are affected by drought conditions, such as water height, flow and where water was present, turbidity.

Overall, the structure and health of Nagero Creek was in moderate condition. The stream is an ephemeral waterway with intermittent flow, which is heavily dependent on high rainfall. The autumn and spring 2025 monitoring event recorded variable water presence consistent with seasonal conditions, including periods of limited flow and isolated standing pools. Disturbances on this stream are likely attributed to past agricultural pressures rather than impacts associated with the Project. The creek appears, however, to be in a stable condition and consistent in health compared to previous years.

Overall, the structure and health of the Namoi River was in moderate condition. The Namoi River is a perennial waterway, which usually contains large volumes of water that flow constantly as witnessed during

both the autumn and spring 2025 survey periods. Although the river is a permanent waterway with many habitat features (such as fallen timber, hollow bearing trees, debris etc.) the riverbanks appeared to be partially unstable as substantial undercutting and scouring was recorded at all sites (SM3, SM4 and SM5), most notably at SM3. The severity of erosion observed at SM4 and SM5 appears to have decreased since 2023 due to growth of groundcover vegetation which is now stabilising large areas.

#### **6.5.2.9 Annual Biodiversity Offset Area Monitoring**

Biodiversity offset area monitoring comprises annual surveys of vegetation, diurnal birds, microchiropteran bats, terrestrial mammals and vertebrate pest and biennial surveys of nocturnal mammals and birds. In addition, targeted annual seasonal surveys are undertaken for Regent Honeyeater, Swift Parrot and Corben's Long-eared Bat and autumn Box Gum Woodland monitoring was completed.

The 2025 biodiversity offset monitoring represents the eleventh year of biodiversity monitoring completed on the BOAs for the Project. The 10 BOAs contain large patches of remnant vegetation and high-quality habitats adjoining existing vegetated lands and create direct linkages or key stepping-stones for a regional east-west wildlife corridor. Boggabri Coal's ten BOAs are separated into four management areas, including:

- Eastern Offset Area (Braefield BOA, Sunshine BOA, Nioka North BOA).
- Central Offset Area (Mallee BOA, Myall Plains BOA, Wirrilah BOA, Goonbri BOA).
- Namoi Offset Area (Namoi BOA, Jerralong BOA).
- Western Offset Area (Merriendi BOA).

##### **6.5.2.9.1 Habitat Management Zone**

Vegetation data collected and general observation made as part of the 2025 monitoring session suggests that the vegetation types within the habitat management zones across the four management areas are in good condition overall and are typical of large relatively undisturbed patches of native vegetation in the locality. Ecosystem health and ecosystem structure were observed as good. The monitoring sites established in the habitat management zones provide good analogue sites for which to compare the progress of habitat restoration zones against. Key findings identified within the habitat management zones in 2025, included:

- Native species richness has remained relatively consistent across all BOAs, showing fluctuations over time in response to varying seasonal conditions such as extended periods of severe drought through to periods of above average rainfall and flooding. In 2025, native plant species richness and cover was comparable to other years with similar conditions;
- Most Box Gum Woodland monitoring sites monitored in 2025 within habitat management zones meet or are considered likely to meet the EPBC Act listing for the threatened ecological community White Box – Yellow Box – Blakely's Red Gum grassy woodland and derived native grasslands; and
- Box Gum Woodland monitoring sites surveyed in 2025 within habitat management zones largely meet, are within or exceed BBAM benchmarks. The main exceptions to this included the occasional site which did not meet fallen timber, hollow bearing tree and native groundcover (grass or other) percentage or native species richness benchmarks.

Habitat management zones across the BOAs provide habitat for a range of threatened species and the intact and semi-intact habitats remain in good condition. The association of habitat management zones with areas of high-quality extant vegetation with a diversity of woodland structural forms are key to the diversity this zone supports, as illustrated by the presence of 12 threatened species recorded in these zones. Key findings identified in habitat management zones during the 2025 monitoring event included:

- The presence of 12 threatened fauna species recorded across the habitat management zones in 2024, including Brown Treecreeper, Diamond Firetail, Dusky Woodswallow, Grey-crowned

Babbler, Hooded Robin, Little Lorikeet, Southern White-face, Speckled Warbler, Spotted Harrier, Swift Parrot, Turquoise Parrot and Varied Sitella..

- Diurnal bird species richness was typical of relatively undisturbed woodland and open forest habitats in the region;
- Mean diurnal bird species richness in habitat management zones achieved between 65 % and 97 % of the Leard State Forest analogue benchmark in 2025;
- Several introduced species were recorded during the 2025 monitoring period, including Fox, Pig, Rabbit, Goat, and Brown Hare.

#### 6.5.2.9.2 Restoration Zone

The habitat restoration zone was predominantly comprised of derived native grassland communities. Ecosystem health and ecosystem structure are generally poor. As such, the monitoring sites surveyed in 2025 generally fall below the BBAM vegetation type benchmarks for a range of attributes. Due to the general lack of canopy, midstorey, fallen logs and presence of grazing pressure, native grass cover is generally high and exceeds benchmark conditions. To date, restoration works are limited to revegetation activities within the Merriendi, Namoi, Jerralong, Wirrilah, Mallee, Nioka North and Braefield BOAs. Restoration activities in habitat restoration zones will result in an overall improvement in the attributes over time. Key findings identified within the habitat restoration zones in 2025 included:

- Most Box Gum Woodland monitoring sites monitored in 2025 within habitat restoration zones meet or are considered likely to meet the EPBC Act listing for the threatened ecological community White Box – Yellow Box – Blakely's Red Gum grassy woodland and derived native grasslands.
- Box Gum Woodland monitoring sites within habitat restoration zones largely fail to meet BBAM benchmark values especially for attributes relating to the number of hollow bearing trees, length of fallen timber and native overstorey percentage cover. Furthermore, most sites showed no or limited evidence of regeneration of canopy species aside from restoration tube stock planting. This is expected given many of these areas occur as derived native grassland. Most other vegetation attributes meet the BBAM benchmarks.
- Due to the above, management within habitat restoration zones should continue to focus on tube stock planting of canopy species and monitoring the success/failure of these which will lead to the eventual increase in canopy cover and formation of habitat resources such as hollow bearing trees, fallen timber, leaf litter etc to increase connectivity. As these resources take over 50 years to form, it is recommended that in the interim fauna habitat resources such as salvaged fallen timber and nest boxes should be introduced, where possible, to encourage fauna usage. These measures will also aid in increasing other BBAM vegetation attributes which do not currently meet benchmark values.
- Native species richness has remained relatively consistent across all BOAs, showing fluctuations over time in response to varying seasonal conditions such as extended periods of severe drought through to periods of above average mean rainfall and flooding. In 2025, native plant species richness and cover was comparable to other similar years.
- Two habitat restoration zone monitoring sites exceeded the Cypress Pine density threshold of 650 stems per hectare (i.e. Wi3 and Na11). Although most BBAM benchmark values for its corresponding vegetation type were met it failed to meet the native overstorey percentage cover and no natural regeneration was recorded suggesting that the germination and establishment of canopy species at this location may be prohibited by the high density of Cypress Pine. It is recommended that Cypress Pine thinning be considered in this area; and

Generally, habitat restoration zones possessed a moderate to low fauna species assemblage during the 2-24 monitoring event. This can be expected as these areas are typically disturbed areas that have long been dedicated to grazing of cattle. Such areas are structurally simplified, contain few habitat features and are generally devoid of canopy and understorey cover; attributes that may otherwise encourage a diverse woodland fauna. Key findings identified in habitat restoration zones in 2025 included:

- Despite most habitat restoration zones being disturbed, they do provide habitat (particularly foraging habitat) for threatened species, such as Dusky Woodswallow and Grey-crowned Babbler; particularly along ecotones, where regenerating shrubs provide adequate cover close to open grounds.
- Comparatively, mean diurnal bird species richness in 2025 is like previous years for the four Offset Areas. Habitat restoration zones possessed a low diurnal bird species richness, typically averaging between 24 % to 59 % of the Leard State Forest analogue benchmark for bird species richness.
- Monitoring of salvaged woody debris in the Namoi Offset Area identified three species of reptile, including Tree Skink, Eastern Striped Skink, and an unidentified skink.
- Several introduced species were recorded in habitat restoration zones during the 2025 monitoring period, including Pig, Fox, Goat, Brown Hare and Rabbit.

#### 6.5.2.9.3 Corridor Enhancement Zone

The corridor enhancement zone has been significantly disturbed by past land use practices, including clearing, cropping and pasture improvement and heavy grazing. The lack of canopy, midstory and altered ground layer composition recorded during baseline monitoring supports this assumption. Likewise, the paucity of fauna species demonstrates how disturbed such areas are. The planned supplementary canopy planting and targeted weed and post management activities should serve to increase woody canopy cover and build on adjoining existing wildlife corridors. A considerable improvement in habitat value should be seen in this area over the coming years. Key findings identified within the corridor enhancement zones in 2025 included:

- Native species richness has remained relatively consistent across all BOAs, showing fluctuations over time in response to varying seasonal conditions. In 2025, native plant species richness and cover was comparable to other similar years;
- In 2025 no evidence of livestock grazing was observed;
- Mean diurnal bird species richness was observed in 2025 to be consistent with previous monitoring events for the Eastern Offsets. Corridor enhancement zones possessed a low diurnal bird species richness, typically achieving between 28% and 43% of the Leard State Forest analogue benchmark for bird species richness.

#### 6.5.2.10 Pest management activities

Onsite programs were conducted to capture and remove feral goats from BCOPLs rehabilitation areas. In two programs 106 goats were captured and removed from the rehab.

### 6.5.3 Improvements and Initiatives

Biodiversity management initiatives implemented during the reporting period continued to include ongoing biodiversity monitoring and management in accordance with the approved BMP and revegetation activities within BCOPL's BOAs. As mentioned in **Section 6.5**, BCM commenced formal negotiations with the NSW Biodiversity Conservation Trust regarding formal in perpetuity conservation agreements for 8009.6 ha committed as biodiversity offset to meet SSD 09\_0182. This process was ongoing through the 2025 reporting

period, with several site visits by representatives of the NSW Biodiversity Conservation Trust for formal commitments and approvals under the new legislative apparatus.

## 6.6 Hazardous Materials

### 6.6.1 Environmental Management

The management of hazardous materials at BCM is undertaken in accordance with the following BCOPL documents:

- Waste Management Plan;
- Pollution Incident Response Management Plan; and
- Hazardous Material, Dangerous Goods Risk Assessment.

Contractors operating at the BCM also implement a range of company-specific standards and procedures to ensure alignment with BCOPL requirements and legal obligations for the management of hazardous materials.

Collectively the hazardous materials management documents:

- Set out the minimum requirements for contractors for the use, storage and control of hazardous materials;
- Provide protocols for hazardous material use, storage and clean-up response;
- Provide a mechanism for the assessment of potentially hazardous materials prior to them being delivered to site; and
- Specify design standards for which hazardous materials storage structures must comply.

Control measures implemented on site include but are not limited to the following:

- Locating spill kits in high risk areas around mine infrastructure and construction areas within the Project Boundary;
- Ensuring all BCOPL personnel and contractors are trained in incident and emergency response procedures. Specific training is also be provided to those personnel required to handle hazardous materials;
- All workshop and vehicle wash down water is directed to a sump/separator for containment and subsequent treatment or appropriate disposal;
- Vehicles, plant and equipment leaking fuel, oil coolant or any other hydrocarbons will not be operated where practicable and repaired at the earliest opportunity;
- All hazardous materials facilities on site will be designed, constructed and operated in accordance with all relevant legislation, standards and guidelines, with particular reference to *AS 1940:2004 – The Storage and Handling of Flammable and Combustible Liquids*; and
- Refuelling operations will be undertaken within areas specifically designated for that purpose, where practicable.

### 6.6.2 Environmental Performance

Hazardous materials used at the BCM that require licensing are listed in **Table 6-10**. Orica Australia Pty Ltd (Orica) holds the appropriate licences and notifications for the storage, handling and use of these substances. The use of hazardous materials during the 2025 reporting period was comparable with the 2024 reporting period.

**Table 6-10: Explosives and Hazardous Materials Licence/Notification Holders**

| Hazardous Materials:                                                                       | Licence/Notification Holder:     |
|--------------------------------------------------------------------------------------------|----------------------------------|
| Acetic Acid Solution<br>Ammonium Nitrate<br>Ammonium Nitrate Emulsion<br>Oxidizing Liquids | Orica                            |
| Bulk Diesel                                                                                | Boggabri Coal Operations Pty Ltd |

All hydrocarbons including fuels and hydraulic/lubricating oils are stored in double-skinned, above ground tanks. Waste oils are stored in a bulk oil tank, for regular collection by a licensed waste contractor.

Six hydrocarbon spills were recorded and managed in accordance with BCOPL and contractor-specific hazardous materials management documentation. All spills were considered to present a low environmental risk and were promptly cleaned up. The management measures contained within relevant documentation were considered to be adequate for the prevention and clean-up of the hazardous spill. These measures will continue to be implemented in the event of future incidents.

#### 6.6.2.1 Diesel

Diesel fuel is stored in the maintenance workshop area in nine double-skinned, aboveground tanks plumbed in series as “slave and master,” with a total nominal capacity of 766,000 litres. Bunded areas are inspected on a regular basis to ensure their integrity. These tanks are proposed to be relocated to the newly built PSI Facility with an additional capacity of 200,000 litres to be installed as part of the process.

Ultra-low sulphur diesel (ULSD) constitutes the primary fuel used on site. Diesel fuel consumption quantities for the 2021 to 2025 reporting periods are summarised in **Table 6-11**. Fuel consumption at BCM has notably increased from previous reporting periods. In previous years, BCOPL has endured periods of industrial action and flooding which stopped coal production. The increase has also been a result of the progressive increase to approved maximum production rates and longer haulage of overburden waste.

Diesel fuel consumption quantities for the 2021 to 2025 reporting periods are summarised in **Table 6-11**. Fuel consumption at BCM has notably increased during the reporting period and over time as a result of the progressive increase to approved maximum production rates.

**Table 6-11: Diesel Fuel Consumption**

| Fuel type | Quantity (L) |            |            |            |            |
|-----------|--------------|------------|------------|------------|------------|
|           | 2021         | 2022       | 2023       | 2024       | 2025       |
| Diesel*   | 60,559,675   | 64,631,567 | 76,833,977 | 77,192,384 | 78,008,344 |

\*ULSD was used during all reporting periods

#### 6.6.2.2 Ammonium Nitrate/Ammonium Nitrate Emulsions

Ammonium Nitrate (AN) and AN Emulsions are used in the blasting process and are stored in 1.2 tonne bulker bags and 40 tonne mobile trailers within the bunded AN storage compound. The AN storage compound is fitted with lockable access gates and is subject to daily inspections to safeguard against theft and/or spillages.

#### **6.6.2.3 Ammonium Nitrate/Fuel Oil**

Ammonium Nitrate/Fuel Oil (ANFO) is a blasting agent used at BCM. Ingredients are stored separately. ANFO is blended using mobile mixing units at blast sites.

#### **6.6.2.4 Detonators**

Detonators and other high explosives are used in the blasting process and are stored in purpose built isolated magazines, to the south-east of the AN storage compound, at the toe of south-eastern overburden emplacement area. The magazines incorporate security fencing, lockable entry points and are bunded.

#### **6.6.2.5 Hydraulic/lubricating oils**

Hydraulic/lubricating oils are stored in double-skinned above-ground tanks adjacent to the heavy vehicle workshop area. Waste oils are stored in a bunded bulk oil tank which is regularly serviced by a licensed waste contractor.

#### **6.6.2.6 Cleaning agents**

Cleaning agents are used in the equipment wash down facility for preparing the fleet of mobile equipment prior to maintenance. The cleaning agents are kept within covered stores in the maintenance workshop area, adjacent to the wash down facility.

Water collected at the bunded wash down facility is treated by an oil-water separator at the wash down bay and recycled.

#### **6.6.2.7 Herbicides**

Herbicides are used across the site for noxious weed control and are purchased on an as-needs basis. Therefore they are not stored on-site. Application of herbicides is conducted only by suitably qualified persons and records of application areas are maintained.

### **6.7 Waste Management**

#### **6.7.1 Environmental Management**

Condition 68, Schedule 3 of SSD 09\_0182 requires the following waste management actions:

- Implement all reasonable and feasible measures to minimise waste generated by the Project;
- Ensure waste generated by the Project is appropriately stored, handled and disposed of; and
- Monitor and report on the effectiveness of waste minimisation and management measures in the Annual Review.

Waste management measures employed on site include:

- General waste from operations (food etc.) is disposed of at an appropriate licensed waste management facility;
- Recyclable wastes are separated on site and collected for recycling at an appropriate facility;
- Contaminated soil is collected and transported to the on-site bioremediation area for treatment and eventual on-site disposal. This is undertaken in accordance with the site's Bioremediation Management Procedure;
- All plant and equipment wash down areas have oil/water separating devices. Water from these areas is collected onsite; sediment, oils and grease are separated. Any sediment collected during



wash down activities is placed into the in pit bioremediation area for further treatment.

- Scrap metal materials are separated onsite and collected by a recycling contractor for off-site recycling;
- Sewage from permanent site facilities is collected onsite and treated within an aerated septic sewer system, with treated effluent being applied to a transpiration area. Sewage collected from in-pit crib hut locations is collected by a waste contractor and disposed of off-site at an appropriate treatment facility;
- All waste oils and greases are segregated and stored appropriately until collection by a waste contractor for appropriate offsite recycling/disposal;
- Heavy earthmoving tyres are re-treaded and reused where possible, and smaller mining tyres were recycled off-site in 2025. Otherwise, tyres are buried in pit in accordance with site guidelines;
- Waste chemicals (including solvents) are segregated, stored appropriately and transported offsite by a licensed waste contractor for appropriate disposal;
- Concrete wash down areas are located away from surface water drains;
- Clean water surface water/runoff is diverted around mine facilities (where feasible); and
- Printer cartridges, bottles and waste collectors are all donated to PlanetArk.
- Cans and bottles are collected and donated to a local community group.

## 6.7.2 Environmental Performance

This reporting period has seen an increase in several non-recyclable and recyclable waste streams compared to the 2024 reporting period. Heavy vehicle tyre recycling was introduced in 2024 to explore options into salvaging of rubber materials. Mining operation waste collection statistics for the 2021, 2022, 2023, 2024 and 2025 reporting periods are summarised in **Table 6-12**.

The total recycled figures dropped in 2022 due to some amendments to the calculations used in previous years. Previously, these totals included the effluent figure despite it being in litres. The totals from 2022 on will now only be the waste measured in tonnes as stated in the table notes.

BCOPL and its contractors have continued to implement the waste management hierarchy. Wherever possible, waste materials are re-used on site in preference to direct disposal. Site induction packages include waste awareness components and waste practice is included in employee and contractor toolbox sessions. Environmental surveillance was undertaken by BCOPL throughout the reporting period, and observations and non-conformances were communicated as necessary to relevant employees and contractors.

**Table 6-12: Waste Disposal from 2021-2025**

| Waste Stream    | 2021 Reporting Period (tonnes) | 2022 Reporting Period (tonnes) | 2023 Reporting Period (tonnes) | 2024 Reporting Period (tonnes) | 2025 reporting Period (tonnes) |
|-----------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| General waste – | 60.7                           | 58.58                          | 88.63                          | 117.87                         | 214.12                         |



| Waste Stream                           | 2021 Reporting Period (tonnes) | 2022 Reporting Period (tonnes) | 2023 Reporting Period (tonnes) | 2024 Reporting Period (tonnes) | 2025 reporting Period (tonnes) |
|----------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| bulk waste skips                       |                                |                                |                                |                                |                                |
| General waste – industrial bins        | 401.8                          | 453.32                         | 532.73                         | 606.66                         | 590.67                         |
| Oily Rags                              | 8.99                           | 7.34                           | 3.09                           | -                              | -                              |
| Oily Water - recycled                  | 7.13                           | 3.90                           | 1.28                           | 3.6                            | 1.05                           |
| Waste Grease – recycled                | 5.25                           | 5.35                           | 7.92                           | 7.82                           | 4.12                           |
| Scrap metal - recycled                 | 1,684.06                       | 414.07                         | 321.52                         | 746.36                         | 270.96                         |
| Aluminium Wire - recycled              | 9.02                           | -                              | -                              | -                              | -                              |
| Copper Wire - recycled                 | 5.63                           | -                              | -                              | -                              | -                              |
| Empty Drums - recycled                 | 0.92                           | 1.43                           | -                              | 0.8                            | 0.93                           |
| Paper and cardboard-recycled           | 28.43                          | 55.76                          | 34.88                          | 46.6                           | 161.06                         |
| Timber packaging and pallets -recycled | 129.75                         | 99.40                          | 91.05                          | 124.9                          | 107.42                         |
| Oil filters - recycled                 | 31.21                          | 35.55                          | 36.10                          | 35.37                          | 20.43                          |
| Hydraulic hoses                        | 26.47                          | 28.48                          | 28.62                          | 28.62                          | 67.02                          |
| Batteries – recycled                   | 5.79                           | 10.92                          | 10.06                          | 39.65                          | 49.53                          |

| Waste Stream                                   | 2021 Reporting Period (tonnes) | 2022 Reporting Period (tonnes) | 2023 Reporting Period (tonnes) | 2024 Reporting Period (tonnes) | 2025 reporting Period (tonnes) |
|------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Nicad Batteries - recycled                     | 0.15                           | -                              | -                              | -                              | -                              |
| Printer cartridges                             | 0.06                           | 0.09                           | 0.01                           | 0.01                           | 0.02                           |
| Tyres (heavy oversize vehicle) – each          | 174                            | 426                            | 300                            | 300                            | 347                            |
| Tyres (light vehicle) – each                   | 116                            | 366                            | 471                            | 474                            | 373                            |
| Tyres (heavy oversize vehicle) – each recycled | -                              | -                              | -                              | 60                             | 56                             |
| 1,000L plastic containers (IBCs)               | 74                             | 25                             | 18.55                          | 5.2                            | 6.56                           |
| Oil-recycled (litres)                          | 518,740 <sup>#</sup>           | 515,382 <sup>#</sup>           | 590,000 <sup>#</sup>           | 631,784 <sup>#</sup>           | 523,200 <sup>#</sup>           |
| Coolant – treatment and recycling (litres)     | 19,700 <sup>#</sup>            | 21,100 <sup>#</sup>            | 28,500 <sup>#</sup>            | 34,500 <sup>#</sup>            | 39,100 <sup>#</sup>            |
| Effluent - offsite recycled (Litres)           | 807.5 <sup>#</sup>             | 875.7 <sup>#</sup>             | 1,773.15 <sup>#</sup>          | 1,264.2 <sup>#</sup>           | 1,436.9 <sup>#</sup>           |
| <b>TOTAL</b>                                   | <b>2,405.36</b>                | <b>1,174.19*</b>               | <b>4,333.71*</b>               | <b>1,763.46*</b>               | <b>1493.89*</b>                |
| <b>Total Recycled</b>                          | <b>1,907.19</b>                | <b>626.47*</b>                 | <b>2,913.01*</b>               | <b>1,005.1*</b>                | <b>615.5*</b>                  |

\* Total applies only to waste measured in tonnes

<sup>#</sup> Total in Litres

## **6.8 Spontaneous Combustion**

### **6.8.1 Environmental Management**

Spontaneous combustion is controlled by avoiding the disposal of combustible material in waste emplacement areas and emplacing combustible materials in locations where oxygen ingress is minimised (i.e. deep in pit burial, away from rehabilitation areas).

Four key principles apply to the management of spontaneous combustion at BCM:

- Prevention;
- Detection;
- Control; and
- Incident management.

Due to the varied nature of spontaneous combustion, the issue is dealt with on a case-by-case basis. Measures that were implemented during the reporting period include:

- Managing spontaneous combustion in accordance with the Spontaneous Combustion Management Plan;
- Capping all areas of combustible material with inert material where possible, noting some mined areas cannot be capped. In some cases capping is not practical for areas that require re-working in the near or medium future;
- Placing any identified combustible materials deep within in pit emplacement areas;
- Monitoring coal stockpiles for signs of spontaneous combustion and responding as required; and
- Implementing Safe work method statements as required.

The 2010 EA reported that spontaneous combustion presents a low risk of causing environmental impacts at BCM. All risks to rehabilitation from spontaneous combustion are managed in accordance with the strategies outlined in the RMP.

### **6.8.2 Environmental Performance**

BCOPL continued to apply the above principals to minimise the occurrence of spontaneous combustion onsite. One minor spontaneous combustion event occurred during the reporting period, in January 2025. The incident was managed in accordance with the Spontaneous Combustion Management Plan.

## **6.9 Heritage**

### **6.9.1 Environmental Management**

The management of cultural heritage at BCM is undertaken in accordance with the HMP. A review of the HMP was commenced in late 2023 and was approved by the DPHI in June 2024. This review has resulted in a document name change, now identifying the Cultural Heritage Management Plan as the Heritage Management Plan due to the incorporation of European Heritage items.

An outline of the process and draft document was discussed at the Aboriginal Stakeholder Consultative Forum (ASCF) meetings in 2023 and 2024. Time has been allowed for review of the draft HMP by Registered

Aboriginal Parties (RAPs) and Community Consultative Committee (CCC) and their feedback incorporated into the management plan. The approved HMP prescribes:

- The policies and practices for the preservation of sites during construction and operations;
- Other facets of cultural heritage practices and conservation measures including salvage of sites as required and practice of due diligence inspections; and
- Other relevant cultural heritage considerations including consultation with the Aboriginal community.

Field investigations, reporting and salvage works undertaken during 2025 focussed on BC 54 and the proposed 2026 tree clearing area which included the pit progression area of 20.83 ha ahead of mining and 4.35 ha of exploration pads.

## **6.9.2 Environmental Performance**

### **6.9.2.1 Archaeological Salvage**

The aim of the archaeological salvage work was to:

- Identify and salvage Aboriginal artefacts within the 2026 tree clearing areas to mitigate harm.
- Use the artefacts salvaged and the landscape context of the area to develop a picture of prehistoric land use and Aboriginal occupation of the area;
- Engage and involve the RAPs in all phases of the archaeological and cultural salvage; and
- Comply with the HMP and thereby comply with legislative requirements.

#### **6.9.2.1.1 Tree Clearing ahead of Pit Progression**

In 2024 a 20.83 ha area of land to the north of the pit (east of BC54 and north of MW5) was archaeologically surveyed ahead of the planned 2026 tree clearing area required for pit progression. The 2026 tree clearing area was surveyed and numerous areas of potential artefact deposits were identified based on landform context and surface evidence. In the first phase of the due diligence assessment test pits totalled 60 m<sup>2</sup> with some areas of PAD remaining to be tested and one hundred artefacts were recorded. A site was further explored in 2025 for three weeks, located two kilometres southeast of BC 54 on a terrace adjacent to a dry creek. Approximately 700 artefacts were salvaged, and a further 38 test pits were completed. A modified tree was also located within the 2026 tree clearing area, which will require salvaging.

#### **6.9.2.1.2 Tree Clearing for Exploration Pads**

In October 2025, 16 areas requiring tree clearing for the 2026 exploration drilling program were inspected for artefacts. This included 14 new drill pads and associated access tracks, the expansion of a pre-existing drill pad and the widening of an access road north of MW5. Several areas of archaeological potential were identified within these areas. In November 2025, areas with potential archaeological deposits were test pitted. No cultural material was found during the test excavation.

#### **6.9.2.1.3 Open area excavation – BC54**

Salvage operations continued in areas of BC 54 using the revised technique introduced in 2023. The introduction of mechanical excavation (with Departmental approval) and the mechanical sieve processed large quantities of soil compared to hand excavation.

### **6.9.3 Results to Date**

- In 2025 excavations were expanded by 103 m<sup>2</sup> in October and November 2025. The increase in output reflects the increased efficiency of the mechanical excavation.
- A total of 1,120 m<sup>2</sup> has been excavated since 2021 at BC54;
- A total of 5,465 artefacts were excavated in 2025;
- As there is no opportunity to conserve any part of BC54 and BC34 in-situ, further open area excavation was undertaken to maximise the data retrieved;

The BC 54 and BC 34 area were excised from the 2026 tree clearing area to allow for further excavation and salvage of artefacts.

#### **6.9.3.1 Discussion**

Approximately 46,542 artefacts have been salvaged since 2021 from test pits and the initial open area excavations. A substantial number of samples from sites BC 54 and BC 34 have been retrieved and form a significant representative sample on which to base the archaeological analysis of site use, raw material selection and sources and the significance of the site relative to others in the Nandewar Range.

Archaeological sites of this size and density are rare in the Leard Forest. Significant resources have been invested into maximising the salvage of the site prior to tree clearance.

#### **6.9.3.2 Aboriginal Community Consultation**

To facilitate ongoing Aboriginal stakeholder consultation, BCOPL hold Aboriginal Stakeholder Consultative Forum (ASCF) meetings, which are open to all RAPs who have registered during the BCOPL Project and any other member of the Aboriginal community who wish to attend. The ASCF provide an inclusive platform for information exchange between BCOPL and Aboriginal stakeholders and allows for continued dialogue on cultural heritage matters and their management at BCM.

A meeting was held in March 2025. Issues discussed in this forum include:

- Project update (including environmental monitoring rainfall and water storage);
- Exploration update;
- Status of management plans such as the revision of the Heritage Management Plan;
- The Keeping Place; and
- Archaeological salvage update.

#### **6.9.3.3 Historic Cultural Heritage**

No historic cultural heritage works were required in 2025.

### **6.9.4 Improvements and Initiatives**

BCOPL will continue to implement Aboriginal Cultural and Historic Heritage management and mitigation measures in accordance with the approved HMP.

## 6.10 Greenhouse Gases

### 6.10.1 Environmental Management

In accordance with the *National Greenhouse and Energy Reporting Act 2007*, and the *National Environment Protection (National Pollutant Inventory (NPI)) Measure*, IA submits mandatory National Greenhouse and Energy Reporting (NGERs) and NPI reporting on an annual basis, which includes emissions reporting on behalf of BCM.

The AQGHGMP details air quality and greenhouse gas management and mitigation measures and outlines BCM's monitoring and reporting requirements for Greenhouse Gas (GHG) emissions.

### 6.10.2 Environmental Performance

Key GHG and energy statistics for BCOPL as reported in the 2024-2025 NGERs submission to the Clean Energy Regulator are summarised in **Table 6-13** alongside statistics from the 2021-2022, 2022-2023 and 2023-2024 periods. As the reporting period for NGERs ends in June, data for the current financial year is not yet available.

For reporting purposes, emissions are categorised as either direct (Scope 1) or indirect (Scope 2) emissions. Scope 1 emissions are from sources that are owned or controlled by BCOPL. Scope 2 emissions are a consequence of the activities of BCOPL but occur at external sources; e.g. emissions resulting from the purchase of electricity. Emissions are calculated as tonnes of carbon dioxide equivalent (t CO<sub>2</sub>-e).

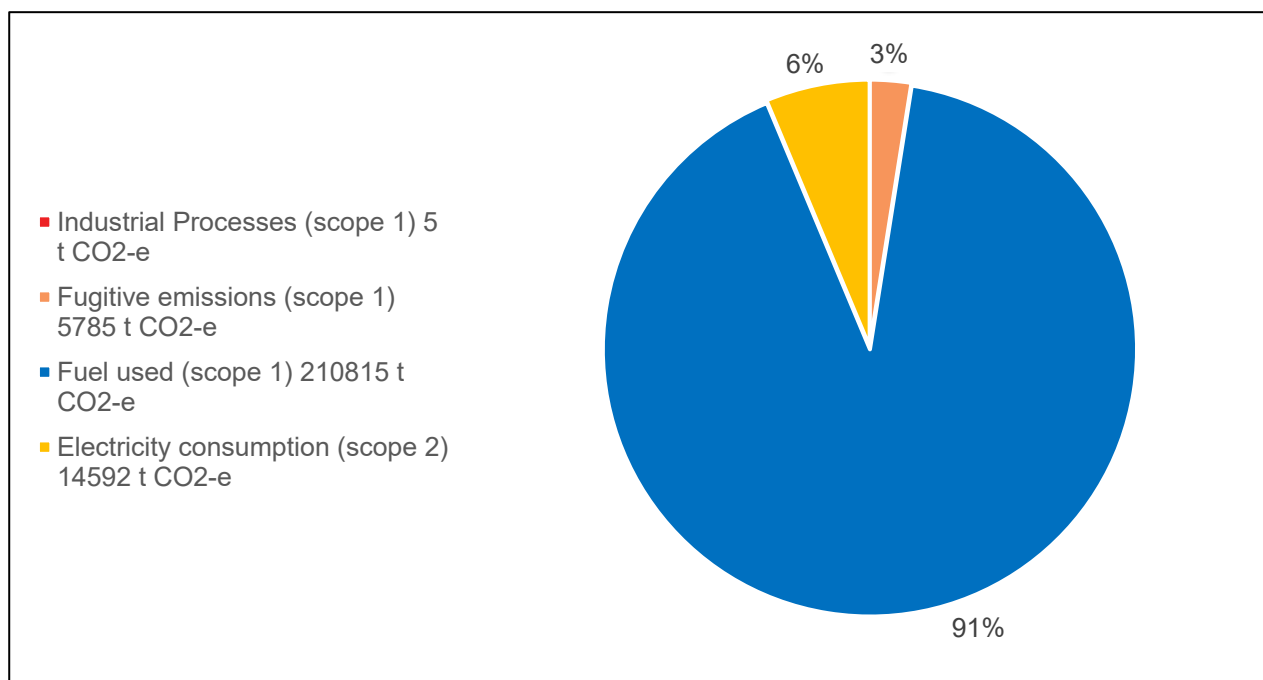
Three gasses constitute the emissions of BCOPL, being primarily carbon dioxide, in addition to methane and nitrous oxide.

**Table 6-13: BCOPL GHG and Energy Statistics 2025**

| GHG/ Energy                                           | 2022-2023      | 2023-2024      | 2024-2025      |
|-------------------------------------------------------|----------------|----------------|----------------|
| Scope 1 (t CO <sub>2</sub> -e)                        | 192,864        | 210,390        | 218,760        |
| Scope 2 (t CO <sub>2</sub> -e)                        | 14,769         | 15,303         | 14,592         |
| <b>Total scope 1 and scope 2 (t CO<sub>2</sub>-e)</b> | <b>207,633</b> | <b>225,693</b> | <b>233,352</b> |
| Energy Consumed (total)<br>(Gigajoules (GJ))          | 2,832,711      | 3,082,591      | 3,239,897      |
| Energy Consumed (net) (GJ)                            | 2,838,711      | 3,082,591      | 3,239,897      |
| Energy Produced (GJ)                                  | 153,752,823    | 203,386,518    | 185,812,353    |

Sources of Scope 1 and Scope 2 emissions for 2024-2025 are illustrated in **Figure 6-8**. The main contributor to Scope 1 emissions was the combustion of diesel. Scope 2 emissions are attributed to the purchase of 22,788,250 kWh of electricity from the state grid.

**Figure 6-8: Sources of BCM Scope 1 and Scope 2 Emissions**



Electricity use during 2023-2024 was similar to 2024-2025 due to the ongoing operation of the CHPP. Emissions from diesel combustion in the 2024-2025 reporting period increased marginally from 2023-2024. This can be attributed to the increase in ROM production across 2025.

#### 6.10.2.1 Comparison to Predictions

The difference in emission predictions to actual can be explained by several changes from the assumptions made in the 2010 EA (Hansen Bailey, 2010)(shown in **Table 6-14**). These changes include a larger equipment fleet, a higher rate of electricity usage and a change in the way in which fugitive emissions are calculated. The increase in electricity consumption compared to the 2010 predictions is the use of electricity by the CHPP. This is considered negligible as the total Scope 1 and 2 emissions are less than half what was predicted in the 2010 EA.

**Table 6-14: Comparison of 2010 EA Emissions Predictions and 2024-25 NGER Report**

| GHG (t CO <sub>2</sub> -e)     | 2024-2025 NGER Report | 2010 EA Emissions Predictions |
|--------------------------------|-----------------------|-------------------------------|
| Scope 1 - Industrial Processes | 5                     | no comparable data estimated  |
| Scope 1 - Fugitive Emissions   | 5,785                 | 329,763                       |
| Scope 1 - Fuels Usage          | 210,815               | 136,920                       |
| Scope 1 - Total                | 218,760               | 466,683                       |

|                                   |                |                |
|-----------------------------------|----------------|----------------|
| Scope 2 - Electricity Consumption | 14,592         | 3,233          |
| <b>Total Scope 1 and Scope 2</b>  | <b>233,352</b> | <b>469,916</b> |

### 6.10.3 Improvements and Initiatives

GHG emissions from the BCM are principally associated with diesel combustion and the consumption of purchased electricity. BCOPL has implemented the tracking of site-wide fuel consumption metrics including a goal of tracking 98% fuel accountability, fuel burn per BCM of material moved, and fuel burn of the 930E fleet.

BCOPL continued to target a decrease in fuel burn during 2024 through operational changes and fuel efficiency trials. Fuel chips trials from both Cummins and Komatsu have commenced across the BCM's fleet of haul trucks. Hydrogen injection systems have been fit to two heavy vehicles and trials are underway to explore increased fuel efficiency. BCOPL has also introduced a hierarchy traffic management system in pit which is focused on safety but will also increase fuel efficacy by limiting the stopping and starting of heavy vehicles at intersections.

During 2021, IA investigated in relation to the potential GHG initiatives which could potentially be implemented across its Queensland and NSW operations, including the BCM. Following on from this work, detailed site specific reviews of existing GHG measures and potential measures available to further reduce direct GHG measures are under consideration for implementation at BCM during 2025.

#### 6.10.3.1 Solar Farm

In 2024 BCOPL commenced a project to develop a small solar farm (4.95 MW solar farm and battery) in close proximity to the BCM. Stage one of the solar farm was completed in 2025 and has been providing enough energy for all mining operations at BCM during daytime operations.

#### 6.10.3.2 Equipment and Fuel Providers

In 2023, BCOPL conducted meetings with the BCM site equipment's Original Equipment Manufacturers (OEMs) (Komatsu, Hitachi, Cummins etc) and Ampol to understand their roadmap for carbon reduction and assess potential for biodiesel and Renewable Fuel. The OEMs' noted that they are completing research and development projects regarding lower emission equipment. However, whilst these technologies are being investigated, they are not of the size and scale which are commercially available to supply vehicles at the scale required.

Ampol confirmed for BCOPL that alternative fuels are not currently reasonably practicable given the limited availability, and whilst they are continuing to review supply chain options they have yet to find a cost effective solution for Australian supply.

BCOPL will continue to explore possible reasonable and feasible mitigation and management measures to minimise GHG emissions associated with their coal operations.

## 6.11 Public Safety

### 6.11.1 Environmental Management

The management of public safety at the BCM involves four key elements as follows:

- Traffic – to ensure a safe environment for public access to and egress from the site and movement within the site;
- Bushfire – to ensure that the public both onsite and offsite are not exposed to increased risk of



bushfire as a result of the Project;

- Lighting – to ensure the provision of adequate lighting to minimise adverse risk to the public both onsite and offsite; and
- Security – to restrict public access to areas of BCM where non-inducted and non-trained members of the public may be exposed to adverse risks posed from mining and related activities.

## **6.11.2 Environmental Performance**

### **6.11.2.1 Traffic**

Additional detail on traffic management is detailed in **Section 6.12**.

### **6.11.2.2 Bushfire**

BCOPL has historically worked closely with the NSW Rural Fire Service and Forestry Corporation of NSW, and will continue to do so, to ensure that bushfire risks on-site are actively identified and managed.

No bushfires or fire related incidents were recorded at BCM during the reporting period. Current management controls are considered to be appropriate.

### **6.11.2.3 Lighting**

BCOPL and its subcontractors ensure the careful positioning of on-site light sources to actively minimise associated impacts on surrounding receivers, while maintaining adequate illumination levels for operational activities to be carried out safely. This is particularly the case for the lighting sets at the waste emplacement areas. Lighting is provided and maintained in accordance with *AS/NZS 1158.0:2005 Lighting for roads and public spaces* and *AS 1680.1-1990 Interior lighting – General principles for recommendations*.

The control strategies implemented during the reporting period are considered appropriate and will be continued.

### **6.11.2.4 Security**

BCOPL implements a Site Access and Security Procedure which defines the conditions under which employees, contractors and visitors can access BCM. It outlines policies and strategies for limiting unauthorised access by members of the public with no commercial cause to be on the site, with a view to limiting the risk of personal harm, theft or damage of assets or personal property.

## **6.12 Traffic**

### **6.12.1 Environmental Management**

Traffic generated by construction and operation activities at BCM is managed in accordance with the approved Traffic Management Plan (TMP). The TMP focuses on the broader issues of traffic management at BCM and prescribes the overall requirements of the contractors associated with the BCM. It details management strategies that address environmental and safety risks associated with traffic generated from construction and operation activities to mitigate potential impacts and to satisfy the requirements of SSD 09\_0182 and other statutory obligations. The TMP also considers traffic associated with the TCM and MCCM.

The TMP describes forecast operational traffic volumes, site access arrangements, safety improvements, monitoring requirements and control measures to ensure the safe movement of pedestrians and vehicles, and to ensure roads are maintained in a 'fit for purpose' state.

Traffic counts were undertaken at six monthly intervals during the construction phase (2012 – 2015) and at 12 monthly intervals post- construction (mid-2015 onwards); to ensure actual traffic volumes are consistent with the TMP. Where there are significant variations in the traffic volumes on a given road because of BCM's operation, amendments to the TMP shall be considered. Internal and external audits of the implementation of the TMP are undertaken periodically.

## **6.12.2 Environmental Performance**

### **6.12.2.1 Traffic Monitoring**

Traffic incidents, monitoring of road conditions and roadkill observations are recorded in weekly inspections and incident reports, where relevant. There were zero BCM personnel traffic-related incidents recorded on roads in the vicinity of the BCM during the 2025 reporting period.

### **6.12.2.2 Inspections and Audits**

A traffic count audit was completed during the reporting period over a 2-week period between 25 November and 10 December 2025 to investigate traffic flows on the key routes and to quantify the number of vehicles entering the BCM via each access routes.

Data from the 2025 traffic survey has been averaged out to produce daily traffic flows (DTF) which incorporates each way traffic passed each monitoring point. The former BCM haul road monitoring point recorded a DTF of 668 while the Leard Forest Rd monitoring point recorded a DTF of 183. This equates to approximately 87.3% (down from 89.8% in 2024) via the former haul road and 12.7% (up from 10.2% in 2024) using Leard Forest Rd.

Analysis of the traffic counts indicates that 6% of vehicles travelling to BCM (via the mine access rd) were heavy vehicles (Class 4-12 vehicles). It is important to note that whilst Class 3 vehicles are also typically grouped as heavy vehicles, it was observed that a significant proportion of Class 3 vehicles are small vehicles with a wheelbase over 3.1m. This includes small busses, large utes and 4x4 vehicles often driven by workers involved in construction and mining projects.

Over the two-week traffic count period, the survey indicated a total average DTF of 851 (heavy and light vehicles) this figure is much lower than the predicted estimated daily traffic volume outlined in the Traffic Management Plan, which predicted a total of 1,174 vehicle trips per day.

## **6.13 Socio-economic**

### **6.13.1 Socio-economic Management**

Socio-economic matters at the BCM are managed via implementation of the Social Impact Management Plan (SIMP). The approved SIMP contains a commitment to undertake a major review of the document every three years. The revised SIMP was approved by the then DPHI in August 2021. BCOPL reviewed the SIMP in 2023 regarding the local community and regulatory requirements. The SIMP is due for revision in 2026.

The approved SIMP summarises the findings of the Social Impact Assessment completed as part of the 2010 EA. It outlines BCOPL's commitments to the mitigation and management of social impacts throughout the life of the Project. This includes implementing adaptive management in response to impacts on:

- Housing affordability;
- Local employment;
- Local businesses;
- Social and community infrastructure;

- Community cohesion;
- Farming communities;
- Indigenous communities; and
- Traffic.

The SIMP also outlines strategies for the management of cumulative social impacts from BCM and other mines in the region.

#### **6.13.2 Environmental Performance**

**Section 7.1** of the approved SIMP outlines a range of measures to be used to monitor the social impact of the BCM. BCOPL's performance against each of the monitoring mechanisms outlined in the SIMP has been assessed as part of the annual review process. The findings of that review are presented in **Table 6-15**.

**Table 6-15: Social Impact Monitoring Summary**

| Monitoring Mechanism | Type         | Frequency   | Purpose                                                                                                                                                               | Status (2025) Reporting Period)                                                                                                                         |
|----------------------|--------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Employment records   | Quantitative | Quarterly   | Monitor employment diversity (gender, Indigenous status), local residency, journey to work.                                                                           | Details of the profile of the BCM workforce are provided in <b>Section 9.4</b> .                                                                        |
| Procurement records  | Quantitative | Six monthly | Monitor project spend on goods and services with local and regional business, including sub-contractors.                                                              | Approximately \$63,905,288.54 was spent on goods and services procured from the business within Narrabri, Gunnedah and Tamworth local government areas. |
| Housing data         | Quantitative | Quarterly   | Monitor changes in house prices and rentals, vacancy rates, motels and temporary accommodation.                                                                       | A summary of housing data monitoring is provided in <b>Section 6.12.2.1</b> .                                                                           |
| Land use data        | Quantitative | Annual      | Monitor availability of zoned and serviced residential land and supply of new housing.                                                                                | Refer to <b>Section 6.12.2.2</b> for a summary of key land availability and housing supply data for the Narrabri and Gunnedah LGAs.                     |
| Social statistics    | Quantitative | Six monthly | Monitor changes in service provider statistics (hospital admission rates, GP attendance, school enrolments, emergency response, reported crime).                      | Refer to <b>Section 6.13</b> for a summary of key social statistics.                                                                                    |
| Attendance Records   | Quantitative | Annual      | Monitor workforce and community participation in education and training programs, induction programs, local sports events, local business forums and business events. | Details of workforce participation are provided in <b>Section 9.0</b> .                                                                                 |

| Monitoring Mechanism  | Type        | Frequency | Purpose                                                                                                                                                  | Status (2025) Reporting Period)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|-------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Workforce Survey      | Qualitative | Annual    | Record workforce perceptions about general wellbeing, family functioning, and community issues                                                           | In November 2025, the workforce was invited to participate in Idemitsu Australia's annual workforce survey. From the feedback captured in this survey elements of the BCO business that are going well and where improvement is required have been identified. The site leadership team is working through a program to provide the workforce with feedback from the survey, combined with proposed action plans to introduce constructive change through a continuous improvement process. |
| Community Survey      | Qualitative | Annual    | Record community perceptions about company reputation, workforce integration into the community, access to local services, and specific project impacts. | Community is regularly engaged through the CCC meetings. Meetings discuss various topics on how the company is interacting with the community and any specific impacts that are viewed by the local community.                                                                                                                                                                                                                                                                              |
| Local business survey | Qualitative | Annual    | Record perceptions about access to the supply chain, tender opportunities, and business engagement and support programs.                                 | BCOPL is a member of the Boggabri Business Chamber. Meetings were attended throughout the reporting period to provide the local business with updates on upcoming events and engage in local business issues. BCOPL's involvement in Boggabri's business community provides a mechanism for the company to gauge business perceptions about the BCM within the local community.                                                                                                             |
| Indigenous engagement | Qualitative | Annual    | Monitor labour demographics in local area                                                                                                                | BCOPL facilitates an ASCF. The ASCF provides a forum for raising general issues by                                                                                                                                                                                                                                                                                                                                                                                                          |

| Monitoring Mechanism | Type        | Frequency | Purpose                                                                                        | Status (2025) Reporting Period)                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|-------------|-----------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      |             |           |                                                                                                | stakeholders or BCOP. The forum met once during the reporting period and discussed matters including Keeping Place for Aboriginal salvage items, results of environmental monitoring on site, and consultation for Modification 10. As of 2021, upon employment BCOP employees can choose to indicate whether they identify as an Aboriginal or Torres Strait Islander person. During the reporting period 13 percent of employees identified as a First Nations person. |
| Community complaints | Qualitative | Annual    | Record workforce perceptions about general wellbeing, family functioning, and community issues | Two community complaints were made in 2025 which is outlined in <b>Section 9.3</b> .                                                                                                                                                                                                                                                                                                                                                                                     |

### 6.13.2.1 Housing

During 2021, BCOPL commissioned an SQM Research report on the Narrabri, Gunnedah and Boggabri area completed in December 2021. An additional housing survey was conducted in November. BCOPL will commission a housing report for Narrabri, Gunnedah and Boggabri in 2026.

Housing vacancy data indicated there have been substantial changes in residential vacancy rates over the past 11 years. Between 2009 and 2022, residential vacancy rates in Narrabri fluctuated significantly from less than 1% (two vacancies) in 2009, to a peak of around 5% (55 properties) in December 2015 and a vacancy rate of less than 1% (ten vacancies) in 2022 (SQM 2022).

Between 2009 and 2020, vacancy rates in Boggabri peaked in September 2013 at around 14% (25 vacancies) before dropping to a ten-year low of around 2% (4 vacancies) in September 2014. Between 2014 and 2019, vacancy rates in Boggabri fluctuated with another low of 2% in May 2018 before increasing to 4.6% in April 2019, and then decreasing to a current rate in 2022 of 2.6% (five vacancies) (SQM 2022).

Between 2009 and 2022, vacancy rates in Gunnedah peaked in both May 2013 and August 2015 at around 6% (more than 75 vacancies and more than 80 vacancies respectively). Over the 12-year period, vacancy rates dropped to a low of around 1% in September 2014 before increasing through to the August 2015 high. The residential vacancy rate in Gunnedah during 2022 increased slightly from 2021 to 1% (14 vacancies) (SQM 2022) from 0.7% (12 vacancies) (SQM 2021).

The DPHI predicts in their Draft Narrabri Place Strategy the Narrabri Shire will see an increase in population from 14,500 to 16,900 by 2041. In the NSC's Draft Place Strategy (2024), a new Residential precinct has been proposed, which has potential for 2,100 dwellings on flood-free land, to ensure housing availability for predicted future population growth (DPHI 2024).

Gunnedah Shire Council in the Gunnedah Shire Local Housing Strategy (2024) have finalised three rezoning applications to rezone land for larger lots, which could add 110 residential allotments. In 2016 there were 801 lots available for development and a predicted decrease in population from 12,900 people to 12,600 in 2041 (Gunnedah Shire Council 2024).

### 6.13.2.2 Social Statistics

#### 6.13.2.2.1 Health

In 2024 BCOPL met with a Boggabri Ochre Health representative to discuss potential social impacts felt by local healthcare service providers. Feedback from this consultation highlighted the need for more resourcing at Boggabri Hospital for aged-care beds. The impacts from BCOPL were found to be minimal, as Boggabri Hospital occasionally receive patients from BCOPL who are involved in incidents.

#### 6.13.2.2.2 Schools

As part of the social impact monitoring required under the SIMP, BCOPL completed a review of school enrolment records for all public schools in Gunnedah, Narrabri, Maules Creek and Boggabri between 2011 and 2022. 2024 enrolment data is released Mid-to-late 2025 which will be reported in the 2025 Annual Review.

Enrolment records indicate there have been gradual increases and decreases in student numbers amongst schools, with no significant trends observed between different years. Gunnedah High School has experienced a decline in enrolment numbers since 2011, though recent enrolments at Narrabri High School have slightly increased. The declining enrolment at Gunnedah High School may be attributed to a growing trend of boarding school education or a shift to accessible private education options such as St Xavier's Christian School and Saint Mary's College whose enrolments increased to 396 and 445 in 2022. A summary of annual enrolments for local schools between 2011 and 2024 is provided in **Table 6-16**.

**Table 6-16: Local School Enrolments 2011 - 2024**

| School                      | Annual Enrolments |       |       |       |       |      |      |      |      |      |      |      |      |      |
|-----------------------------|-------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
|                             | 2011              | 2012  | 2013  | 2014  | 2015  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| <b>Boggabri</b>             |                   |       |       |       |       |      |      |      |      |      |      |      |      |      |
| Boggabri Public School      | 98                | 101   | 105   | 123   | 117   | 117  | 113  | 88   | 83   | 69   | 77   | 86   | 86   | 89   |
| Sacred Heart Boggabri       | 37                | 32    | 33    | 34    | 23    | 24   | 37   | 43   | 39   | 43   | 38   | 40   | 38   | 24   |
| <b>Narrabri</b>             |                   |       |       |       |       |      |      |      |      |      |      |      |      |      |
| Narrabri Public School      | ≈ 400             | ≈ 395 | ≈ 400 | ≈ 410 | ≈ 410 | 406  | 403  | 399  | 394  | 353  | 329  | 298  | 256  | 255  |
| Narrabri West Public School | ≈ 230             | ≈ 240 | ≈ 280 | ≈ 280 | ≈ 300 | 370  | 348  | 327  | 330  | 325  | 313  | 301  | 292  | 262  |
| Narrabri High School        | 568               | 589   | 588   | 614   | 587   | 540  | 508  | 488  | 489  | 504  | 521  | 511  | 517  | 447  |
| St Xavier's Narrabri        | 240               | 224   | 113   | 171   | 195   | 178  | 188  | 189  | 187  | 212  | 235  | 237  | 279  | 291  |
| Fairfax Public School       | 8                 | 8     | 13    | 10    | 10    | 12   | 14   | 11   | 11   | 8    | 6    | 3    | 3    | 5    |



| School                              | Annual Enrolments |       |       |       |       |       |      |      |      |      |      |      |      |      |
|-------------------------------------|-------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
|                                     | 2011              | 2012  | 2013  | 2014  | 2015  | 2016  | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| <b>Gunnedah</b>                     |                   |       |       |       |       |       |      |      |      |      |      |      |      |      |
| Carinya Christian School – Gunnedah | 37                | 43    | 6     | 17    | 42    | 69    | 89   | 99   | 155  | 186  | 220  | 211  | 217  | 232  |
| Saint Mary's College Gunnedah       | -                 | -     | 379   | 408   | 401   | 379   | 357  | 364  | 379  | 370  | 421  | 445  | 435  | 415  |
| St Xavier's Gunnedah                | -                 | -     | 350   | 350   | 358   | 350   | 371  | 381  | 365  | 382  | 374  | 396  | 396  | 387  |
| G S Kidd Memorial School            | 45                | 49    | 32    | 33    | 40    | 40    | 40   | 36   | 36   | 33   | 33   | 35   | 31   | 35   |
| Gunnedah Public School              | ≈ 135             | ≈ 130 | ≈ 120 | ≈ 122 | ≈ 122 | ≈ 122 | 156  | 155  | 156  | 164  | 154  | 172  | 182  | 167  |
| Gunnedah South Public School        | ≈ 480             | ≈ 520 | ≈ 570 | 599   | 616   | 620   | 634  | 629  | 636  | 614  | 607  | 571  | 589  | 543  |
| Gunnedah High School                | ≈ 550             | ≈ 550 | ≈ 500 | ≈ 450 | ≈ 430 | 430   | 391  | 414  | 426  | 432  | 399  | 357  | 389  | 426  |

## 7 WATER MANAGEMENT

Water management at BCM is undertaken in accordance with the approved water management plans, prepared in accordance with SSD 09\_0182. The Water Management Plan (WMP) acts as the overarching document governing water management at BCM. Approved subordinate plans supporting water management include:

- Surface Water Management Plan (SWMP);
- Groundwater Management Plan (GWMP);
- Site Water Balance (SWB) report; and
- BTM Complex Water Management Strategy (WMS).

The water management system operates across four key elements as defined below:

- **Clean water** is defined as runoff from catchments that are not disturbed by mining operations;
- **Dirty water** is defined as runoff from disturbed areas within the mine site and includes runoff from spoil dumps, haul roads and parts of the mine infrastructure area. This water contains high levels of suspended solids;
- **Contaminated water** is defined as runoff generated from coal stockpiles, the CHPP, parts of the MIA and the mining void, as well as groundwater inflows to the mining void. This water contains high levels of suspended solids and is mildly saline; and
- **Erosion and sediment control** is defined as the suite of management and physical measures available to minimise the generation of soil erosion and to prevent soil and sediment entering the receiving water systems (i.e. 'Nagero Creek' and the Namoi River).

### 7.1 Surface Water

Surface water is managed in accordance with BCM's SWMP and associated water management plans which conform to the approvals, licences and other regulatory requirements of BCM. The key objectives of the surface water management system are to:

- Segregate clean runoff, dirty runoff, and contaminated water generated from rainfall events and mining operations;
- Minimise the volume of contaminated mine water (surface runoff draining to the pit and groundwater seepage) generated by BCM;
- Preferentially reuse contaminated water for dust suppression and coal washing;
- Provide sufficient on-site storage to avoid releases of contaminated water that could affect the quality of downstream watercourses;
- Treat all dirty runoff from un-rehabilitated overburden areas to settle coarse suspended solids; and
- Where practicable, divert 'clean' runoff to downstream creeks.
- Prioritise the use of contaminated and dirty water where reasonable and feasible in preference to imported water

Erosion and sediment control measures are used to supplement the water management system.

In accordance with SSD 09\_0182, BCM maintains a SWB for effective management of water resources. The SWB details water use, water demand and water management at BCM, as well as the sources and security of water supply, including contingency for future reporting periods.

### 7.1.1 Environmental Management

BCOPL undertakes 'ambient,' 'event' and 'frequency' based water quality monitoring in accordance with the SWMP and EPL12407.

Ambient monitoring measures the surface water quality of the receiving environment surrounding BCM (i.e. outside the site water management system). Ambient monitoring is triggered by an event such as a 'wet weather discharge' rather than as part of a set sampling regime.

Mine site event-based monitoring is undertaken within the site water management system and includes monitoring of sediment dams and mine water dams (MWD) in response to controlled discharges (i.e. release from a sediment dam), uncontrolled discharges (i.e. spillage from a dam during wet weather) or emergency discharges (i.e. an emergency discharge due to wet weather).

Frequency based monitoring is undertaken within the site water management system on a quarterly basis to assess the condition of site water quality and inform ongoing management.

Details of BCM's surface water quality monitoring program including monitoring locations, trigger events and sampling methods, are outlined in **Table 7-1**.

**Table 7-1: Surface Water Quality Monitoring Regime**

| EPL ID                                    | Location           | Location description                                  | *Trigger event/<br>Type of monitoring                       | Frequency                                                                          | Sampling method                              |
|-------------------------------------------|--------------------|-------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------|
| <b>Ambient and Event Based Monitoring</b> |                    |                                                       |                                                             |                                                                                    |                                              |
| 1                                         | SD6                | Nagero Dam                                            | Wet weather discharge<br>Controlled discharge water quality | As soon as practicable at the commencement of a wet weather discharge              | Grab sample with conductivity and pH in situ |
| 3                                         | SD3                | Southwest corner of spoil dump                        | Wet weather discharge<br>Controlled discharge water quality | As soon as practicable at the commencement of a wet weather discharge              | Grab sample with conductivity and pH in situ |
| 4                                         | SD4                | Sediment dam at rail load out area, west of mine site | Wet weather discharge<br>Controlled discharge water quality | As soon as practicable at the commencement of a wet weather discharge              | Grab sample with conductivity and pH in situ |
| 5                                         | SW1 'Nagero Creek' | Downstream of mining                                  | Discharge water quality (from EPL points 1,3 & 4)           | As soon as practicable during a discharge event from EPL discharge points 1, 3 & 4 | Grab sample with conductivity and pH in situ |

| EPL ID                            | Location              | Location description           | *Trigger event/<br>Type of monitoring             | Frequency                                                                          | Sampling method                              |
|-----------------------------------|-----------------------|--------------------------------|---------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------|
| 6                                 | SW2<br>'Nagero Creek' | Upstream of mining             | Discharge water quality (from EPL points 1,3 & 4) | As soon as practicable during a discharge event from EPL discharge points 1, 3 & 4 | Grab sample with conductivity and pH in situ |
| 48                                | SW3<br>'Nagero Creek' | Downstream of mining and SW1   | Discharge water quality (from EPL points 1,3 & 4) | As soon as practicable during a discharge event from EPL discharge points 1, 3 & 4 | Grab sample with conductivity and pH in situ |
| <b>Frequency Based Monitoring</b> |                       |                                |                                                   |                                                                                    |                                              |
| 36                                | SD6^                  | Nagero Dam                     | Surface water quality                             | Quarterly                                                                          | In situ                                      |
| 37                                | SD12                  | Near CHPP                      | Surface water quality                             | Quarterly                                                                          | In situ                                      |
| 38                                | SD3^                  | Southwest corner of spoil dump | Surface water quality                             | Quarterly                                                                          | In situ                                      |
| 41                                | MW3                   | South of MIA                   | Surface water quality                             | Quarterly                                                                          | In situ                                      |

Notes:

\* Wet weather discharge: An overtopping event from a dam as a result of excessive rainfall (i.e. typically via the emergency spillway)

\* Controlled discharge water quality: a controlled discharge event from a dam (i.e. drawdown of a dam after adequate sediment settlement has occurred)

^ EPL Point – Licensed discharge point

Surface water quality testing parameters from the SWMP are specified in **Table 7-2**.

**Table 7-2: Surface Water Quality Testing Parameters**

| Monitoring Type             | Determinants                                                                                                                                                                                                  |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient and event based     | Conductivity, nitrate, nitrogen (total), oil and grease, pH, phosphorus (total), reactive phosphorus, total suspended solids, dissolved metals (arsenic, cadmium, chromium, copper, lead, nickel, zinc, iron) |
| Frequency based (quarterly) | Conductivity, pH, Temp                                                                                                                                                                                        |

BCOPL uses a handheld multi-parameter water quality probe (pH, EC, temperature) for field checks. All water quality samples requiring lab analysis are sent to a NATA-accredited laboratory for processing.

#### 7.1.1.1 Water Storage and Usage Monitoring

Water storage levels of all active sediment dams and mine water dams are monitored and recorded on a weekly basis. This allows for effective management of stored volumes in terms of consumption, potential discharges and infrastructure planning in accordance with the SWMP.

#### 7.1.2 Environmental Performance

##### 7.1.2.1 Surface Water Quality Criteria

###### 7.1.2.1.1 Default guideline values

The SWMP specifies interim trigger levels for ambient monitoring, i.e. water quality of Nagero Creek when a discharge event occurs at BCM. Sufficient baseline data for the formation of statistically sound trigger levels is not available for Nagero Creek and the ANZECC (2000) default guidelines are considered to be unsuitable, as the ambient water quality has historically exceeded some of the criteria. The SWMP therefore assigns interim trigger levels based on the ANZECC *guideline values for the protection of Environmental Values* (2010) and the 80<sup>th</sup> percentile value of the limited ambient monitoring results historically collected from SW2.

ANZG (2018) provides DGVs for many of the various toxicants sampled through the monitoring program. Where ANZG (2018) did not provide guideline values, ANZECC (2000) was used instead. DGVs for the protection of aquatic ecosystems were taken where possible and are presented in the SWMP. Results of Event Based Monitoring.

The approved SWMP requires BCOPL to undertake surface water quality monitoring in Nagero Creek upstream (SW2) and downstream (SW1 & SW3) of the BCM as soon as practicable at the commencement of discharge.

No discharge events occurred during the reporting period as such no event-based sampling was undertaken.

###### 7.1.2.2 Results of Frequency Based Monitoring

Frequency based monitoring was undertaken on the following dates:

- 27-28 February 2025
- 18 June 2025
- 2-4 September 2025
- 17, 18 and 21 November 2025

The in-situ results for quarterly monitoring are provided in **Table 7-3**.

**Table 7-3: Summary of Frequency Based Monitoring Results**

|                             | MW3  | SD3  | SD4   | SD6   | SD10 | SD12 | SD23 |
|-----------------------------|------|------|-------|-------|------|------|------|
| <b>pH</b>                   |      |      |       |       |      |      |      |
| Q1                          | 8.93 | 8.34 | -     | 7.99  | 7.26 | 8.88 | 8.17 |
| Q2                          | 8.84 | 8.21 | 7.86  | 8.05  | 7.9  | 8.22 | -    |
| Q3                          | 9.09 | 8.12 | 8.23  | 8.03  | 8.29 | 8.2  | -    |
| Q4                          | 8.36 | 8.61 | -     | 8.29  | 8.56 | 8.64 | -    |
| <b>Average</b>              | 8.81 | 8.32 | 8.05  | 8.09  | 8.00 | 8.49 | 8.17 |
| <b>Conductivity (µS/cm)</b> |      |      |       |       |      |      |      |
| Q1                          | 2518 | 883  | -     | 618   | 1982 | 2564 | 1878 |
| Q2                          | 709  | 402  | 125.5 | 303   | 544  | 1028 | -    |
| Q3                          | 1316 | 467  | 202   | 207.6 | 1531 | 1581 | -    |
| Q4                          | 1145 | 455  | -     | 274   | 1281 | 1249 | -    |
| <b>Average</b>              | 1422 | 552  | 164   | 351   | 1335 | 1606 | 1878 |

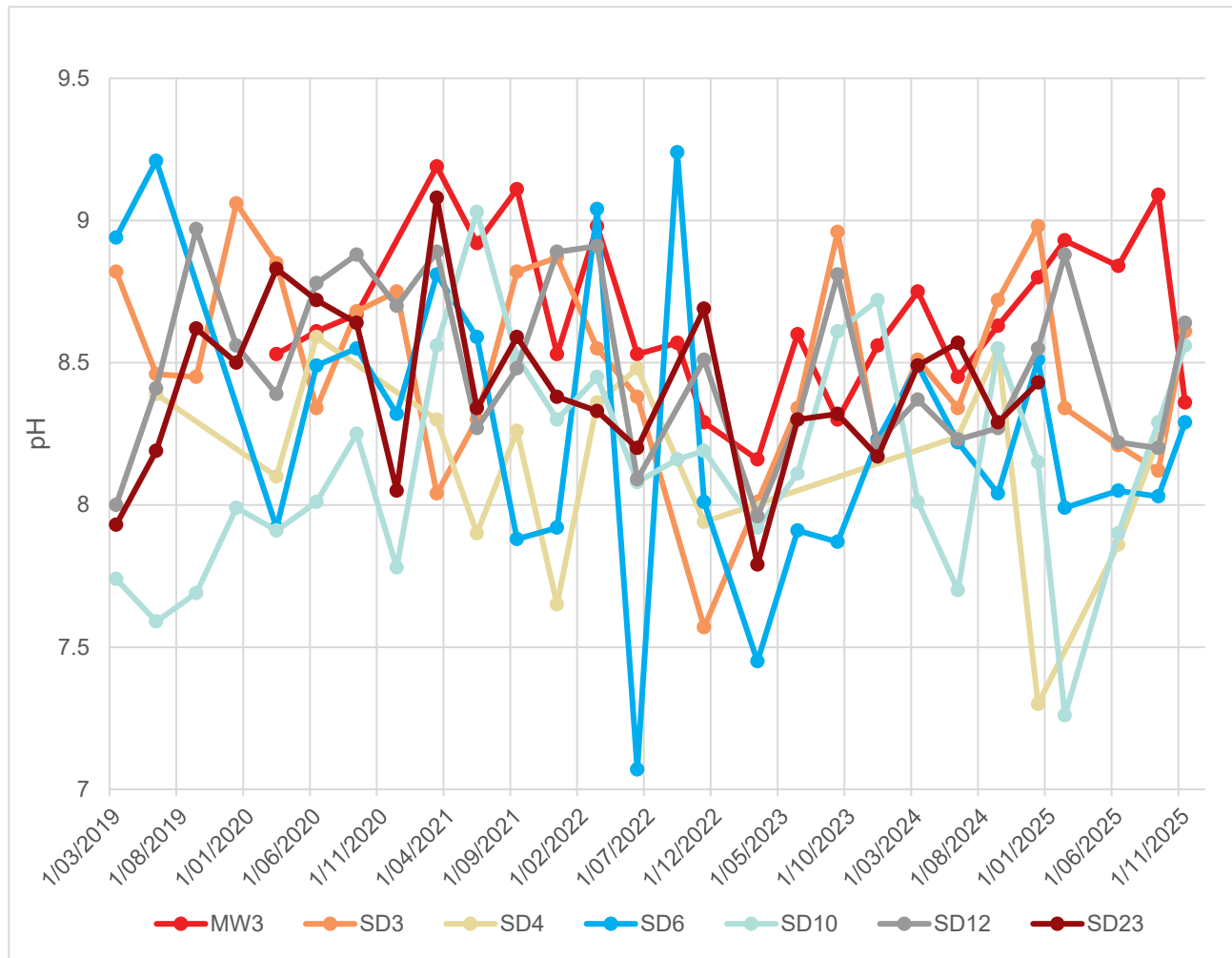
- no results recorded

### 7.1.2.3 Long Term Trend Analysis

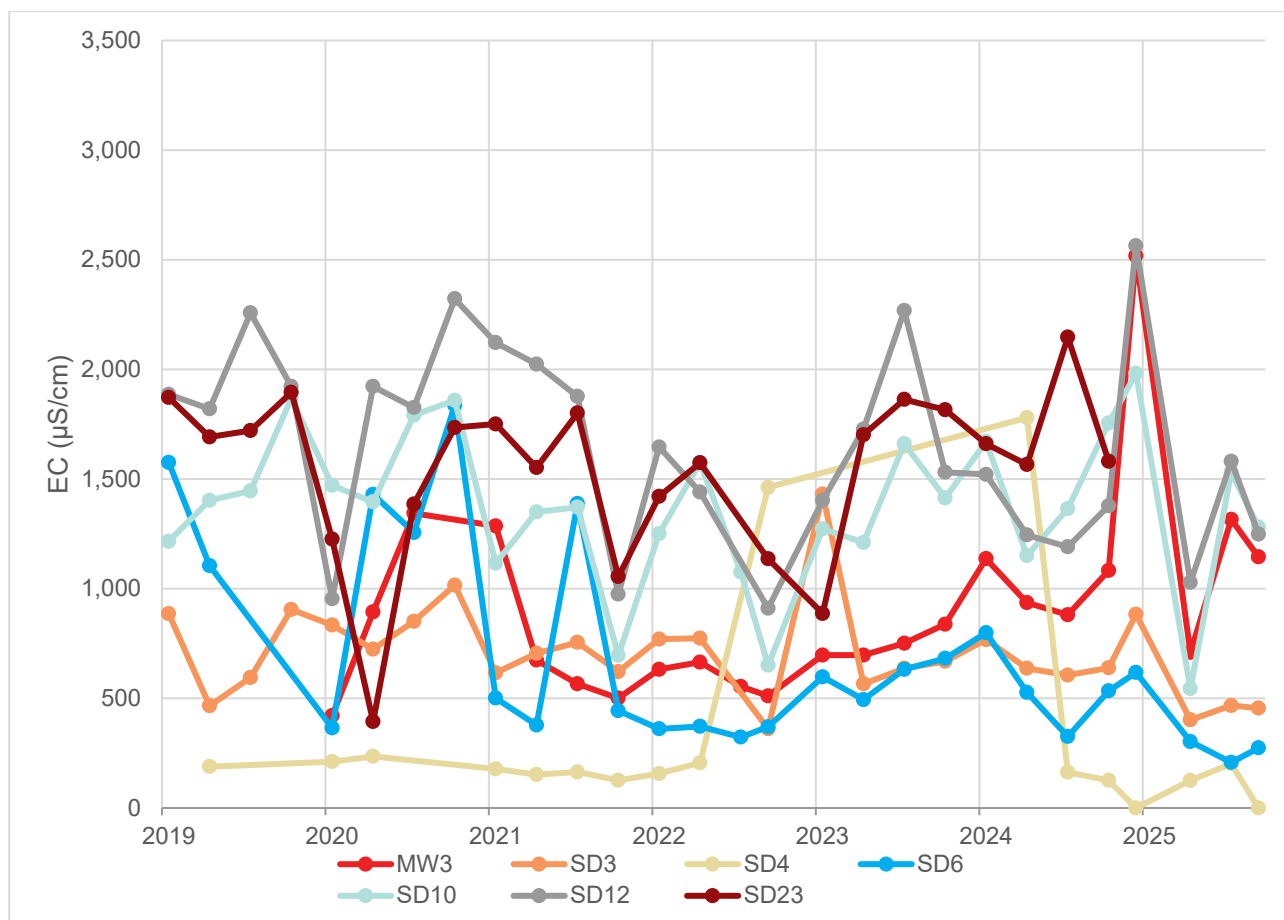
In accordance with SSD 09\_0182, a long-term trend analysis of surface water monitoring results at BCM has been undertaken using data from 2019 to 2025 to identify any trends in the monitoring. The results indicate the following:

- The pH of surface monitoring results stayed relatively stable between 2019 and 2025 with values ranging between 7.07 and 9.24 (2022) (**Figure 7-1**). In 2025 results all fell within these readings and showed mixed trends across the site, with some of the monitoring locations exhibiting increasing trends and others exhibiting decreasing trends.
- Historical trends show fluctuations in EC between 2019 and 2025. Since mid-2022, EC has been largely influenced by higher water storage volumes and rainfall. Although there have been fluctuations in recorded EC readings during 2024 and 2025, many of the water storages have followed similar trends (**Figure 7-2**).
- SD23 was decommissioned 20 April 2025.
- There were no discharges from BCOPL in 2025.

**Figure 7-1: Long Term Surface Water Monitoring Results for pH**



**Figure 7-2: Long Term Surface Water Monitoring Results for EC**



### Demand, Take and Usage

In accordance with its surface water licences and SSD 09\_0182, BCOPL accesses surface water from the Namoi River from time to time. BCOPL also holds water entitlements for groundwater extraction from the Namoi River alluvium. Furthermore, BCOPL can trade additional water to make up shortfalls. Where necessary, BCM uses existing water entitlements to supplement demand. The water taken from the existing licenses as at the end of the water year (1 July 2024 to 30 June 2025) is detailed in **Table 7-4**.

**Table 7-4: Water Take**

| Water Access Licence No. | Water Source and Water Sharing Plan (WSP)                                               | Allocation (ML) | Carryover from Previous Water Year | Temporary Transfers (ML) | Passive Take / Inflows (ML) | Active Pumping (ML) | TOTAL (ML)* |
|--------------------------|-----------------------------------------------------------------------------------------|-----------------|------------------------------------|--------------------------|-----------------------------|---------------------|-------------|
| 15037                    | Upper Namoi Zone 4<br>Namoi Valley (Keepit Dam to Gin's Leap),<br>Upper and Lower Namoi | 1,028           | 2,056                              | 0                        | 29                          | 783.9               | 812.9       |
| 12767                    |                                                                                         |                 |                                    |                          |                             |                     |             |
| 24103                    |                                                                                         |                 |                                    |                          |                             |                     |             |



| Water Access Licence No. | Water Source and Water Sharing Plan (WSP)                                                                                  | Allocation (ML) | Carryover from Previous Water Year | Temporary Transfers (ML) | Passive Take / Inflows (ML) | Active Pumping (ML) | TOTAL (ML)* |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------|--------------------------|-----------------------------|---------------------|-------------|
| 12691                    | Groundwater Sources WSP                                                                                                    |                 |                                    |                          |                             |                     |             |
| 36547                    |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 37519                    |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 29473                    | Gunnedah Oxley Basin Murray Darling Basin Groundwater Source, NSW Murray Darling Basin Porous Rock Groundwater Sources WSP | 842             | 210.5                              | 0                        | 155                         | 21.3                | 176.3       |
| 29562                    |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 44134                    | Bluevale Water Source, Namoi and Peel Unregulated Rivers Water Sources 2012                                                | 93              | 186                                | 400                      | 278.5                       | 0                   | 278.5       |
| 2571                     | Lower Namoi Regulated River, Upper Namoi and Lower Namoi Regulated River WSP                                               | 864.4           | 538.4                              | 0                        | 0                           | 0                   | 0           |
| 2572                     |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 2595                     |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 2596                     |                                                                                                                            |                 |                                    |                          |                             |                     |             |
| 37067                    | Upper Namoi Regulated River, Upper Namoi and Lower Namoi Regulated River WSP                                               | 128             | 64                                 | 128                      | 0                           | 0                   | 0           |
| 42234                    | Upper Namoi Zone 11 Maules Creek Groundwater source. Purchased 9/1/2019                                                    | 20              | 40                                 | 0                        | 1                           | 0                   | 1           |

#### 7.1.2.3.1 Water Demand

Core water demands during the 'water year' reporting period (1 July 2024 to 30 June 2025) were for coal processing in the CHPP and dust suppression. Quantities of water were also required for vehicle washdown and potable water uses. **Table 7-5** outlines future estimated water volumes for key water demands as described in the SWB.

Water demand predictions were initially provided in the 2010 EA; however, these have been updated a number of times since to account for changes to water demand and usage in light of approved changes to the operations.

**Table 7-5: Predicted Water Demand**

|        | Dust suppression (haul roads) | CHPP             | MIA and Potable water |
|--------|-------------------------------|------------------|-----------------------|
| Period | Jan 2017 to 2033              | Jan 2017 to 2033 | Jan 2017 to 2033      |
| Demand | 1,460 Megalitres (ML)/yr      | 1,460 ML/yr      | 365 ML/yr             |

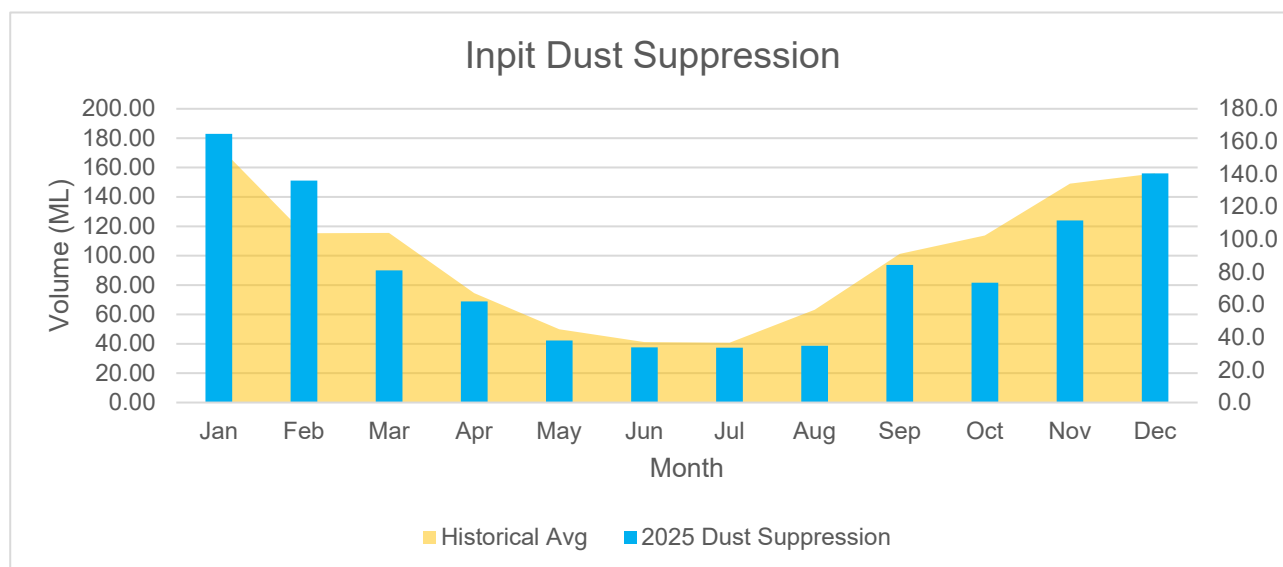
#### 7.1.2.3.2 Water Usage

Dust suppression accounts for the majority of water usage at BCM and involves application by water cart to unsealed roads, trafficable areas, windrows, stockpiles and batters.

During the reporting period, 1103.94 ML of water was used for dust suppression. This represents a decrease in water use from the previous reporting period, when 1256.59 ML of water was used. This decrease in water used is most likely due to the increased rainfall experienced during March and a flooding event during August, see **Section 6.1**.

In addition, a total of 209ML of water was used in the CHPP and MIA areas during the reporting period. This includes water used in the coal bypass, processing plant and train load out. The total water usage for dust suppression and the CHPP is below the predicted demand as detailed in **Figure 7-3**.

**Figure 7-3: 2025 Monthly Dust Suppression Water Usage (ML)**



### 7.1.2.3.3 Water Storage

Details of BCM's water storage dams including their design capacity and storage at the beginning (as at 3 January 2025) and end of the reporting period (as at 29 December 2025), are outlined in **Table 7-6**.

**Table 7-6: Water Storage Summary**

| Storage                   | Location/<br>description                                                                | Stored water                                                                                    | Catchment<br>area (ha) | Required<br>minimum<br>capacity<br>(ML) | Design<br>capacity<br>(ML) | Water<br>stored<br>start of<br>period<br>(ML) | Water<br>stored end<br>of period<br>(ML) |
|---------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------|----------------------------|-----------------------------------------------|------------------------------------------|
| <b>Dirty Water</b>        |                                                                                         |                                                                                                 |                        |                                         |                            |                                               |                                          |
| SD3                       | West of spoil<br>dump                                                                   | Dirty Water: runoff<br>from partially<br>rehabilitated spoil<br>dump                            | 194.2                  | 92.1                                    | 102.3                      | 36.13                                         | 34.4                                     |
| SD6                       | Downstream of<br>Mine<br>Infrastructure<br>Area (MIA)<br>(referred to as<br>Nagero Dam) | Dirty Water:<br>Runoff from<br>grassed areas<br>near MIA, and<br>overflows from<br>SD10 and SD8 | 64.3                   | 14.6                                    | 55.9                       | 5.9                                           | 12.3                                     |
| SD7                       | Eastern spoil<br>dump                                                                   | Dirty Water: runoff<br>from spoil dump<br>and clean runoff<br>from undisturbed<br>catchment     | 207.8                  | 57.5                                    | 95.1                       | 64.5                                          | 61.7                                     |
| SD8                       | In MIA                                                                                  | Dirty Water: runoff<br>from MIA                                                                 | 10.9                   | 5.6                                     | 13.4                       | 2.26                                          | 4.6                                      |
| <b>Dirty water total</b>  |                                                                                         |                                                                                                 |                        |                                         |                            | <b>108.79</b>                                 | <b>113</b>                               |
| <b>Contaminated Water</b> |                                                                                         |                                                                                                 |                        |                                         |                            |                                               |                                          |
| SD10                      | CHPP                                                                                    | Contaminated<br>Water: runoff from<br>product coal<br>stockpile                                 | 31.8                   | 92.1                                    | 102.3                      | 59.15                                         | 57.4                                     |
| SD11                      | At rail loop                                                                            | Contaminated<br>Water: runoff from<br>rail loop                                                 | 3.9                    | 10                                      | 16.4                       | 3.27                                          | 4.6                                      |
| SD12                      | CHPP                                                                                    | Contaminated<br>Water: runoff from<br>ROM coal<br>stockpile                                     | 45.7                   | 136.6                                   | 206.6                      | 48.55                                         | 73.8                                     |

| Storage                         | Location/<br>description          | Stored water                                                                                                  | Catchment<br>area (ha) | Required<br>minimum<br>capacity<br>(ML) | Design<br>capacity<br>(ML) | Water<br>stored<br>start of<br>period<br>(ML) | Water<br>stored end<br>of period<br>(ML) |
|---------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------|----------------------------|-----------------------------------------------|------------------------------------------|
| SD23 <sup>a</sup>               | Near topsoil<br>stockpile         | Dirty Water: runoff<br>from topsoil<br>stockpile                                                              | 56.5                   | 8.7                                     | 17                         | 14.77                                         | -                                        |
| SD28                            | Train loads out<br>facility (TLO) | Contaminated<br>Water: Runoff<br>from TLO                                                                     | 0.7                    | 2.6                                     | 3.5                        | 3.39                                          | 3.4                                      |
| MW3                             | South of MIA                      | Contaminated<br>Water: surplus<br>pumped from<br>SD10 and clean<br>runoff from small,<br>grassed<br>catchment | 10.7                   | 22.5                                    | 153.5                      | 43.96                                         | 100.4                                    |
| MW5 <sup>b</sup>                | In pit                            | Contaminated<br>Water Storage<br>Dam                                                                          | 208.1                  | 40                                      | 2,200                      | 855.65                                        | 256.3                                    |
| MW11 <sup>c</sup>               | In pit                            | Contaminated<br>Water Storage<br>Dam                                                                          | 16.2                   | -                                       | 1,582                      | -                                             | 231.76                                   |
| <b>Contaminated water total</b> |                                   |                                                                                                               |                        |                                         |                            | <b>1032.96</b>                                | <b>727.66</b>                            |

a SD23 Decommissioned 20 April 2025

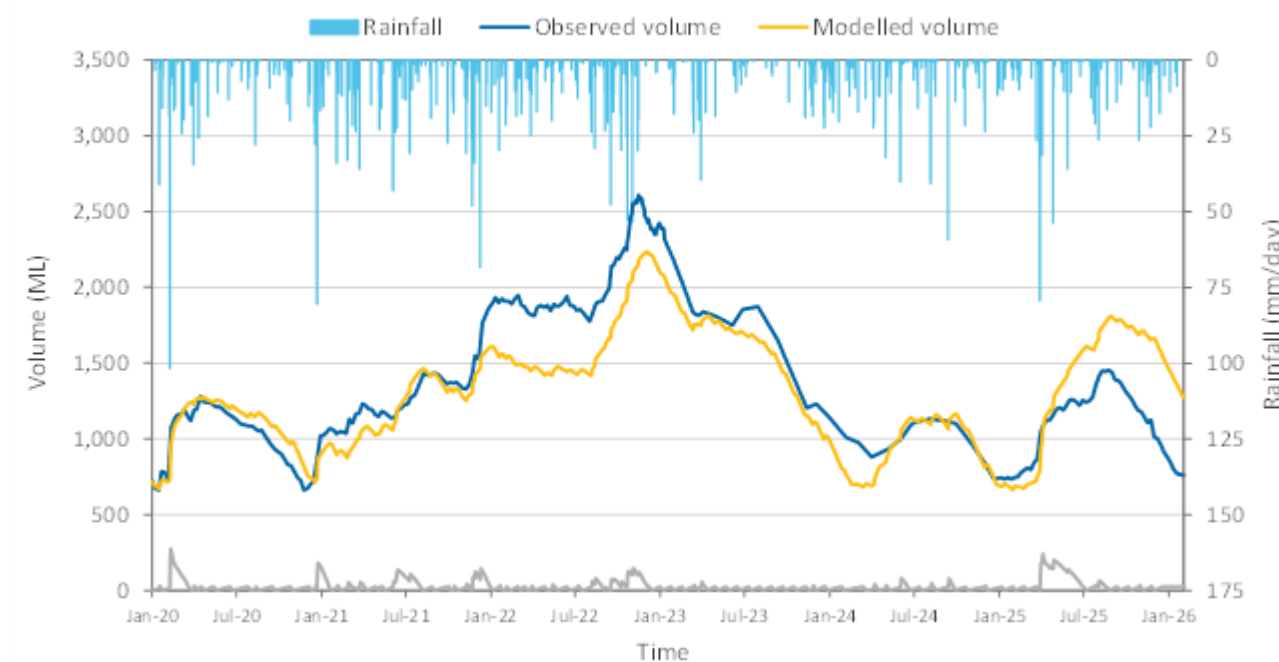
b Began dewatering MW5 to decommission in 2026

c MW11 Commissioned 3 December 2025 – water pumped from MW5 to MW11

#### 7.1.2.4 Water Balance Modelling

The site water balance model was reviewed and recalibrated for 2026, see **Appendix H** (EMM 2026) by comparing the observed and modelled site water inventory (**Figure 7-4**). The calibrated site water balance model was considered to provide a reasonable fit for total inventory, with the modelled rate of drawdown after rainfall events correlating well with the observed data. Except for the November and December 2021 and March and April 2025 rainfall events, the magnitude of inflows from rainfall events is also captured by the runoff model. It is noted that these events have seemingly resulted in different responses in storage to large rainfall events, which is likely a combination of land use timing inaccuracies and pit dewatering.

**Figure 7-4: Modelled vs Observed Site Water Inventory**



### 7.1.3 Improvements and Initiatives

Control strategies implemented under relevant management plans and strategies are considered to be adequate to manage and mitigate impacts to surface water downstream of the BCM. These will continue to be implemented throughout future reporting periods and updated where deemed necessary. Impacts to the downstream environment during the current reporting period are considered negligible. Ongoing improvements focused on strengthening BCM's water management framework and key initiatives include maintaining and optimising the mine water management system to contain runoff mine water, implementing and maintaining erosion and sediment control measures and continuing surface water quality monitoring across BCM.

## 7.2 Groundwater

### 7.2.1 Environmental Management

Groundwater is managed in accordance with BCM's approved water management plans, specifically the GWMP. A general overview of water management at BCM is provided in **Section 7.0**.

The GWMP provides a framework defining how BCOPL will assess, manage, and mitigate impacts to the groundwater system. This particularly focuses on impacts to the shallow alluvial aquifer attributable to mining activities such as dewatering the open pit void. The GWMP specifies impact assessment criteria and trigger levels to identify groundwater level and quality changes, and outlines BCOPL's monitoring and reporting requirements for groundwater management.

BCOPL holds licences for extraction from several groundwater bores. The amount of water extracted from groundwater sources and corresponding entitlements are identified in **Table 7-4**.

### 7.2.1.1 Groundwater Monitoring Program

BCOPL's groundwater monitoring program focuses on potential impacts to environmental assets and groundwater users in the area surrounding BCM, and aims to:

- Identify changes to the natural groundwater system attributable to mining operations; and
- Demonstrate compliance with the SSD 09\_0182.

Groundwater monitoring during 2025 at BCM consisted of monitoring of groundwater levels and sampling of groundwater quality. Groundwater monitoring was undertaken in accordance with the requirements of EPL 12407 and the GWMP. Groundwater levels were monitored manually on a quarterly basis (February, June, September, and November 2025), as listed in **Table 7-7**.

**Table 7-7: Groundwater Quality Testing Parameters**

| Groundwater Monitoring  | Parameters                                                                                                                                                          |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Water Level</b>      | Groundwater level                                                                                                                                                   |
| <b>Volume</b>           | Extraction volume (for production bores)                                                                                                                            |
| <b>Field Parameters</b> | pH, EC, temperature                                                                                                                                                 |
| <b>Major Ions</b>       | Sulphate as $\text{SO}_4^{2-}$ , chloride, calcium, magnesium, sodium, potassium                                                                                    |
| <b>Dissolved Metals</b> | Aluminium, arsenic, cadmium, chromium, copper, iron, lead, manganese, molybdenum, nickel, selenium, zinc                                                            |
| <b>Nutrients</b>        | Ammonia as N, nitrite as N, nitrate as N, nitrite + nitrate as N, total nitrogen as N, total phosphorus as P, reactive phosphorus as P                              |
| <b>Alkalinity</b>       | Hydroxide alkalinity as $\text{CaCO}_3$ , carbonate alkalinity as $\text{CaCO}_3$ , bicarbonate alkalinity as $\text{CaCO}_3$ , total alkalinity as $\text{CaCO}_3$ |

Groundwater quality field parameters (EC, pH and temperature) were measured quarterly, while sampling for major ions, dissolved metals and nutrients was undertaken in June and November 2025.

Groundwater sampling was undertaken using a groundwater pump and a minimum of three well volumes were purged or until the field parameters stabilised prior to sample collection. Samples were filtered onsite for the dissolved metal suite.

During the reporting period the active groundwater monitoring network comprised four monitoring bores screened across different geological units. Details of these bores are listed in **Table 7-8**.

**Table 7-8: Groundwater Monitoring Bores**

| EPL ID | Bore    | Licence    | Depth (mBGL <sup>A</sup> ) | Screen interval (mbtoc <sup>B</sup> ) | Geological Unit       | Screened geology               | Notes for reporting period                                                 |
|--------|---------|------------|----------------------------|---------------------------------------|-----------------------|--------------------------------|----------------------------------------------------------------------------|
| 7      | GW3115  | 90BL253832 | 32                         | 0-42                                  | Colluvial Aquifer     | Boggabri Volcanics (weathered) | Water level and quality data collected as per groundwater management plan. |
| 12     | IBC2110 | 90BL253841 | 100                        | 91-97                                 | Colluvial Aquifer     | Boggabri Volcanics             | Water level and quality data collected as per groundwater management plan. |
| 13     | IBC2111 | 90BL253840 | 45                         | 36-42                                 | Colluvial Aquifer     | Boggabri Volcanics (weathered) | Water level and quality data collected as per groundwater management plan. |
| 18     | MW6     | 90BL254255 | 32                         | 18-22                                 | Nagero Creek Alluvium | Alluvium                       | Water level and quality data collected as per groundwater management plan. |

<sup>A</sup> Metres below ground level

<sup>B</sup> Metres below top of casing

#### 7.2.1.2 Additional Groundwater monitoring bores

An additional 12 monitoring locations have been constructed following recommendations by Australasian Groundwater and Environment Consultants (AGE, 2023). The purpose of the additional monitoring bores is to replace exiting bores that are no longer operational, monitor groundwater in deeper coal seams (as proposed to be mined as part of the MOD 8 application) and to assess the groundwater-surface water relationship within the Nagero Creek alluvial region (AGE, 2023). Previously Permian monitoring bores (IBC2102, IBC2103, IBC2104 and IBC2105) have been decommissioned to facilitate the progression of mining.

A review of the groundwater monitoring network at the BCM conducted by AGE in 2023 identified that additional monitoring points should be added in the Nagero Creek alluvium and Bollol Creek to gain a better understanding of the connectivity between the surface water and groundwater resources, assessments of faults in the project area and in assessment of the depressurisation over time within the deeper coal seams.

Condition 12 of EPBC 2021/8875 requires the installation of groundwater monitoring bores illustrated on the plan in Appendix A of EPBC 2021/8875 prior to the commencement of mining below the Merriown Coal Seam. This includes BEP\_01 to BEP\_06 within **Table 7-9** below.

The locations, rationale, target geology and monitoring frequency for the bores are provided in **Table 7-9**. The VWP sensors are located within the target aquifers/aquitards where appropriate, with groundwater pressures and water levels logged daily. Logging at this frequency will allow rainfall recharge and pumping to be distinguished from potential water level declines due to depressurisation as a result of mine operations (AGE, 2023). It will also provide data to allow the calibration of the model to be improved over time and the connectivity between the alluvium and coal measures to be assessed.



**Table 7-9 Additional Groundwater Monitoring Locations**

| Bore    | Easting | Northing | Rationale                                                                                                                                                                                 | Target Geology                                    | Monitoring Regime |                                                          |
|---------|---------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------|----------------------------------------------------------|
| BEP_01a | 225441  | 6608126  | Monitoring in Nagero Creek alluvium. Bores adjacent to mapped Poplar Box Woodland.                                                                                                        | 2 x Stand pipes (SPs) in alluvium                 | Quarterly         | Water levels, field parameters                           |
| BEP_01b | 225439  | 6608114  |                                                                                                                                                                                           |                                                   | Half yearly       | SP - Major ions, dissolved metals, nutrients, alkalinity |
| BEP_02  | 225961  | 6608665  | Monitoring in Nagero Creek alluvium.                                                                                                                                                      | 1 x SP in alluvium                                | Quarterly         | Water levels, field parameters                           |
|         |         |          |                                                                                                                                                                                           |                                                   | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity      |
| BEP_03  | 224742  | 6607720  | Monitoring in downstream Nagero Creek alluvium.                                                                                                                                           | 1 x SP in alluvium                                | Quarterly         | Water levels, field parameters                           |
|         |         |          |                                                                                                                                                                                           |                                                   | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity      |
| BEP_04a | 226991  | 6613004  | Partially replaces mined out 'IBC' series of bores. Allows for the collection of groundwater level/quality data in the deeper seams that are targeted by MOD 8 and the Extension Project. | 3 x SPs in Templemore, Nagero, and Merriown seams | Quarterly         | Water levels, field parameters                           |
| BEP_04b | 226992  | 6612998  |                                                                                                                                                                                           |                                                   | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity      |
| BEP_04c | 226996  | 6613001  |                                                                                                                                                                                           |                                                   |                   |                                                          |

| Bore   | Easting | Northing | Rationale                                                                                                                                                                                                                                                              | Target Geology                                                                                              | Monitoring Regime |                                |
|--------|---------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------|--------------------------------|
| BEP_05 | 229202  | 6612997  | BCM specific monitoring of groundwater levels in the deeper seams that are targeted by the MOD 8 Amendment. Records of the expected coal seam depressurisation as mining progresses will improve the calibration of future updates to the numerical groundwater model. | VWP – 4 x sensors in Templemore, Tarrawonga, Nagero, and Merriown seams                                     | Daily             | VWP - Water levels             |
| BEP_06 | 225449  | 6608143  | Assessment of potential impacts propagating to the west through the volcanics.                                                                                                                                                                                         | VWP – 3 x sensors in Boggabri Volcanics                                                                     | Daily             | VWP - Water levels             |
| BEP_07 | 233568  | 6611834  | Long term monitoring in deep to shallow Permian coal seams. Assessment of impact propagation towards Goonbri Creek and Bollol Creek.                                                                                                                                   | 1 x SP in shallow regolith<br><br>VWP – 4 x sensors in Templemore, Nagero, and Merriown, and Braymont seams | Daily             | VWP - Water levels             |
| BEP_08 | 237025  | 6611767  | Assessment of lithology and water pressures east of the                                                                                                                                                                                                                | 1 x SP on eastern side                                                                                      | Quarterly         | Water levels, field parameters |

| Bore    | Easting | Northing | Rationale                                                                                                                                                         | Target Geology                                                            | Monitoring Regime |                                                          |
|---------|---------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------|----------------------------------------------------------|
|         |         |          | mapped Mooki thrust fault. Appreciation of fault behaviour in line with IESC guidance.                                                                            | of Mooki Thrust Fault                                                     | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity      |
| BEP_09  | 225949  | 6608667  | In line with IESC guidance, assessment of the Conomos Faults role in the hydrogeological regime. Also, further afield monitoring of potential impact propagation. | VWP – 3 x sensors in Nagero, Merriown, and Jeralong<br>1 x SP in alluvium | Daily             | VWP - Water levels                                       |
|         |         |          |                                                                                                                                                                   |                                                                           | Quarterly         | SP - Water levels, field parameters                      |
|         |         |          |                                                                                                                                                                   |                                                                           | Half yearly       | SP - Major ions, dissolved metals, nutrients, alkalinity |
| BEP_10  | 227309  | 6608685  | Monitoring connectivity between the coal seams and the volcanics.                                                                                                 | VWP – 3 x sensors in Therribri, Templemore, and Boggabri volcanics        | Daily             | VWP - Water levels                                       |
| BEP_11  | 224559  | 6603419  | Monitoring of groundwater levels and groundwater quality in a downstream portion of Bollol Creek where cumulative impacts are predicted and where there is        | 1 x SP did not reach the alluvium and will not be able to be sampled.     |                   |                                                          |
| BEP_11a | 224570  | 6603427  |                                                                                                                                                                   | 1 x SP in alluvium.                                                       | Quarterly         | Water levels, field parameters                           |

| Bore   | Easting | Northing | Rationale                                                                             | Target Geology                          | Monitoring Regime |                                                     |
|--------|---------|----------|---------------------------------------------------------------------------------------|-----------------------------------------|-------------------|-----------------------------------------------------|
|        |         |          | some evidence that the water table may be close to the surface.                       | This will be sampled instead of BEP_11. | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity |
| BEP_12 | 234258  | 6610626  | Coal seam monitoring bore for verification of existing VWP data as per NRAR requests. | 1 x SP in Braymont seam                 | Quarterly         | Water levels, field parameters                      |
|        |         |          |                                                                                       |                                         | Half yearly       | Major ions, dissolved metals, nutrients, alkalinity |

## 7.2.2 Environmental Performance

### 7.2.2.1 Groundwater Level Results

The minimum recorded water levels in 2025 have been compared with the trigger levels defined in the GWMP and are provided in **Table 7-10**. These groundwater levels are only compared with the GWMP trigger values for this reporting period as these trigger values only came into effect in September 2025. These 5<sup>th</sup> percentile trigger values have been produced based on an assessment of historical groundwater data.

The GWMP requires that 5<sup>th</sup> percentile groundwater level trigger values be recalculated each year to include the additional data. These will be reviewed in the 2026 Annual Review.

During the monitoring period, all monitoring bores screened remained within trigger values defined in the GWMP.

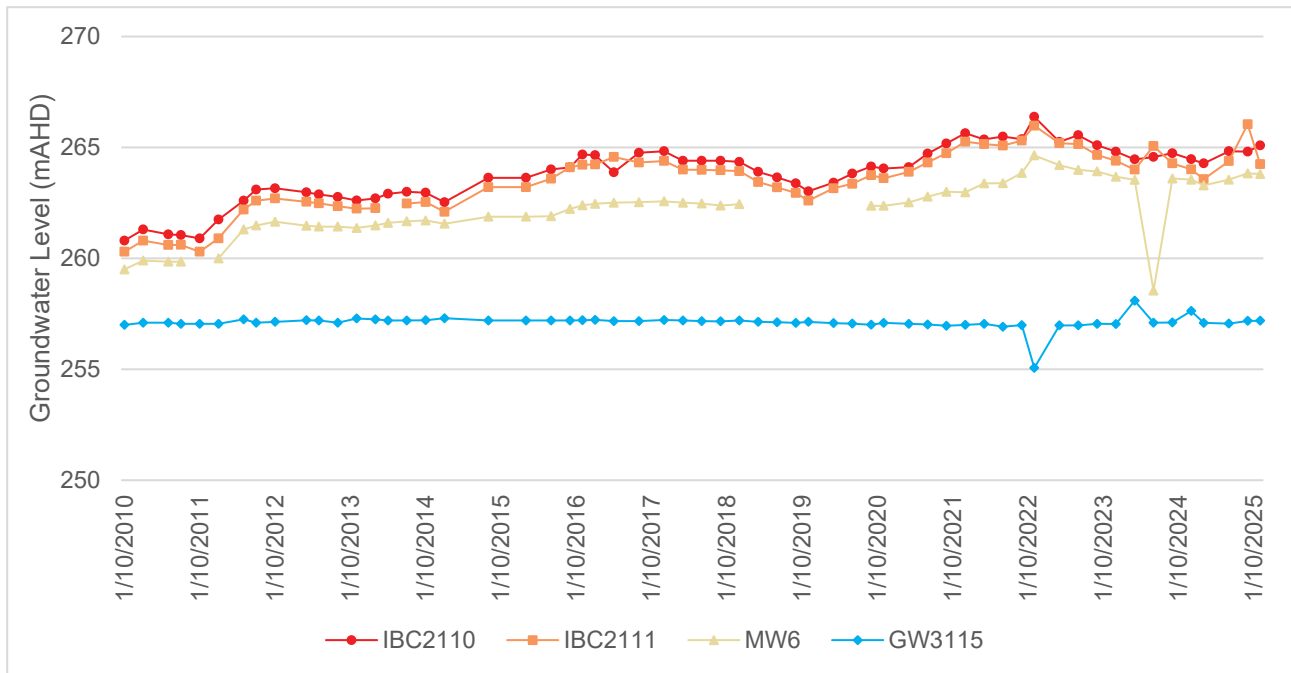
**Table 7-10 Minimum Measured Groundwater Levels**

| Monitoring bore | Trigger value (5 <sup>th</sup> percentile) (mAHD) | Minimum water level<br>2025 reporting period |
|-----------------|---------------------------------------------------|----------------------------------------------|
|                 | GWMP <sup>A</sup>                                 |                                              |
| GW3115          | 256.92                                            | 257.06                                       |
| IBC2110         | 257.16                                            | 264.28                                       |
| IBC2111         | 256.65                                            | 263.57                                       |
| MW6             | 258.79                                            | 263.29                                       |

<sup>A</sup> Approved trigger levels from the approved Groundwater Management Plan (September 2025)

The groundwater level monitoring results obtained during the reporting period have been added to the long-term hydrographs presented annually for BCM, as shown in **Figure 7-5**.

**Figure 7-5: Long Term Groundwater Levels for all Bores**



**Figure 7-5** clearly shows that the monitoring bores within the Boggabri Volcanics (IBC2110, IBC2111 and GW3115) and alluvium (MW6) have continued to remain relatively stable. IBC2111 saw a slight spike during the year, but recovered by the following sampling event.

#### 7.2.2.2 Compensatory groundwater

In accordance with Schedule 3 Condition 34 of SSD 09\_0182, BCOPL is required to provide a compensatory water supply to any landowner of privately-owned land whose water supply is adversely and directly impacted because of the project.

No adverse or direct impacts to water supply was reported in 2025, therefore no compensatory water supplies were provided

#### 7.2.2.3 Groundwater Quality Trigger Values

For certain parameters, the groundwater quality data collected to date has been reviewed and used to develop revised site trigger values for groundwater quality, which are documented in the latest version of the GWMP (September 2025).

Criteria to develop the trigger values have followed the percentiles approach instead of the standard deviation, as recommended for skewed data, which applies to the BCM. Monitoring results will be collated and reviewed to ensure that the data quality is appropriate and then compared to the relevant trigger values.

Following this method, the trigger values derived in the GMP for the currently active monitoring bores are presented in **Table 7-11**.

**Table 7-11: Groundwater Quality Trigger Values**

| Analytes        | Triggers Values | Alluvium | Boggabri Volcanics |         |        |
|-----------------|-----------------|----------|--------------------|---------|--------|
|                 |                 | MW6      | IBC2110            | IBC2111 | GW3115 |
| pH              | 5th %ile        | 6.7      | 6.9                | 6.4     | 7.0    |
|                 | 95th %ile       | 8.3      | 8.3                | 7.3     | 8.1    |
| EC (µS/cm)      | 5th %ile        | 1,953    | 1,606              | 1,952   | 3,110  |
|                 | 95th %ile       | 2,310    | 2,182              | 2,524   | 3,698  |
| Sulphate (mg/L) | 5th %ile        | 38       | 1                  | 46      | 154    |
|                 | 95th %ile       | 70       | 108                | 101     | 211    |
| Chloride (mg/L) | 5th %ile        | 239      | 104                | 229     | 559    |
|                 | 95th %ile       | 434      | 447                | 470     | 713    |
| Sodium (mg/L)   | 5th %ile        | 349      | 372                | 317     | 621    |
|                 | 95th %ile       | 411      | 484                | 373     | 797    |

#### 7.2.2.4 Groundwater Quality Results – Field Parameters

Time series plots of pH and electrical conductivity (EC) are presented in **Figure 7-6** and **Figure 7-7** respectively. Water quality field parameters for EC and pH have also been compared to the trigger values, with results presented in **Table 7-12**.

**Table 7-12 Groundwater Quality Results**

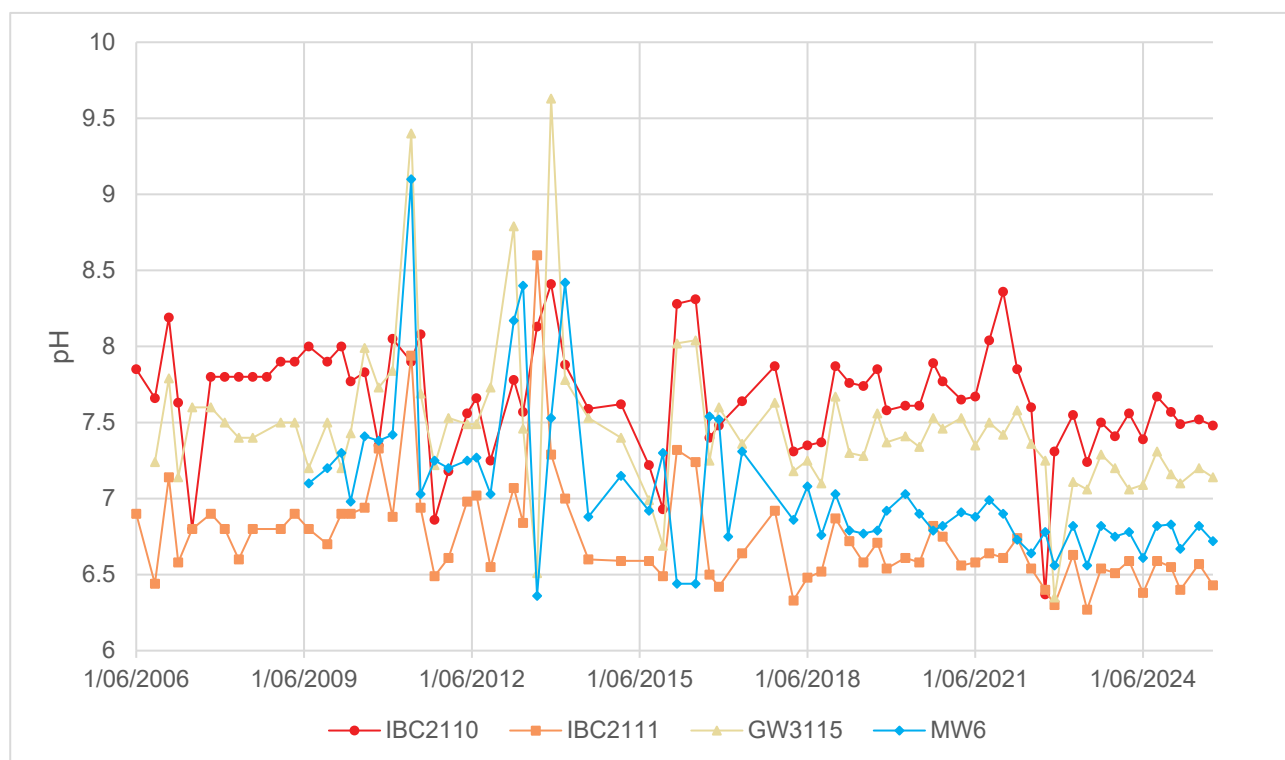
| Analytes          | Alluvium | Boggabri Volcanics |         |        |
|-------------------|----------|--------------------|---------|--------|
|                   | MW6      | IBC2110            | IBC2111 | GW3115 |
| <b>pH</b>         |          |                    |         |        |
| 27/02/2025        | 6.83     | 7.57               | 6.55    | 7.16   |
| 19/06/2025        | 6.67     | 7.49               | 6.4     | 7.1    |
| 4/09/2025         | 6.82     | 7.52               | 6.57    | 7.2    |
| 18/11/2025        | 6.72     | 7.48               | 6.43    | 7.14   |
| <b>EC (µS/cm)</b> |          |                    |         |        |
| 27/02/2025        | 2568     | 2132               | 2629    | 3440   |
| 19/06/2025        | 2458     | 1991               | 2418    | 3340   |
| 4/09/2025         | 2536     | 2145               | 2640    | 3560   |
| 18/11/2025        | 2000     | 1897               | 2397    | 3180   |

#### 7.2.2.4.1 pH

pH levels were generally within historical limits for pH at all monitoring bores throughout the reporting period (**Figure 7-6**). Rises and falls throughout the reporting period were consistent amongst all monitoring bores.

There were no exceedances of pH trigger values during the 2025 sampling period. Trends in pH will continue to be monitored at these sites in accordance with the requirements of the GWMP. See **Figure 7-5** for long term trends.

**Figure 7-6: Groundwater Trends in pH**



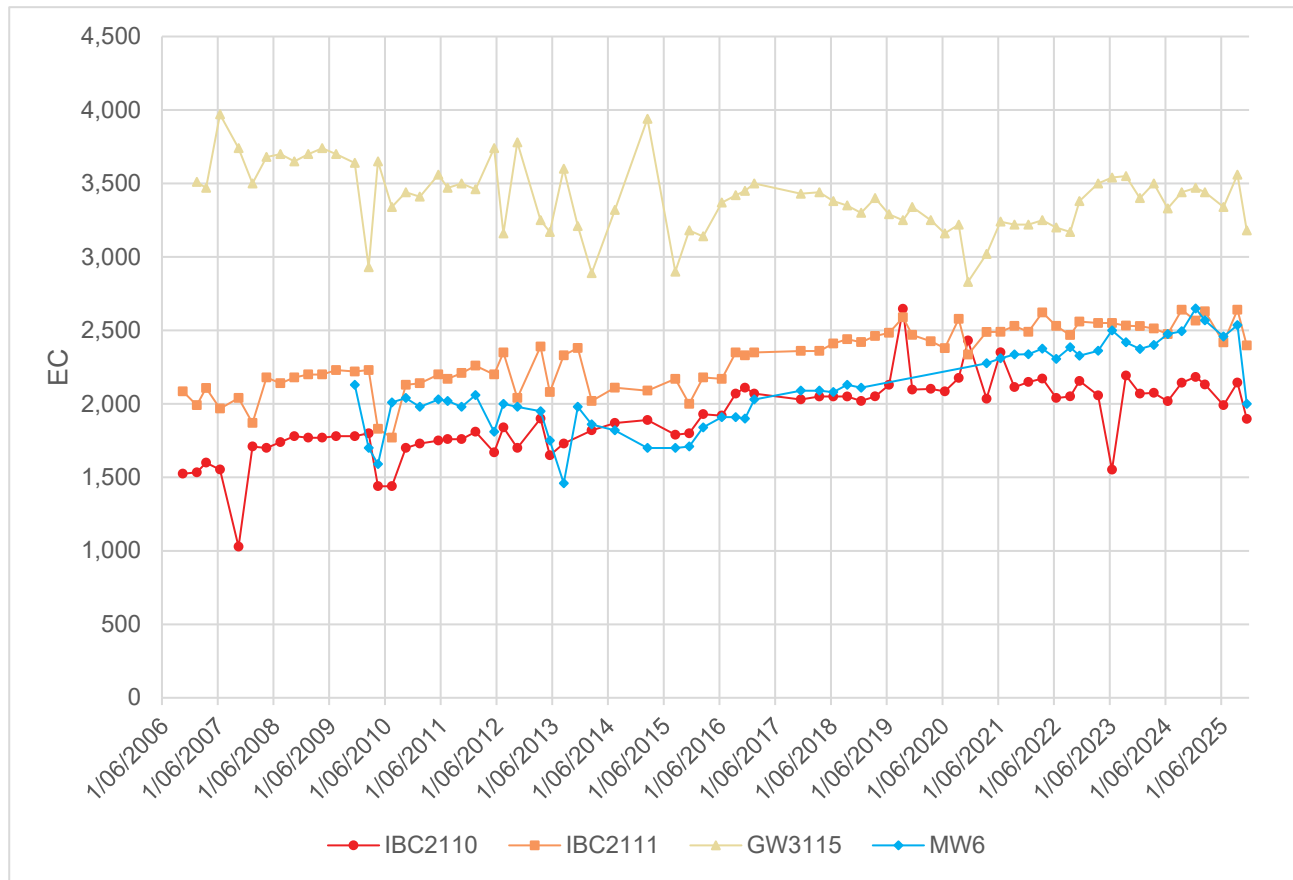
#### 7.2.2.4.2 Electrical Conductivity

EC conductivity results were within the trigger limits for GW3115 and IBC 2110 throughout the reporting period (**Figure 7-7**). The trigger values listed above in **Table 7-11** only came into effect since the approval of the most recent version of the GWMP in September 2025. EC results were all within triggers values during the November groundwater sampling.

EC results across all groundwater monitoring bores during the November sampling event, were lower than samples taken during September. EC exceedances experienced earlier in the reporting period may be attributed to increases in salinity, increases in the concentration of inorganic materials and/or increases in water temperature.



**Figure 7-7: Groundwater Trends in Electrical Conductivity**



#### 7.2.2.4.3 Groundwater - Major Ions

Major ion compositions were analysed as part of the analytical suite. Results for major ions are presented in **Table 7-13**. The results of major ions were consistent with previous years and remained relatively stable over the reporting period. Potential exceedances of trigger values occurred in the November sampling at MW6. In accordance with the GWMP a follow-up sample was taken and did not rule out a potentially anomalous result. This further testing has prompted BCOPL to engage with a suitably qualified person to undertake an assessment of MW6 to determine the reason for the potential exceedance. BCOPL is still awaiting the results of this assessment and if it is found that BCOPL is not the driving factor behind the result, it will be reported in the 2026 Annual Review. If this is not the case, BCOPL will report the non-compliance in accordance with the GWMP and approvals.

**Table 7-13: Results Summary for Analysis of Major Ions**

| Bore and Date Sample                | Sulphate<br>(mg/L) | Chloride<br>(mg/L) | Sodium(mg/L) |
|-------------------------------------|--------------------|--------------------|--------------|
|                                     | (mg/L)             | (mg/L)             | (mg/L)       |
| <b>GW3115 (Boggabri Volcanics)</b>  |                    |                    |              |
| 17/06/2025                          | 178                | 689                | 666          |
| 17/11/2025                          | 196                | 622                | 664          |
| <b>IBC2110 (Boggabri Volcanics)</b> |                    |                    |              |
| 17/06/2025                          | 73                 | 415                | 411          |
| 17/11/2025                          | 75                 | 388                | 398          |
| <b>IBC2111 (Boggabri Volcanics)</b> |                    |                    |              |
| 17/06/2025                          | 100                | 505                | 353          |
| 17/11/2025                          | 97                 | 410                | 352          |
| <b>MW6 (Alluvium)</b>               |                    |                    |              |
| 17/06/2025                          | 75                 | 517                | 411          |
| 18/11/2025                          | 73                 | 441                | 426          |

#### 7.2.2.4.4 Groundwater - Metals

Analytical results indicated that dissolved metal concentrations for Cadmium, Chromium, Copper, and Iron were generally below laboratory limit of reporting (LOR) (**Table 7-14**). Concentrations of Manganese, Nickel, and Zinc above the LOR were recorded (**Table 7-14**), however remain at levels generally consistent with historically observed values.

A summary of the metal concentrations recorded during the reporting period is presented below in **Table 7-14**.

**Table 7-14: Results Summary for Analysis of Metals**

| Bore and date sample                | Arsenic | Cadmium | Chromium | Copper | Lead   | Manganese | Nickel | Zinc   | Iron   |
|-------------------------------------|---------|---------|----------|--------|--------|-----------|--------|--------|--------|
|                                     | (mg/L)  | (mg/L)  | (mg/L)   | (mg/L) | (mg/L) | (mg/L)    | (mg/L) | (mg/L) | (mg/L) |
| <b>GW3115 (Boggabri Volcanics)</b>  |         |         |          |        |        |           |        |        |        |
| 17/06/2025                          | <0.001  | <0.0001 | <0.001   | 0.001  | <0.001 | 0.091     | <0.001 | 0.042  | 2.48   |
| 17/11/2025                          | <0.001  | <0.0001 | <0.001   | <0.001 | <0.001 | 0.08      | <0.001 | 0.015  | 1.95   |
| <b>IBC2110 (Boggabri Volcanics)</b> |         |         |          |        |        |           |        |        |        |
| 17/06/2025                          | <0.001  | <0.0001 | <0.001   | <0.001 | <0.001 | 0.033     | 0.002  | <0.005 | <0.05  |
| 17/11/2025                          | <0.001  | <0.0001 | <0.001   | <0.001 | <0.001 | 0.052     | <0.001 | <0.005 | <0.05  |
| <b>IBC2111 (Boggabri Volcanics)</b> |         |         |          |        |        |           |        |        |        |
| 17/06/2025                          | <0.001  | <0.0001 | <0.001   | 0.005  | <0.001 | 0.003     | 0.001  | 0.1    | <0.05  |
| 17/11/2025                          | <0.001  | <0.0001 | <0.001   | 0.014  | <0.001 | 0.006     | 0.005  | 0.084  | <0.05  |
| <b>MW6 (Alluvium)</b>               |         |         |          |        |        |           |        |        |        |
| 17/06/2025                          | <0.001  | <0.0001 | <0.001   | 0.002  | <0.001 | 0.002     | <0.001 | 0.037  | <0.05  |
| 17/11/2025                          | <0.001  | <0.0001 | <0.001   | 0.002  | <0.001 | 0.005     | 0.002  | 0.0    | <0.05  |

#### 7.2.2.4.5 Groundwater - Nutrients

Nutrient concentrations during 2025 were generally similar to historical concentrations, with spikes in nitrate (and total nitrogen) concentrations at MW6 and IBC2111 compared to previous years (**Table 7-15**). The increase in Nitrogen at MW6 is consistent with what was experienced in 2024.

**Table 7-15: Results Summary for Analysis of Nutrients**

| Bore and date sample                | Ammonia<br>(mg/L) | Nitrite<br>(mg/L) | Nitrate<br>(mg/L) | Nitrite + Nitrate<br>(mg/L) | Total Kjeldahl Nitrogen<br>(mg/L) | Total Nitrogen<br>(mg/L) | Total Phosphorus<br>(mg/L) | Reactive Phosphorus<br>(mg/L) |
|-------------------------------------|-------------------|-------------------|-------------------|-----------------------------|-----------------------------------|--------------------------|----------------------------|-------------------------------|
| <b>GW3115 (Boggabri Volcanics)</b>  |                   |                   |                   |                             |                                   |                          |                            |                               |
| 17/06/2025                          | 0.15              | <0.01             | <0.01             | <0.01                       | 0.2                               | 0.2                      | 0.12                       | <0.01                         |
| 17/11/2025                          | 0.12              | <0.01             | <0.01             | <0.01                       | 0.2                               | 0.2                      | <0.01                      | <0.01                         |
| <b>IBC2110 (Boggabri Volcanics)</b> |                   |                   |                   |                             |                                   |                          |                            |                               |
| 17/06/2025                          | 0.64              | <0.01             | 0.01              | 0.01                        | 0.8                               | 0.8                      | 0.23                       | 0.2                           |
| 17/11/2025                          | 0.53              | <0.01             | <0.01             | <0.01                       | 0.6                               | 0.6                      | 0.22                       | 0.17                          |
| <b>IBC2111 (Boggabri Volcanics)</b> |                   |                   |                   |                             |                                   |                          |                            |                               |
| 17/06/2025                          | 0.01              | <0.01             | 3.58              | 3.58                        | 0.6                               | 4.2                      | 0.03                       | 0.03                          |
| 17/11/2025                          | 0.01              | 0.01              | 3.55              | 3.56                        | 0.4                               | 4                        | 0.04                       | 0.03                          |
| <b>MW6 (Alluvium)</b>               |                   |                   |                   |                             |                                   |                          |                            |                               |
| 17/06/2025                          | 0.06              | <0.01             | 2.58              | 2.58                        | 0.6                               | 3.2                      | 0.06                       | 0.03                          |
| 17/11/2025                          | <0.01             | <0.01             | 2.47              | 2.47                        | 0.3                               | 2.8                      | 0.05                       | 0.03                          |

#### 7.2.2.5 Additional Groundwater Bores

The November 2025 biannual groundwater monitoring results (table below) incorporate data from the expanded monitoring network, including the recently installed additional bores in accordance with the updated GWMP (2025). The inclusion of these bores strengthens spatial coverage of the monitoring network and will improve the understanding of groundwater conditions and potential mining related impacts over time. The latest iteration of the GWMP was approved in September 2025, only one single round of sampling (November 2025) has been completed for these new bores to date. As such, the current dataset is insufficient to establish meaningful trends or long term variability. A more robust assessment of groundwater behaviour will be included in future Annual Reviews once additional monitoring data becomes available.

**Figure 7-8 Additional Groundwater Bores November Results**

|                                 | Sample ID   | BEP_01a                      | BEP_01b    | BEP_02     | BEP_03     | BEP_04a    | BEP_04b    | BEP_04c    |
|---------------------------------|-------------|------------------------------|------------|------------|------------|------------|------------|------------|
|                                 | Sample Date | 21/11/2025                   | 21/11/2025 | 17/11/2025 | 18/11/2025 | 18/11/2025 | 18/11/2025 | 18/11/2025 |
| Analyte grouping/Analyte        | Units       | Insufficient water to sample |            |            |            |            |            |            |
| Standing Water Level            | mgbl        | 5.35                         | 4.96       | 15.35      | 4.63       | 138.55     | 136.50     | 147.68     |
| Temperature                     | °C          | 21.3                         | 21.7       |            | 28.2       | 30.2       | 29         | 27.8       |
| pH                              | pH Unit     | 6.89                         | 6.74       |            | 7.02       | 6.93       | 8.46       | 7.41       |
| Electrical Conductivity         | µS/cm       | 4630                         | 4640       |            | 1224       | 1088       | 371        | 701        |
| Suspended Solids (SS)           | mg/L        |                              |            |            |            |            |            |            |
| Hydroxide Alkalinity as CaCO3   | mg/L        | <1                           | <1         |            | <1         | <1         | <1         | <1         |
| Carbonate Alkalinity as CaCO3   | mg/L        | <1                           | <1         |            | <1         | <1         | 2          | <1         |
| Bicarbonate Alkalinity as CaCO3 | mg/L        | 506                          | 467        |            | 719        | 542        | 98         | 342        |
| Total Alkalinity (pH 4.5)       | mg/L        | 506                          | 467        |            | 719        | 542        | 100        | 342        |
| Sulfate as SO4 - Turbidimetric  | mg/L        | 596                          | 614        |            | 19         | 23         | 69         | 80         |
| Chloride                        | mg/L        | 1250                         | 1300       |            | 42         | 108        | 40         | 23         |
| Calcium                         | mg/L        | 343                          | 384        |            | 32         | 57         | 10         | 74         |
| Magnesium                       | mg/L        | 168                          | 143        |            | 17         | 17         | 2          | 20         |
| Sodium                          | mg/L        | 700                          | 684        |            | 311        | 238        | 80         | 89         |
| Potassium                       | mg/L        | 20                           | 18         |            | 7          | 8          | 5          | 11         |
| Arsenic                         | mg/L        | 0.002                        | 0.004      |            | 0.001      | <0.001     | 0.002      | <0.001     |
| Cadmium                         | mg/L        | <0.0001                      | 0.0004     |            | 0.001      | <0.0001    | <0.0001    | <0.0001    |
| Chromium                        | mg/L        | <0.001                       | <0.001     |            | 0.001      | <0.001     | <0.001     | <0.001     |
| Copper                          | mg/L        | <0.001                       | 0.003      |            | 0.001      | <0.001     | <0.001     | <0.001     |
| Lead                            | mg/L        | <0.001                       | <0.001     |            | 0.001      | <0.001     | <0.001     | <0.001     |
| Manganese                       | mg/L        | 1.06                         | 0.363      |            | 0.001      | 0.367      | 0.004      | 0.063      |
| Nickel                          | mg/L        | 0.004                        | 0.003      |            | 0.001      | 0.004      | <0.001     | 0.005      |
| Zinc                            | mg/L        | 0.028                        | 0.026      |            | 0.001      | <0.005     | <0.005     | 0.006      |
| Iron                            | mg/L        | 0.19                         | <0.05      |            | 0.001      | 0.31       | <0.05      | 0.13       |
| Ammonia as N                    | mg/L        | 0.05                         | 0.03       |            | 0.001      | 0.6        | 0.59       | 0.23       |
| Nitrite as N                    | mg/L        | <0.01                        | <0.01      |            | 0.001      | <0.01      | <0.01      | <0.01      |
| Nitrate as N                    | mg/L        | <0.01                        | 0.04       |            | 0.001      | <0.01      | <0.01      | <0.01      |
| Nitrite + Nitrate as N          | mg/L        | <0.01                        | 0.04       |            | 0.001      | <0.01      | <0.01      | <0.01      |
| Total Nitrogen as N             | mg/L        | 0.4                          | 0.3        |            | 0.001      | 1.6        | 0.8        | 0.7        |
| Total Phosphorous as P          | mg/L        | 0.51                         | 0.10       |            | 0.001      | 0.03       | 0.04       | 0.06       |
| Reactive Phosphorus as P        | mg/L        | 0.01                         | 0.02       |            | 0.001      | <0.01      | 0.01       | <0.01      |



#### **7.2.2.6 Mine Void Groundwater Inflow**

##### **7.2.2.6.1 Inflow Volumes**

The estimated groundwater take for the 2024/25 water year reporting period is about 229ML. This value was estimated using the BCMs water balance model. Quantifying groundwater inflow to the open cut mining area is difficult as groundwater seepage within the pit mixes with rainfall, runoff and water pumped into mining areas for dust suppression which masks the source of water. This water take from the Gunnedah Oxley Basin Groundwater Source is accounted for in **Table 7-4**.

##### **7.2.3 Improvements and Initiatives**

Review of the groundwater monitoring network at the BCM conducted by AGE in 2023 identified that additional monitoring points should be added in the Nagero Creek alluvium and Bollol Creek to gain a better understanding of the connectivity between the surface water and groundwater resources, assessments of faults in the project area and in assessment of the depressurisation over time within the deeper coal seams.

An additional 12 monitoring locations have been constructed during 2025 and January 2026 to replace existing bores that are no longer operational, monitor groundwater in deeper coal seams (as apart of Modification 8) and to assess groundwater-surface relationships with the Nagero Creek Alluvial Region.

## 8 REHABILITATION

The principal objective for rehabilitation at BCM is to return the site to a condition where its landforms, soils, hydrology, flora and fauna are self-sustaining and compatible with the surrounding landscape. Progressive rehabilitation is an ongoing activity at BCM and is carried out in accordance with regulatory requirements, previously the MOP, now the Rehabilitation Management Plan (RMP).

The RMP guides rehabilitation for all operational activities and associated infrastructure, and indirectly and partly fulfils the rehabilitation requirements specified in SSD 09\_0182. It focuses on rehabilitation of the active pit and waste emplacement areas within CL368. However, closure components also consider lands and infrastructure occupied by the private haul road, rail spur, powerline easements and the BCT.

Schedule 3, Condition 71 of SSD 09\_0182 (as modified by MOD 9 in March 2023) replaces the former requirement for a RMP with the requirement for a Rehabilitation Strategy. The Rehabilitation Strategy was prepared and submitted to the Department of Planning, Housing and Infrastructure in June 2024 and Approved November 2024. The Rehabilitation Strategy is currently under revision and has been submitted for consultation with the relevant Regulatory Authorities for review. Comments have been compiled and BCOPL is working to address the comments and submit early 2026. The purpose of the Rehabilitation Strategy is to build on the Rehabilitation Objectives within SSD 09\_0182 and to address the rehabilitation of land within the Project Boundary (i.e. beyond the areas currently covered by CL 368).

Rehabilitation objectives for the BCM are:

- Mine site (as a whole), including the final void - Safe, stable and non-polluting;
- Mine site (as a whole), including the final void - Minimise the size and depth of the final void as far as is reasonable and feasible and ensure the void contains no retained surface water (i.e. no pit lake);
- Mine site (as a whole), including the final void - Land degradation is minimised and vegetation removal is minimised
- Surface Infrastructure - Decommission and remove, unless the Executive Director, Mineral Resources in Resources Regulator agrees otherwise, and rehabilitate to a level equal or better to the original landscape;
- Waterways - Water is managed to ensure that clean and dirty water systems are separated.
- Waterways - No polluting waterways;
- Other land - Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species, a landform consistent with the surrounding environment and stable free draining landform able to support proposed vegetation;
- Other land - Ecological biodiversity is promoted;
- Community / General - Safety risks are eliminated as far as is practical;
- Community / General - Minimise the adverse socio-economic effects associated with mine closure; and
- Community / General - Ensure that cultural heritage is not impacted and is appropriately managed.

This section of the Annual Review discusses the rehabilitation which has been undertaken or is proposed within the BCM Project Boundary as required in accordance with the conditions of SSD 09\_0182. **Appendix I** provides a copy of the Annual Rehabilitation Report which has been prepared to satisfy the requirements under the *Mining Act 1992* and reports on the rehabilitation undertaken and proposed within CL 368 and ML 1755 only.



Rehabilitation monitoring is undertaken to assess the vegetation establishment, fauna utilisation and landform stability across rehabilitated areas and to track progress toward biodiversity conservation land use objectives defined for the site. For the 2025 reporting period, ecological monitoring of the BCM rehabilitation area was undertaken across established monitoring sites representing rehabilitation completed between 2008 and 2020, with additional monitoring surveys established in recently rehabilitated areas. Monitoring methods included vegetation surveys, bird surveys, ultrasonic bat monitoring, invertebrate sampling and camera trapping (WSP 2026 Report Rev A).

Monitoring results indicate that rehabilitated areas continue to develop vegetation structure and species composition consistent with the target woodland ecosystems for BCM. Native plant species richness at several rehabilitation monitoring sites was comparable to, or approaching, values recorded at analogue reference sites within Leard State Forest. Exotic species remained relatively low across monitoring sites (WSP 2026 Report Rev A).

Fauna monitoring confirmed continued utilisation of rehabilitation areas by woodland birds species, insectivorous bats and invertebrates. Motion activated cameras also recorded larger fauna including Eastern Grey Kangaroo and Swamp Wallaby, indicating that rehabilitated areas are increasingly provided habitat and being incorporated into surrounding landscape.

Overall, the 2025 monitoring results indicate that rehabilitation areas at BCM continue to progress toward the biodiversity conservation land use objective defined in the RMP.

## 8.1 Rehabilitation Methodology

The adopted rehabilitation methodology is described in detail in the RMP. Key components of the methodology include:

- Landform design;
- Contamination Management during commissioning;
- Acid rock drainage;
- Reject and fines disposal;
- Groundwater barrier;
- Soil stripping and handling;
- Soil stockpiling;
- Topsoil volume;
- Surface preparation;
- Soil respreading;
- Amelioration of growing media;
- Erosion control;
- Timing of revegetation works;
- Revegetation;
- Habitat creation;
- Seed collection and viability testing; and
- Revegetation species.

## 8.2 Rehabilitation Progress

### 8.2.1 Summary of Land Rehabilitation

During the reporting period, no rehabilitated land was transitioned to 'Landuse Establishment'. 2025 rehabilitation areas in the east of the pit that were proposed in the forward works program, were not completed during the 2025 reporting period. This was largely due to the inability to move the explosives magazine area. A portion of this proposed rehabilitation area covered a road that provided access to this magazine area. Until the magazine area is moved, these areas cannot progress to rehabilitation. The magazine is planned to be moved by the end of Q1 2026. In response to this delay, BCOPL has increased the forecast total area of land proposed for rehabilitation in 2026 from 30.98 ha to 41.80 ha.

A detailed breakdown of rehabilitation/disturbance footprints for the previous, current, and future reporting period is also provided in **Table 8-1**.

**Table 8-1: Rehabilitation Status**

| Mine Area Type                            | 2023 Reporting Period (Actual) (ha) | 2024 Reporting Period (Actual) (ha) | 2025 Reporting Period (Actual) (ha) | 2026 Reporting Period (Predicted) (ha) |
|-------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------------------------|
| A. Total mine footprint                   | 1,682.7                             | 1573.45                             | 1585.93                             | 1610.03                                |
| B. Total actual disturbance               | 1,361.8                             | 1211.6                              | 1,209.367                           | 1191.71                                |
| C. Land being prepared for rehabilitation | 40.3                                | 15.21                               | 30.84                               | 24.1                                   |
| D. Land under active rehabilitation       | 280.6*                              | 346.64                              | 345.73                              | 382.6                                  |
| E. Completed Rehabilitation               | None                                | None                                | None                                | None                                   |

Note:

\* Reconciliation of rehabilitation areas was undertaken as part of the rehabilitation reforms work. This inconsistency with rehabilitation between 2022 and previous years may be a result of the inclusion of rehabilitation outside of the mining lease (along the rail spur).

### 8.2.2 2025 Ecosystem Establishment

BCOPL transitioned to direct seeding in 2023. 59.38ha & 32.90ha of rehabilitation was seeded in 2023 and 2024 respectively, see below (**Figure 8-1**). No direct seeding occurred during 2025, as mentioned previously this was largely due to the inability to move the explosives magazine area.

**Figure 8-1: 2025 Established Rehabilitation (Sept 2025)**



### 8.2.3 Rehabilitation Status

BCOPL has adopted ten primary rehabilitation domains (refer to **Figure 8-2**). These domains define areas based on operational or functional purpose and geophysical similarities. The RMP outlines the regulatory requirements, rehabilitation objectives, indicators and proposed completion criteria for each rehabilitation phase of all rehabilitation domains.

The calculated rehabilitation status based on the requirements of the *Annual Review Guideline* (2015) for 2023, 2024, 2025 and predicted values for 2026 in accordance with the Forward Program and RMP are summarised in **Table 8-1**.

During the 2025 reporting period, Landscape Function Analysis (LFA) and erosion monitoring were undertaken across approximately 345 hectares of rehabilitated landforms to assess soil condition, ecosystem function and landform stability. Results indicate rehabilitated landforms are progressively developing the characteristics required to support vegetation establishment, including soil stability, water infiltration and nutrient cycling.

Ground cover and litter accumulation at some younger rehabilitation locations remains below reference site levels but are expected to improve as vegetation matures. (Allied Land Water report 2026)







#### 8.2.4 Comparison with Forward Program Forecasts

Rehabilitation for the end of 2025 does not align with that proposed by the 2025 Forward Program which was lodged on 17 April 2025 to address the requirements of the Rehabilitation Reforms under the *Mining Act 1992*. BCOPL progressed with rehabilitation maintenance and monitoring measures as described within the following sections.

### 8.3 Removal of Buildings

During the 2025 reporting period, there has been no removal of buildings.

### 8.4 Rehabilitation Biodiversity Monitoring

Biodiversity monitoring of rehabilitation areas is completed annually to assess the biodiversity status of rehabilitated areas to further guide rehabilitation methodologies, procedures and maintenance activities, in order to achieve site rehabilitation objectives. This monitoring reports on aspects of ecosystem establishment and ecosystem development.

Rehabilitation monitoring for the reporting period commenced 1 September 2025 across thirteen monitoring sites. This included ten replicate monitoring sites and an additional three that were established in 2024 (two) and 2025 (one). The 2025 monitoring program involved the following sampling methodologies at each of the replicate monitoring sites;

- One BioBanking vegetation quadrat in accordance with the BioBanking Assessment Methodology (BBAM);
- Photo point monitoring (to track changes in plant growth and ecology of the rehabilitated areas);
- Salinity monitoring within the BioBanking vegetation 20 x 20m quadrat (observational);
- Canopy species recruitment and presence of reproductive structures monitoring (observational); and
- Two 20-minute bird and general fauna area search within 80 m (approximately 2 ha) of fixed monitoring sites on separate mornings.
- Two randomly place 100m transect surveys of vegetation cover abundance
- Two nights of passive bat recordings using ultrasonic bat recording units
- Two randomly placed 100m transect surveys with 10 invertebrate pitfall traps in each transect line (total of 20 pitfall traps per replicate monitoring site)
- 30 person-minute herpetofauna active search of salvaged woody debris within an approximate 1ha (~56m radius)

#### 8.4.1 Summary of Findings

Monitoring results indicate that native species diversity and structure of the vegetation are progressing over time. Acquired data indicate that biodiversity values (vegetation, birds and invertebrates) are trending well against analogue sites associated with the Leard State Forest remnant.

##### 8.4.1.1 Vegetation

A total of 143 species of plant were recorded from the thirteen, replicate mine rehabilitation monitoring sites surveyed during the 2025 monitoring event. Of these, 109 were native (76%) and 34 were exotic (24%). No plant species recorded in the mine rehabilitation area during the 2025 monitoring event were listed as

threatened under the NSW BC act and/or the EPBC Act. Flora surveys and data analysis for BCMs rehabilitation areas identified the following:

- Native species richness has generally increased over time as the rehabilitation areas mature. Native species richness exceeded the averaged BBAM benchmark value across all monitoring locations during the 2054 sampling period.
- Nine of the thirteen replicate monitoring sites achieved the RMP completion criteria for native species richness.
- Six of the thirteen rehabilitation sites met or exceeded native overstorey projected foliage cover and mid storey cover benchmarks. Native groundcover percentages were generally high, with most monitoring sites meeting or exceeding benchmarks for native ground cover (grass and shrubs).
- Many native groundcover and midstory species recorded across all rehabilitation areas were observed recruiting from the soil seed bank and/or were producing reproductive structures. This suggests that groundcover and midstory stratum is trending towards self-sustaining native ecosystem.
- Structural characteristics which take time to develop within natural ecosystems (such as fallen timber and hollow bearing trees) are mostly absent across the rehabilitation area except for salvaged timber and stags which have been distributed/erected in localised areas.
- Mean exotic species richness is appearing to fluctuate and be influenced by seasonal climate conditions. There was variation in the mean exotic species richness during the 2025 monitoring period, with most sites occurring above the Leard State Forest analogue benchmark for the respective rehabilitation domain.
- There are isolated individuals of African Boxthorn, Prickly Pear and Paterson's Curse which are both priority weeds and weeds of national significance.
- No salinity was identified in any of the rehabilitation monitoring sites surveyed during the 2025 monitoring period.
- No threatened flora species were recorded across the mine rehabilitation areas.

#### 8.4.1.2 Fauna

- A total of 69 species of birds were recorded from the mine rehabilitation area. This included several woodland and generalist species common to the area.
- Five threatened species listed as Vulnerable under the BC Act were recorded from the mine rehabilitation area, including Speckled Warbler, Turquoise Parrot, Varied Sittella, Little Eagle and Spotted Harrier.
- Bat surveys were conducted throughout the Rehabilitation Areas during 2025. BCOPL is yet to receive the results of these surveys. They will be reported on in the 2026 Annual Review.
- For shrubby woodland/forest native ecosystems, RH2018 recorded the highest mean diurnal bird species richness, while RH2017 recorded the highest mean bird species richness in the grassy woodland ecosystems during the 2025 monitoring period. This is not unexpected for RH2018, as these monitoring locations are progressing well against vegetation benchmarks and positioned immediately adjacent to and connected with good quality extant habitats of the larger Leard State Forest remnant.
- Within Shrubby woodland/forest native ecosystems three of the eight sites sampled exceeded the Leard State Forest analogue benchmark for diurnal bird species richness, whilst the remaining sites

with the exception of RH2011, achieved greater than 80% of the Leard State Forest analogue benchmark. RH2011 recorded with lowest mean species richness, achieving 51% of the Leard State Forest analogue benchmark.

- Within grassy woodland native ecosystems mean diurnal bird species richness achieved above the Leard State Forest benchmark at RH2017 and 72% of the Leard State Forest benchmark for RH2020.
- A total of 5,675 invertebrates from 65 morpho-species were recorded from the mine rehabilitation area, with Hymenoptera (ants) the most diverse and abundant group recorded. Invertebrate diversity ranged from 105% to 152% of the Leard State Forest analogue benchmark, whilst Native Ecosystem: Grassy Woodland community achieved 114% and 118% of the benchmark.
- Five native species were recorded via infra-red/motion sensor cameras, including Australian Raven, Speckled Warbler, Swamp Wallaby, Common Wallaroo and Eastern Grey Kangaroo. Three pest species, Fox, hare and pig were also recorded from RH2008, RH2008D, RH2016 and RH2017 monitoring sites.

### 8.4.1.3 Weed Management

#### 8.4.1.3.1 April 2025

Weed management was undertaken in 2025 for woody weeds within the 2023 rehab area. The cut and paint method was used to treat *Nicotiana glauca* (tree tobacco) and *Lycium Ferrocissimum* (African boxthorn). While the treatment of approximately 100 *N.glauca* was successful, ongoing management is required.

## 8.5 Rehabilitation Improvements and Initiatives

During the 2025 reporting period BCOPL has conducted rehabilitation activities in accordance with the Rehabilitation Management Plan. The use of direct seeding for ecosystem establishment was planned for 2025, however, as mentioned previously, this was unable to commence due to the inability to move the explosives magazine area. A trial program for improving older rehabilitation areas will be implemented in 2026.

Repairs occurred during 2025 in the 2024 Area 1 rehab. Large rainfall over March and April 2025 led to significant rills and gullies forming. In June 2025 bunds were reinstated and rills and gullies were filled in. The areas were seeded with oats to achieve quick cover and reduce the chances of eroding again.

Repairs also occurred on the RL375 southern batter (this was mentioned in last year's ARR). The area was topsoiled in 2020 but not seeded until 2024. The area showed <10% germination and riling was starting to occur due to the lack of groundcover in the first 6 to 12 months. Soil tests were conducted and concluded low fertility and organic carbon present. Follow up agronomy advice led to the correct amelioration and seeding requirements which was carried out in May and June 2025. Both areas are continued to be monitored regularly.

A tree thinning trial was implemented in 2025 across two transects of the rehabilitation area, one in an area subject to tube stock planting in 2010, the other area planted with tube stock in 2011. Baseline monitoring undertaken in 2022 indicated that mine rehabilitation contained approximately 4.6 times the stem density as compared to reference sites within the Leard State Forest (WSP, 2025). This led to the recommendation to trial the reduction of stems. The eucalypt tree thinning trial aims to reduce the competition for natural resources in turn increasing native species diversity and cover and is expected to create a less homogenous ecosystem than what is typically represented in the rehabilitation area by thinning eucalypt stems by 69% per hectare (WSP, 2025). With the supervision of ecologists, eucalypts were selected for thinning, which were felled with chainsaws and then glyphosate applied to the stumps to prevent re-growth. The trial area will continue to be monitored.



## **8.6 Rehabilitation in 2026**

Rehabilitation activities proposed for the next reporting period will be completed in accordance with the Forward Works Program.

## 9 COMMUNITY

BCOPL's involvement with the local community is guided by:

- Studies undertaken as part of the EA (and associated Modification Reports) for the Project;
- BCM's SIMP;
- Consultation with key stakeholders, including the CCC; and
- BCOPL's internal environmental management plans and corporate guidance.

In accordance with SSD 09\_0182 (Schedule 3, Condition 77(b)), BCOPL has prepared a SIMP, in consultation with relevant stakeholders. BCOPL undertook revisions to the SIMP which were approved by the DPHI in August 2021.

### 9.1 Community Programs and Investment

BCOPL is committed to supporting the local community in which they operate. Over the 2025 reporting period and in concurrence with previous reporting periods, BCOPL and its contractors were involved in a number of community initiatives and events. BCOPL contributed \$295,622.20 to local projects and sponsorships in the 2025 reporting period, as summarised in **Table 9-1**.

BCOPL regularly hosts site visits from the community, industry professionals, the media and other interested parties. During 2025 mine tours were attended by participants from Gunnedah Workshop Enterprises, Gunnedah High School Stars Foundation Indigenous girls group, students from The Armidale School and a visit to the Biodiversity Wildlife Corridor was hosted.

**Table 9-1: BCOPL Community Funding 2025**

| Organisation                                     | BCOPL Contribution |
|--------------------------------------------------|--------------------|
| Anglicare Community Pantry                       | \$5,000.00         |
| Baan Baa Hall                                    | \$5,000.00         |
| Boggabri and District Rugby League Football Club | \$10,000.00        |
| Boggabri Anglican Church                         | \$5,000.00         |
| Boggabri Business Chamber                        | \$5,000.00         |
| Boggabri Cricket Club                            | \$5,000.00         |
| Boggabri Golf Club                               | \$6,500.00         |
| Boggabri Junior League                           | \$2,500.00         |
| Boggabri Lion's Club- Drovers Campfire           | \$20,000.00        |
| Boggabri Pony Club                               | \$3,000.00         |
| Boggabri Public School                           | \$1,000.00         |
| Boggabri Public School P&C                       | \$3,099.00         |
| Boggabri RSL Fishing Club                        | \$5,000.00         |
| Boggabri United Hospital Auxiliary               | \$24,075.00        |
| Central North Junior Rugby Union                 | \$5,000.00         |
| Country Women's Association                      | \$3,000.00         |
| Dorothea Mackellar                               | \$5,000.00         |

|                                                   |             |
|---------------------------------------------------|-------------|
| Gomeri Roos                                       | \$4,500.00  |
| Goodstart Early Learning Facility                 | \$2,000.00  |
| GS Kidds School P&C                               | \$5,000.00  |
| Gunnedah Cricket Club                             | \$1,000.00  |
| Gunnedah District Soccer Club                     | \$5,000.00  |
| Gunnedah Family Support                           | \$2,500.00  |
| Gunnedah Golf Club                                | \$5,000.00  |
| Gunnedah High School                              | \$5,000.00  |
| Gunnedah Ministers Fraternal                      | \$3,500.00  |
| Gunnedah Motorcycle Club                          | \$3,500.00  |
| Gunnedah Mountain Bikers                          | \$2,000.00  |
| Gunnedah Public School P &C                       | \$2,000.00  |
| Gunnedah Rugby League Football Club               | \$3,000.00  |
| Gunnedah Rugby Union Football Club                | \$5,000.00  |
| Gunnedah Salvation Army                           | \$2,000.00  |
| Gunnedah Show Society                             | \$20,000.00 |
| Gunnedah South Public School P&C                  | \$2,500.00  |
| Gunnedah Swimming Club                            | \$3,000.00  |
| Kiwi Hockey Club                                  | \$2,000.00  |
| Lake Keepit Family Fishing Club                   | \$2,500.00  |
| Manilla Bowling Club                              | \$1,000.00  |
| Manilla Campdraft                                 | \$3,000.00  |
| Manilla Show Society                              | \$7,700.00  |
| Maules Creek Campdraft                            | \$7,500.00  |
| Meals on Wheels                                   | \$1,000.00  |
| Mullaley School P&C                               | \$500.00    |
| Narrabri Carp Muster                              | \$5,000.00  |
| Narrabri Polocrosse                               | \$1,867.20  |
| Narrabri Public School P&C                        | \$2,500.00  |
| Narrabri Show Society                             | \$7,500.00  |
| North West Branch Aus Stock Horse Society         | \$5,000.00  |
| Paediatric and Maternity Support (PRAMS) Gunnedah | \$5,000.00  |
| PCYC                                              | \$7,500.00  |
| Peel High School                                  | \$200.00    |
| Sacred Heart Primary School P&F                   | \$450.00    |
| Sacred Heart Primary School, Boggabri             | \$2,500.00  |
| Tamworth Running Festival                         | \$1,000.00  |
| Uncle Will Memorial                               | \$4,231.00  |
| Wean Amateur Picnic Races                         | \$5,000.00  |

|                              |              |
|------------------------------|--------------|
| Westpac Rescue Helicopter    | \$30,000.00  |
| Yallambee Homes for the Aged | \$3,000.00   |
| Total                        | \$295,622.20 |

## 9.2 Community Consultative Committee

In accordance with SSD 09\_0182 (Schedule 5, Condition 7), a CCC based on the *Community Consultative Committees Guideline for State Significant Projects 2023* (DPHI, 2023) has continued through the reporting period.

The purpose of the CCC is to provide a forum for open discussion between representatives of BCOP, the community, the local council and other stakeholders on issues directly relating to BCM's operations and community relations.

Quarterly CCC meetings were held during the reporting period on the following dates:

- 13 February 2025;
- 15 May 2025;
- 4 September 2025; and
- 30 October 2025.

Key topics discussed included:

- Overview of recent activities and reports from BCM;
- 2025 Archaeological Salvage Program;
- Modification 8 to BCM and proposed amendment,
- Application for Modification 10;
- Revisions to Management Plans;
- Exploration update;
- Biodiversity offset areas;
- Housing VPA – General Housing;
- Recent correspondence with regulatory agencies;
- Tyre management and waste;
- Environmental Monitoring conditions;
- Tree clearing;
- Community Sponsorship 2025; and
- Community complaints.

Copies of the minutes from CCC meetings are publicly available on the BCM website:

<https://idemitsu.com.au/operations/boggabri-coal/approvals-plans-and-reports/community-consultative-committee/>

## 9.3 Complaints

### 9.3.1 Management of Complaints

Community complaints are managed in accordance with the BCOPL Complaint Management Procedure. This procedure outlines a standard process for reporting and responding to community complaints for all BCOPL employees and contractors at BCM.

The procedure includes reporting:

- The nature of the complaint;
- The method of the complaint, for example, telephone;
- The monitoring results, including any relevant conditions at the time of the complaint;
- Site investigation outcomes;
- Site activity and activity changes; and
- Any necessary actions assigned.

BCOPL maintains a 24 Hour Community Response Line to provide the community or interested stakeholders with an accessible and reliable communications point for complaints. In turn, the response line allows for rapid response to community complaints. The phone number for this Community Response Line is: **1800BOGGABRI (1800 264 422 74).**

Where possible, complainants are contacted within 24 hours of BCOPL's Environment Superintendent being advised of a complaint. Where requested to notify the complainant of any remedial or required actions undertaken, a follow-up on the complaint is made by BCOPL's Environment Superintendent or other authorised representative. All complaints received are tabled at CCC meetings. BCOPL maintains records of completed internal complaint forms for a period of no less than five years.

### 9.3.2 Registered Environmental Complaints

Two community complaints were received by BCOPL during the 2025 reporting period. On 18 March 2025, BCOPL received an email from the DPHI stating "NSW Planning has received a complaint regarding a dust plume from a blast fired at Bogabri Coal Mine on Monday 17 March at just after 3pm". DPHI sent an RFI and BCOPL responded on 25 March 2025 with meteorological conditions, wind direction and air quality data.

On 5 November 2025, BCOPL received an email from DPHI stating "NSW planning Compliance has received a complaint about the Bogabri Coal Mine, specifically in relation to the Heritage Management Plan (HMP)." DPHI sent an RFI and BCOPL responded on 21 November with information detailing consultation undertaken for the revision of the HMP and the BC 54 salvage program. No further action was required.

## 9.4 Workforce Profile

As of 31 December 2025, the total workforce on BCM was 869. A breakdown of the workforce and their residential locality are detailed in **Sections 9.4.1** and **9.4.2**.

### 9.4.1 BCOPL Employees

Wherever possible, local personnel are employed by BCOPL and its contractors. The BCOPL team at BCM consists of 663 employees, the majority (~85%) of whom are based locally within the Narrabri, Gunnedah and

Tamworth LGAs, of which 68 employees reside in Boggabri, 257 in Gunnedah and 56 in Narrabri. All BCOPL employees are employed full time. A breakdown of the location is found in **Table 9-2**.

**Table 9-2: Residential Locality of BCOPL Employees by LGA**

| Locality     | 2023 BCOPL Employee Residency | 2024 BCOPL Employee Residency | 2025 BCOPL Employee Residency |
|--------------|-------------------------------|-------------------------------|-------------------------------|
| Gunnedah LGA | 195                           | 244                           | 269                           |
| Narrabri LGA | 43                            | 110                           | 129                           |
| Tamworth LGA | 59                            | 124                           | 172                           |
| Other NSW    | 113                           | 97                            | 83                            |
| QLD          | 10                            | 11                            | 10                            |
| <b>Total</b> | <b>509</b>                    | <b>586</b>                    | <b>663</b>                    |

#### 9.4.2 Mining Contractors

Expansion project related construction activities concluded in late 2015, at which point the BCM moved to an operational phase. From late 2015, BCM continued to be contractor operated. In 2017, BCOPL took over the operation of BCM with assistance of mining contractor staff.

During the reporting period, the major mining contractors on site included Orica Australia Pty Ltd (Orica), Ausdrill Limited (Ausdrill), and One Key.

The One Key workforce consisted of 38 personnel, Orica workforce was 47 personnel, and Ausdrill had 26 personnel employed at the BCM (see **Table 9-3**).

**Table 9-3: Residential Locality of Contractor Employees by LGA**

| Locality        | One Key Resources Pty Ltd | Orica     | Ausdrill  |
|-----------------|---------------------------|-----------|-----------|
| Narrabri LGA    | 9                         | 11        | 6         |
| Gunnedah LGA    | 12                        | 17        | 4         |
| Tamworth LGA    | 11                        | 7         | 6         |
| Other NSW       | 6                         | 6         | 14        |
| QLD             | 0                         | 3         | 3         |
| Other Australia | 0                         | 0         | 3         |
| <b>Total</b>    | <b>38</b>                 | <b>44</b> | <b>26</b> |

## 10 AUDITS

### 10.1 Independent Environmental Audit (2023)

#### 10.1.1 Scope of Audit

In accordance with Schedule 5, Conditions 10 and 11 of SSD 09\_0182, BCOPL engaged independent certified auditors to undertake an independent environmental compliance audit (IEA) of BCM during October 2023.

GHD Pty Ltd (GHD) was approved by the DPHI to assess BCOPL's compliance with the conditions of SSD 09\_0182 and other relevant leases, licences and approvals. It also included assessing the environmental performance of the Project in meeting the requirements of SSD 09\_0182 through the implementation of a range of environmental management measures outlined in the various environmental management plans developed for the Project. This covered the period from the 7 November 2020 to 17 November 2023.

#### 10.1.2 Audit Outcomes

Overall, 26 non-compliances were identified by GHD including 15 against the conditions of SSD 09\_0182, 6 against the conditions of EPL 12407 and 5 against the standard of the Mining Regulation 2016 Schedule 8A Part 2. GHD stated that the site appeared to be well managed and that there were no non-compliances noted of medium or high risk. BCOPL has developed an action plan in response to the recommendations made as part of the IEAs as shown within **Appendix F**.

The final report noted by the auditor that it was evident that the site was generally being managed with a commitment to minimise the impact on the environment and surrounding residents.

Overall, the audit found that the management plans, strategies, and programs that have been prepared for BCM were adequate and prepared in accordance with the relevant compliance requirements. The audit found that on-site staff displayed a good understanding of the key biodiversity issues and were focused on implementing measures that would minimise impacts and achieve good biodiversity/environmental outcomes.

#### 10.1.3 DPHI Review

The IEA was lodged with the DPHI on 20 December 2023. The DPHI found the audit to generally satisfy the requirements of SSD 09\_0182 and the DPHI's Independent Audit Guidelines (2015).

The DPHI also requested that a status update on the recommended actions be included in future Annual Reviews until each action is completed.

#### 10.1.4 Status of Audit Recommendations

BCOPL have proposed completion dates for the actions in response to the non-compliances highlighted in the 2023 IEA (Refer to the Response Action Plan in **Appendix F**). The audit action plan is continuing to be closed out and the next IEA is due in 2026.

## 11 INCIDENTS AND NON-COMPLIANCES

All incidents and non-compliances are detailed in **Table 1-2** of the Statement of Compliance. **Table 11-2** outlines the non-compliances which occurred during the 2025 reporting period and BCOPL's response. Actions that have resulted from the IEAs can be found in the Response Action Plan in **Appendix F**.

One warning letter was received by BCOPL during the 2025 reporting period. This has been outlined in **Table 11-1**.

**Table 11-1: Notices and Warnings Received during the Reporting Period**

| Agency                                             | Date       | Correspondence Details                                                                                                  | BCOPL response                                                                                 |
|----------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Department of planning, Housing and Infrastructure | 8/05/2025  | Official Caution – Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979                          | Internal investigation undertaken and appropriate controls put in place.                       |
| Department of planning, Housing and Infrastructure | 8/05/2025  | Penalty Notice - Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979                            | Internal investigation undertaken and appropriate controls put in place.                       |
| Environmental Protection Authority (EPA)           | 10/10/2025 | Penalty Notice for the contravention of condition O1.1 "Licensed activities must be carried out in a competent manner". | External Audits on blast monitoring network. Review of blasting sign off forms and procedures. |
| Environmental Protection Authority (EPA)           | 10/10/2025 | Formal warning in relation to breaches of Environmental Protection Licence NO.12407                                     | External Audits on blast monitoring network. Review of blasting sign off forms and procedures. |
| Resources Regulator                                | 29/10/2026 | Official Caution – Failure to submit A339 (Act 1973) Environmental and Rehabilitation Compliance Report                 | The Environmental and Rehabilitation Compliance Report was submitted 5 June 2025.              |



**Table 11-2: Non-Compliances and Exceedances during 2025**

| Time Period | Condition Description                                             | Relevant approval                                           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------|-------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ongoing     | Sound Power Levels                                                | SSD 09_0182                                                 | Sound power screening during 2025 found four items of plant which exceeded required sound power levels by 3dB or more. These units will be addressed over the next 12 months.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Ongoing     | Leard Forest Mining Precinct Regional Biodiversity Strategy       | SSD 09_0182<br>Schedule 3<br>Condition 40                   | Umwelt prepared a preliminary review of the Leard Forest Regional Biodiversity Strategy in 2018. The scope of the review was reduced to solely focussing on the implementation of the strategy in the revised biodiversity management plans to provide a list of recommendations to the BTM Complex for future revisions of the Leard Forest Regional Biodiversity Strategy. The preliminary review included a recommendation (recommendation 4.6) that a comprehensive review of the strategy should be undertaken by 31 December 2021.<br><br>A letter of response was provided by BCD on 26 July 2019 providing comments on the preliminary review that supported this recommendation. The Comprehensive Review of the strategy has not been undertaken and therefore the recommendations of the preliminary review have not been implemented. This was considered a non-compliance against this condition. |
| Ongoing     | Development of the Eucalyptus Forestry Plantation Offset Strategy | SSD 09_0182<br>Condition 54                                 | BCOPL submitted a Forestry Planation Offset Strategy in July 2013 to NSW Forestry Corporation. Feedback has been received which suggests NSW Forestry Corporation does not see benefit in the proposed strategy. BCOPL will continue to liaise with NSW Forestry Corporation to finalise this strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Jan-25      | Blasting                                                          | EPL-12407 and<br><br>SSD 09_0182<br>Schedule 3 Condition 15 | Recorded an air blast overpressure level of 121.2dB. representing an exceedance of 1.2 dB above the maximum allowable limit of 120db.<br><br>BCOPL self-reported this non-compliance to DPPI and the EPA. BCOPL commissioned an independent review of the incident, which concluded the elevated readings were wind related. Despite this, BCOPL has had all blast monitoring equipment audited, and will continue to work with DPPI and the EPA to ensure compliance in the future.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Jan-25      | Ambient Air Quality Monitoring                                    | SSD 09_0182                                                 | Compliance TEOM at 'Wilberoi East' failed to record reliable data from 23 January to 3 February 2025.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Time Period | Condition Description                               | Relevant approval       | Comment                                                                                                                                                                                                                                                                           |
|-------------|-----------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                                                     | Schedule 3 Condition 30 | Following calibration, BCOPL's compliance TEOM began to record incorrect data, the unit was re-calibrated before being swapped out for a temporary unit. Ultimately BCOPL replaced the faulty unit with a brand new compliance TEOM.                                              |
| Feb-25      | Ambient Air Quality Monitoring                      | Schedule 3 Condition 27 | Exceedance of short term PM10 criteria was recorded at Wilberoi East compliance TEOM on 7 February 2025.<br>BCOPL conducted an internal investigation into the non-compliance and presented evidence to DPHI who were satisfied BCOPL was not the major contributor to the event. |
| Oct-25      | Ambient Air Quality Monitoring                      | Schedule 3 Condition 27 | Exceedance of short term PM10 criteria was recorded at Wilberoi East compliance TEOM on 10 October 2025.<br>BCOPL conducted an internal investigation into the non-compliance and presented evidence to DPHI who were satisfied BCOPL was not the major contributor to the event. |
| Oct-25      | A339 Environmental Rehabilitation Compliance Report | Schedule 2 Condition 8  | Failed to comply with Schedule 2 of condition 8 when an Environmental and Rehabilitation Compliance Report ( <b>ERCR</b> ) was not submitted by the due date for compliance being 11 May 2024.<br>The report was submitted June 2025.                                             |

## 12 ACTIVITIES PROPOSED FOR NEXT ANNUAL REVIEW PERIOD

Activities that are proposed for the next Annual Review reporting period are detailed in **Table 12-1**.

**Table 12-1: Activities Proposed for Next Reporting Period**

| Activity                                                                                                                                                                                                         | Target Completion Date |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Complete construction of dwellings in Boggabri                                                                                                                                                                   | 2026                   |
| Clearing of vegetation in advance of mining                                                                                                                                                                      | February - April 2026  |
| Continued implementation of a noise attenuation program for items of plant exceeding modelled sound power levels. This will continue as an iterative process and be ongoing throughout the next reporting period | Ongoing                |
| Undertake exploration activities ahead of mining                                                                                                                                                                 | Ongoing                |
| Fauna habitat resources such as salvaged fallen timber and nest boxes will be introduced in rehabilitation areas                                                                                                 | Ongoing                |
| Fauna habitat resources such as salvaged fallen timber and nest boxes will be introduced in rehabilitation areas                                                                                                 | Ongoing                |
| Planting of canopy species in BOAs and rehabilitation areas                                                                                                                                                      | Ongoing                |

## 13 REFERENCES

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## 14 ABBREVIATIONS

| Abbreviations                            | Terms                                                                                  |
|------------------------------------------|----------------------------------------------------------------------------------------|
| $\mu\text{g}/\text{m}^3$                 | Micrograms per metre cubed                                                             |
| $\mu\text{S}/\text{cm}$                  | Microsiemens per centimetre                                                            |
| Ausdrill                                 | Ausdrill Limited                                                                       |
| AHCS                                     | Aboriginal Heritage Conservation Strategy                                              |
| AIA                                      | Acoustic Impact Assessment                                                             |
| AN                                       | Ammonium Nitrate                                                                       |
| ANFO                                     | Ammonium Nitrate/ Fuel Oil                                                             |
| AQGHGMP                                  | Air Quality and Greenhouse Gas Management Plan                                         |
| ASCF                                     | Aboriginal Stakeholder Consultative Forum                                              |
| BBAM                                     | BioBanking Assessment Methodology 2014                                                 |
| BC Act                                   | Biodiversity Conservation Act 2016 NSW                                                 |
| BCM                                      | Boggabri Coal Mine                                                                     |
| BCOPL                                    | Boggabri Coal Operations Pty Limited                                                   |
| BFMP                                     | Blast Fume Management Protocol                                                         |
| BLMP                                     | Blast Management Plan                                                                  |
| BMP                                      | Biodiversity Management Plan                                                           |
| BOA                                      | Biodiversity Offset Area                                                               |
| BOS                                      | Biodiversity Offset Strategy                                                           |
| BTM Complex                              | Boggabri, Tarrawonga, Maules Creek Mining Complex                                      |
| CCC                                      | Community Consultative Committee                                                       |
| CHMP                                     | Cultural Heritage Management Plan                                                      |
| CHPP                                     | Coal Handling and Preparation Plant                                                    |
| CL                                       | Coal Lease                                                                             |
| $\text{dB(A)}_{\text{Leq (15 minutes)}}$ | Decibels A-Weighted with an Equivalent Continuous Sound Pressure Level over 15 minutes |
| DPE                                      | Department of Planning and Environment - now DPHI                                      |

| Abbreviations                 | Terms                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------|
| DPHI                          | Department of Planning, Housing and Infrastructure                                |
| DPI                           | Department of Primary Industries                                                  |
| EA                            | Continuation of Boggabri Coal Mine Environmental Assessment (Hansen Bailey, 2010) |
| EC                            | Electrical Conductivity                                                           |
| EMPs                          | Environmental Management Plans                                                    |
| EMS                           | Environmental Management Strategy                                                 |
| EP&A Act                      | Environmental Planning and Assessment Act 1979 (NSW)                              |
| EPA                           | Environment Protection Authority                                                  |
| EPBC Act                      | Environment Protection and Biodiversity Conservation Act 1999 (Cth)               |
| EPL                           | Environment Protection Licence                                                    |
| Forestry NSW                  | NSW Forestry Corporation of NSW                                                   |
| g/m <sup>2</sup> /month       | Grams per metre squared per month                                                 |
| GHG                           | Greenhouse Gas                                                                    |
| GJ                            | Gigajoules                                                                        |
| GSC                           | Gunnedah Shire Council                                                            |
| GWMP                          | Groundwater Management Plan                                                       |
| ha                            | Hectares                                                                          |
| HTV                           | High Trigger Value                                                                |
| HVAS                          | High Volume Air Sampler                                                           |
| IA                            | Idemitsu Australia Pty Ltd                                                        |
| IEA                           | Independent Environment Audit                                                     |
| kbcm                          | Kilo Bank Cubic Metres                                                            |
| L <sub>Aeq</sub> (15 minutes) | Equivalent Continuous Sound Pressure Level over 15 minutes                        |
| LGA                           | Local Government Area                                                             |
| LTV                           | Low Trigger Value                                                                 |
| m/s                           | Metres per second                                                                 |
| mAHD                          | Metres Australian Height Datum                                                    |

| Abbreviations     | Terms                                                                      |
|-------------------|----------------------------------------------------------------------------|
| Mbcm              | Million bank cubic metres                                                  |
| mBGL              | Metres Below Ground Level                                                  |
| mbtoc             | Metres below top of casing                                                 |
| MCCM              | Maules Creek Coal Mine                                                     |
| mg/L              | Milligrams per litre                                                       |
| MIA               | Mine Infrastructure Area                                                   |
| ML                | Mining Lease                                                               |
| MOP               | Mining Operations Plan                                                     |
| Mt                | Million tonnes                                                             |
| Mtpa              | Million Tonnes Per Annum                                                   |
| MTV               | Medium Trigger Value                                                       |
| NGERs             | National Greenhouse and Energy Reporting                                   |
| NMP               | Noise Management Plan                                                      |
| NPI               | National Pollutant Inventory                                               |
| NSC               | Narrabri Shire Council                                                     |
| Orica             | Orica Australia Pty Ltd                                                    |
| PA                | Project Approval                                                           |
| PAF               | Potential Acid Forming                                                     |
| PM <sub>10</sub>  | Particulate matter < 10 µm                                                 |
| PM <sub>2.5</sub> | Particulate matter < 2.5 µm                                                |
| RAPs              | Registered Aboriginal Parties                                              |
| RBS               | Leard Forest Regional Biodiversity Strategy                                |
| RMP               | Rehabilitation Management Plan                                             |
| ROM               | Run of Mine                                                                |
| SIMP              | Social Impact Management Plan                                              |
| SPL               | Sound Power Level                                                          |
| SSD               | State Significant Development approval (formerly Project Approval) 09_0182 |



| Abbreviations               | Terms                                         |
|-----------------------------|-----------------------------------------------|
| SWB                         | Site Water Balance                            |
| SWMP                        | Surface Water Management Plan                 |
| t CO <sub>2</sub> -e        | Tonnes of Carbon Dioxide Equivalent           |
| tonnes/t CO <sub>2</sub> -e | Tonnes per Tonne of Carbon Dioxide Equivalent |
| TCM                         | Tarrawonga Coal Mine                          |
| TEOM                        | Tapered Element Oscillating Microbalance      |
| TLO                         | Train Load-out Facility                       |
| TMP                         | Traffic Management Plan                       |
| TSP                         | Total Suspended Particulates                  |
| ULSD                        | Ultra-Low Sulphur Diesel                      |
| WAL                         | Water Access Licence                          |
| WMP                         | Water Management Plan                         |

## 15 APPENDICES

## **Appendix A**

### **Annual Review Requirements**

**Table A-15-1: Annual Review Requirements**

| Licence, Approval or Guideline | Section Reference       | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Reference in this report |
|--------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| CL 368                         | Condition 4             | <p>(a) The lease holder must lodge Environmental Management Reports (EMRs) with the Director-General annually or at dates otherwise directed by the Director-General.</p> <p>(b) The EMR must:</p> <ol style="list-style-type: none"> <li>Report against compliance with the MOP;</li> <li>Report on progress in respect of rehabilitation completion criteria;</li> <li>Report on the extent of compliance with regulatory requirements; and</li> <li>Have regard to any relevant guidelines adopted by the Director-General</li> </ol>                                                                                                                                                                                                                                   | Whole document           |
| ML 1755                        | Condition 3(f)          | <p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <ol style="list-style-type: none"> <li>provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</li> <li>be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</li> <li>be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at:<br/><br/> <a href="http://www.resources.nsw.gov.au/environment">www.resources.nsw.gov.au/environment</a>. </li> </ol> <p>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</p> | <b>Section 7.0</b>       |
| Project Approval 09_0182       | Schedule 5, Condition 4 | <p>Annual Review</p> <p>By the end of March each year, the Proponent shall review the environmental performance of the project for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>(a) Describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p>                                                                                                                                                                                                                                                                                                                                        | <b>Section 7.0</b>       |

| Licence, Approval or Guideline | Section Reference        | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                  | Reference in this report                  |
|--------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                |                          | (b) Include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the: <ul style="list-style-type: none"> <li>Relevant statutory requirements, limits or performance measures/criteria;</li> <li>Monitoring results of previous years; and</li> <li>Relevant predictions in the EA</li> </ul>                                      | <b>Section 4.0</b><br><b>Section 9.3</b>  |
|                                |                          | (c) Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;                                                                                                                                                                                                                                                                                                                | <b>Section 4.0,</b><br><b>Section 7.0</b> |
|                                |                          | (d) Identify any trends in the monitoring data over the life of the project;                                                                                                                                                                                                                                                                                                                                                                 | <b>Section 4.0</b>                        |
|                                |                          | (e) Identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and                                                                                                                                                                                                                                                                                | <b>Section 4.0</b>                        |
|                                |                          | (f) Describe what measures will be implemented over the next year to improve the environmental performance of the project.                                                                                                                                                                                                                                                                                                                   | <b>Section 5.0</b>                        |
|                                | Schedule 3, Condition 10 | The Proponent shall: <ul style="list-style-type: none"> <li>(a) Conduct an annual testing program of the attenuated plant on site to ensure that the attenuation remains effective;</li> <li>(b) Restore the effectiveness of any attenuation if it is found to be defective; and</li> <li>(c) Report on the results of any testing and/or attenuation work within the Annual Review.</li> </ul>                                             | <b>Section 6.3</b>                        |
|                                | Schedule 3, Condition 12 | The proponent shall: <ul style="list-style-type: none"> <li>(i) Use its best endeavours to achieve the long term intrusive noise goals for the project in Table 5, where this is reasonable and feasible, and report on the progress towards achieving these goals in the Annual Review;</li> </ul>                                                                                                                                          | <b>Section 4.3.2</b>                      |
|                                | Schedule 3, Condition 68 | The Proponent shall: <ul style="list-style-type: none"> <li>(a) Implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project;</li> <li>(b) Ensure that the waste generated by the project is appropriately stored, handled and disposed of;</li> <li>(c) Monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review.</li> </ul> | <b>Section 6.6</b>                        |

| Licence,<br>Approval or<br>Guideline | Section<br>Reference        | Requirement                                                                                                                                                                                                                                             | Reference in<br>this report |
|--------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
|                                      | Schedule 3,<br>Condition 77 | The proponent shall prepare and implement a Social Impact Management Plan (which will)<br><br>(h) Include a monitoring program, incorporating key performance indicators and a review and reporting protocol, including reporting in the Annual Review. | <b>Section 11.0</b>         |
| Boggabri<br>Coal Project<br>EA       | Section 8                   | BCOPL will prepare an Annual Review (which summarises monitoring results and reviews performance) and distribute it to the relevant regulatory authorities and the Boggabri CCC.                                                                        | <b>Whole<br/>document</b>   |

## Appendix B

### Environmental Monitoring Location Maps



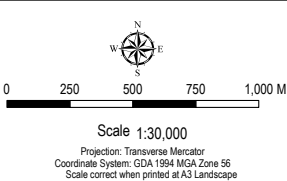
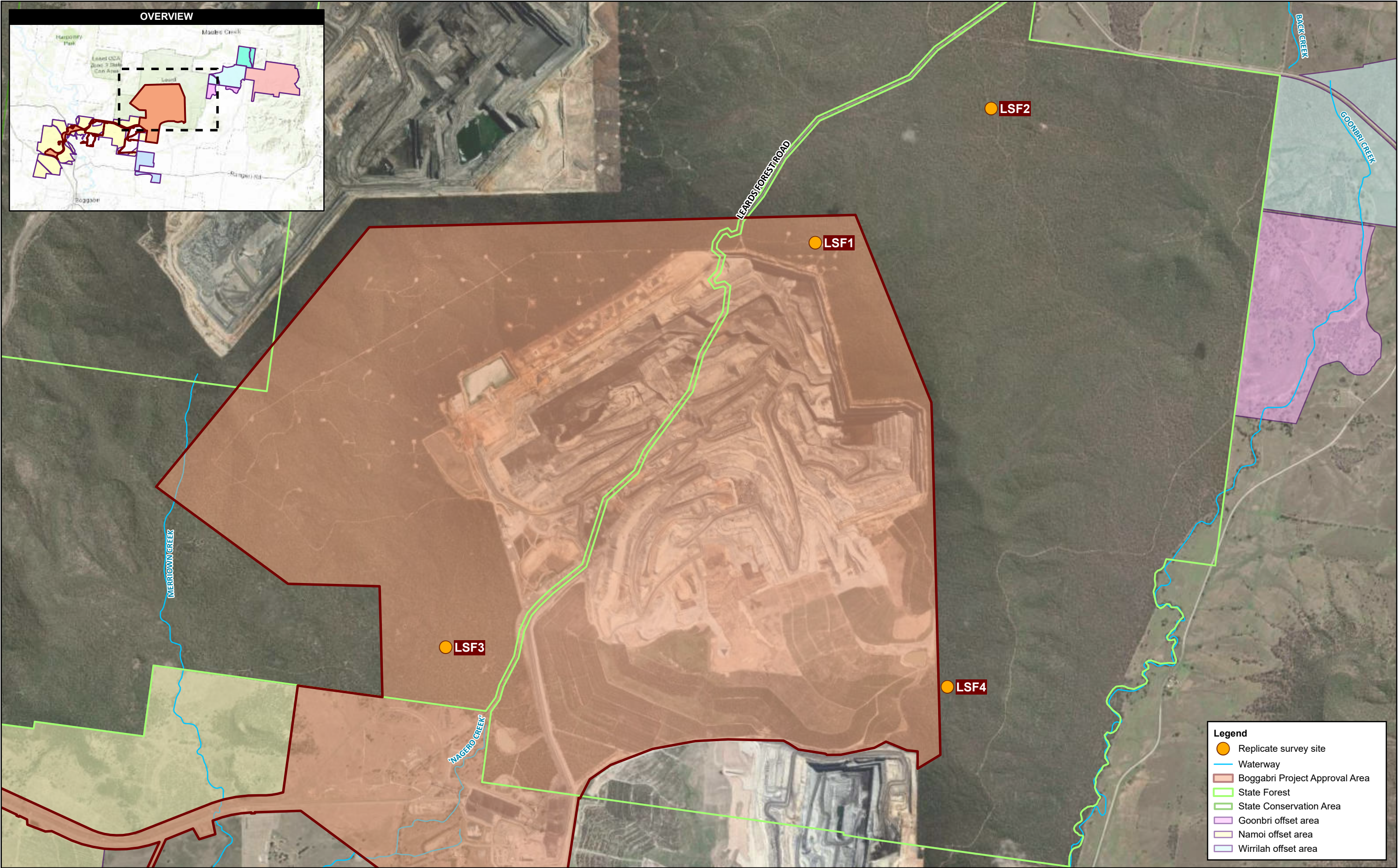




## **Appendix C**

### **Biodiversity Monitoring Maps**





Imagery:  
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DOCUMENT: B\_1\_BC2026\_AEMR003\_MON\_LSF\_r1v1

AUTHOR: A. Carrillo

REVIEWED BY: N.Cooper

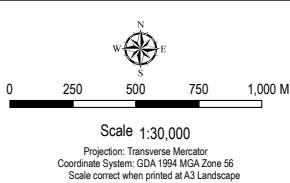
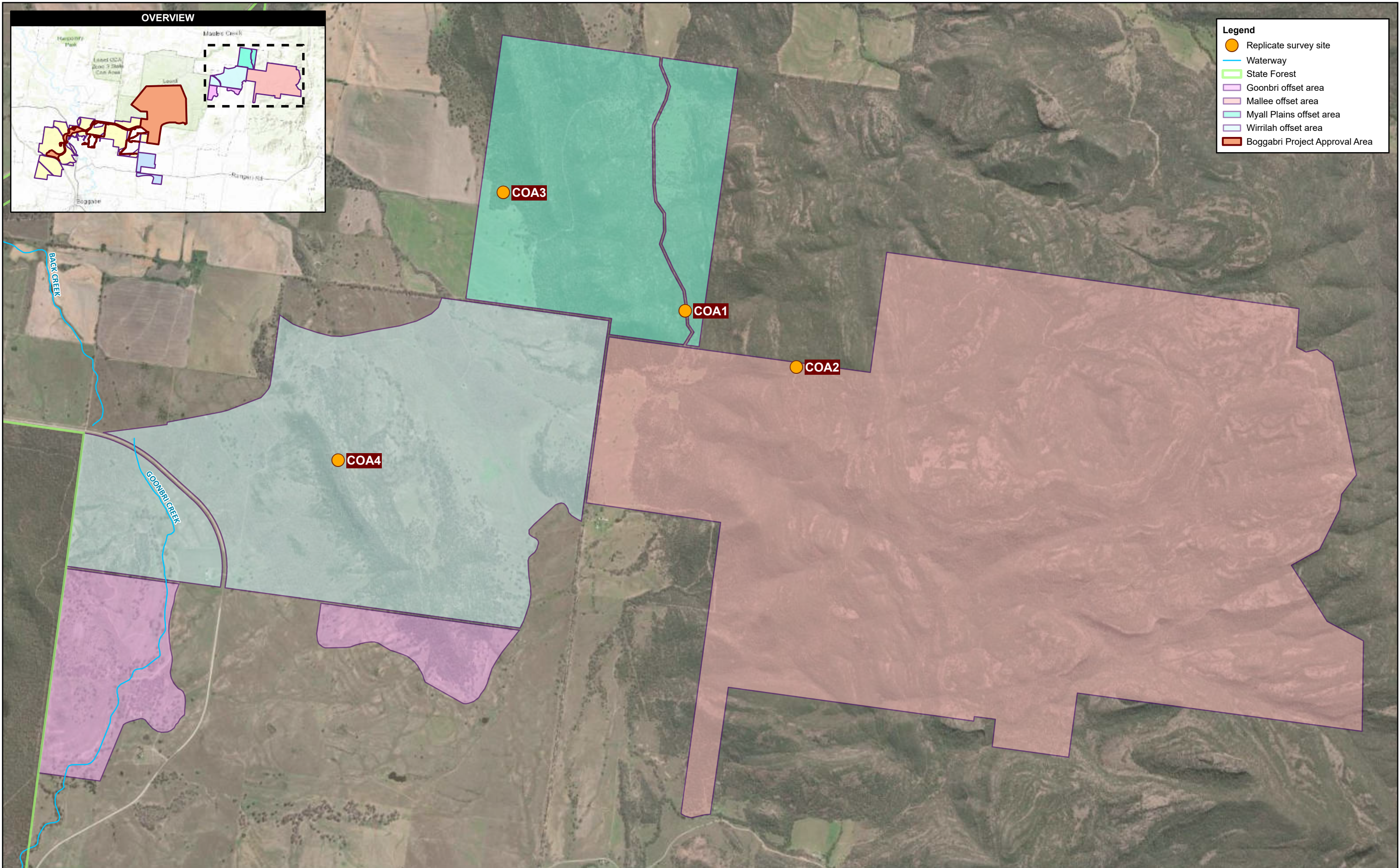
DATE: 25/03/2026



FIGURE **B-1**

TITLE: **LOCATION OF REPLICATE SURVEY SITES - LEARD STATE FOREST**





Imagery:  
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DOCUMENT: B\_2\_BC2026\_AEMR004\_MON\_COA\_r1v1

AUTHOR: A. Carrillo

APPROVED BY.: N.Cooper

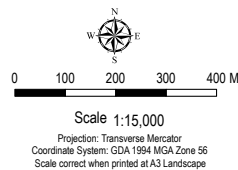
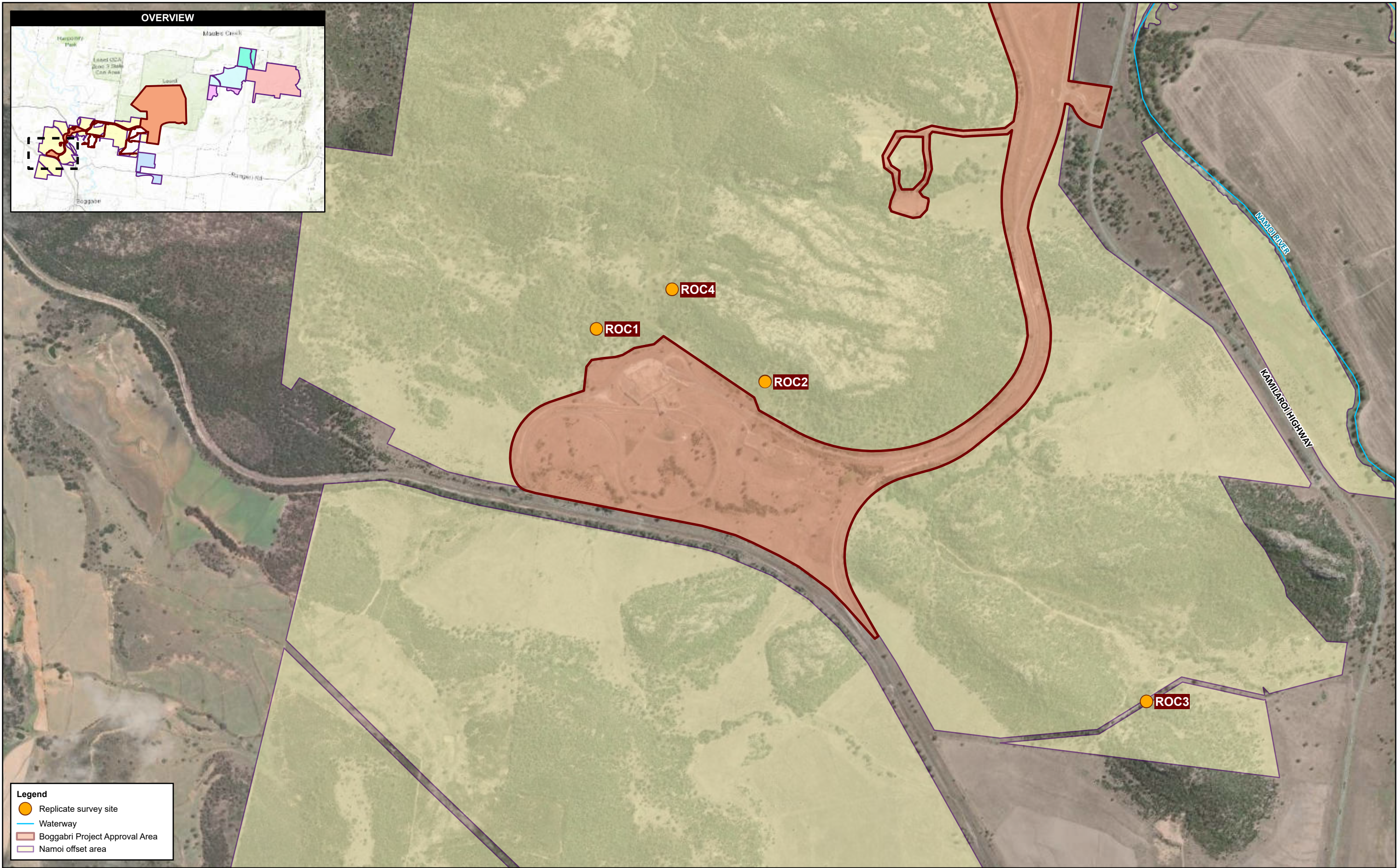
DATE: 25/03/2026



FIGURE **B-2**

TITLE: **LOCATION OF REPLICATE SURVEY SITES - CENTRAL OFFSET AREA**





Imagery:  
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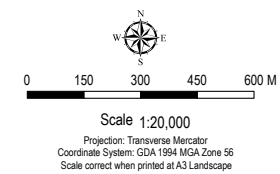
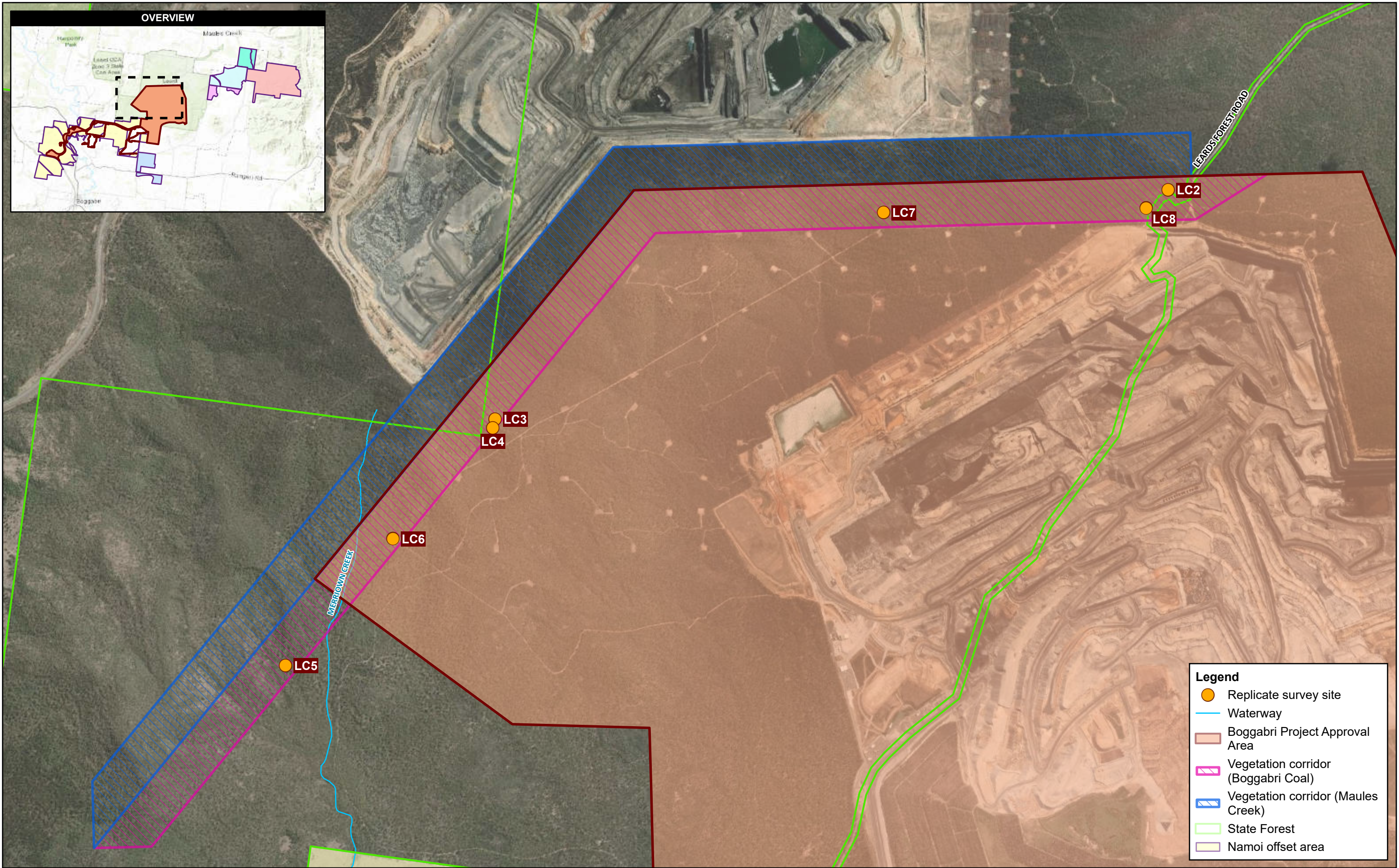
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|                                               |
|-----------------------------------------------|
| DOCUMENT: B_3_BC2026_AEMR005_MON_Rocklea_r1v1 |
| AUTHOR: A. Carrillo                           |
| REVIEWED BY: N.Cooper                         |
| DATE: 25/03/2026                              |



|        |                                                                                      |
|--------|--------------------------------------------------------------------------------------|
| FIGURE | <b>B-3</b>                                                                           |
| TITLE: | <b>LOCATION OF REPLICATE SURVEY<br/>SITES - ROCKLEA PROPERTY (NAMOI<br/>OFFSETS)</b> |





Imagery:  
Basemap - World ImageryWorld\_Topo\_Map: Esri, © OpenStreetMap contributors, HERE, Garmin, USGS, NGA

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DOCUMENT: B\_4\_BC2026\_AEMR006\_MON\_Corridor\_r1v1

AUTHOR: A.Carrillo

REVIEWED BY: N.Cooper

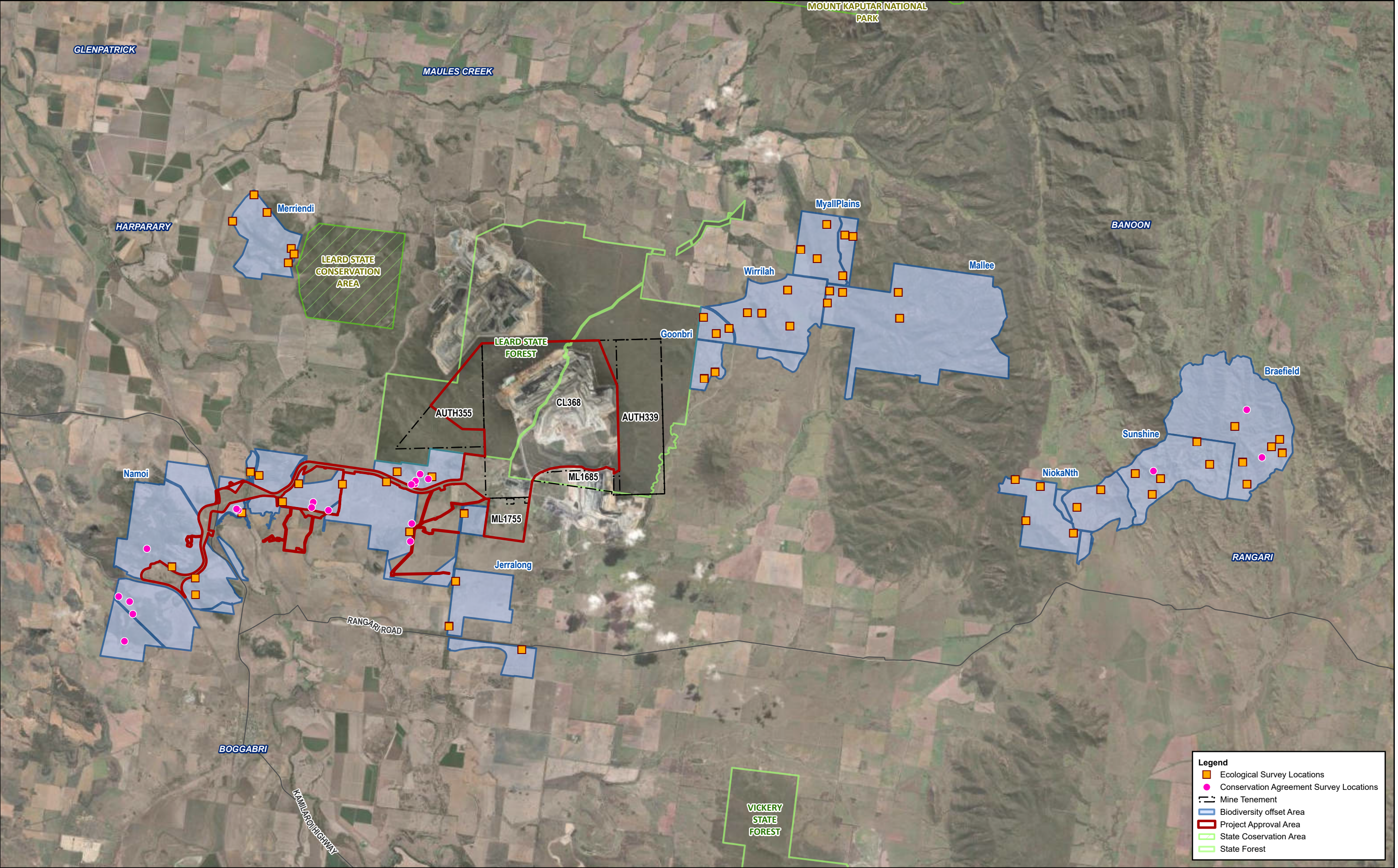
DATE: 25/03/2026



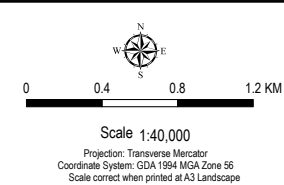
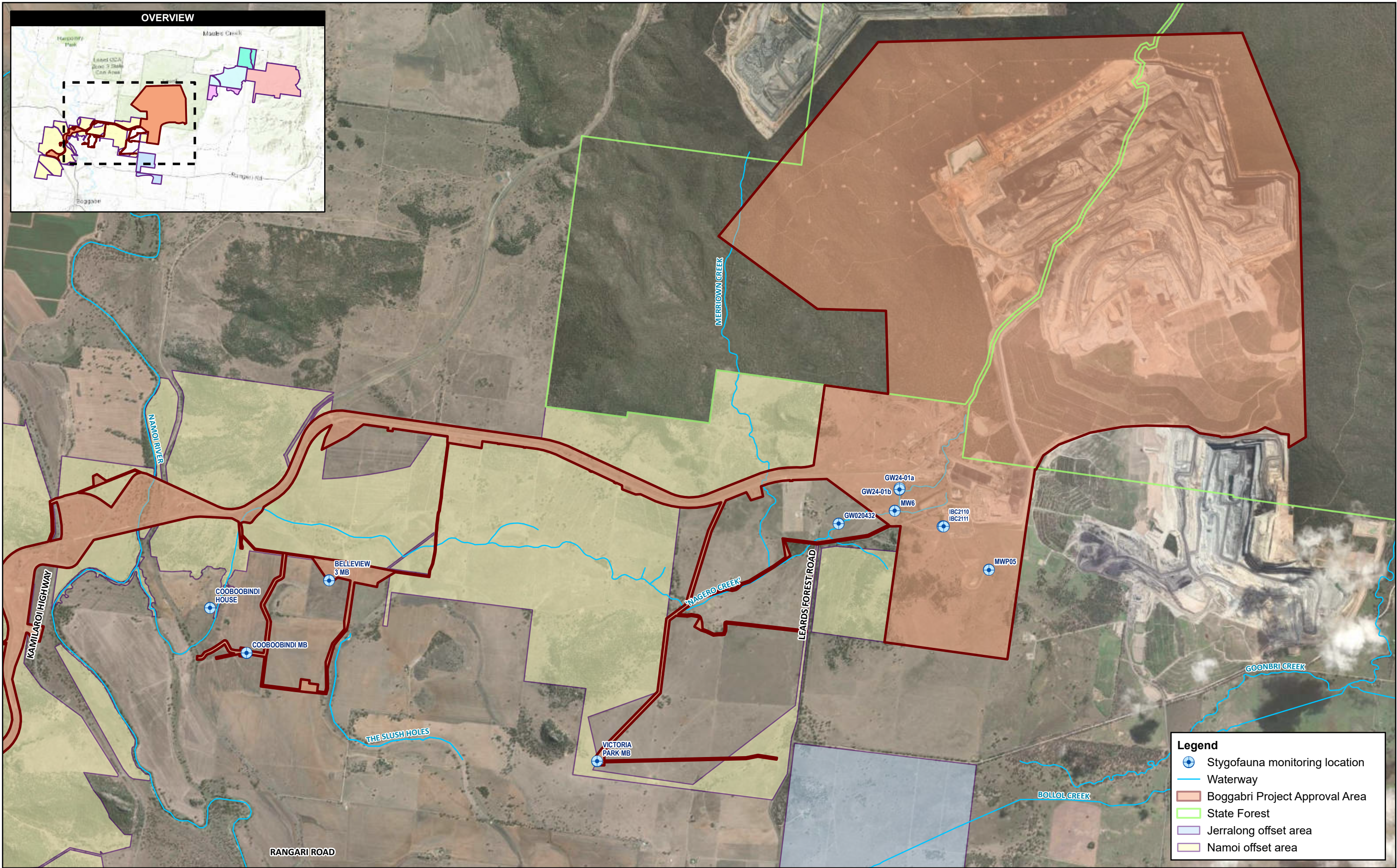
FIGURE **B-4**

TITLE: **LOCATION OF REPLICATE SURVEY SITES - LEARD STATE FOREST VEGETATION CORRIDOR**









Imagery:  
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DOCUMENT: B\_6\_BC2026\_AEMR009\_MON\_stygo\_r1v1

AUTHOR: A. Carrillo

REVIEWED BY: N. Cooper

DATE: 25/03/2026



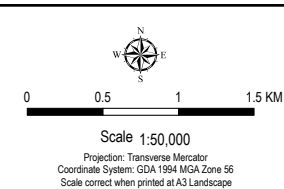
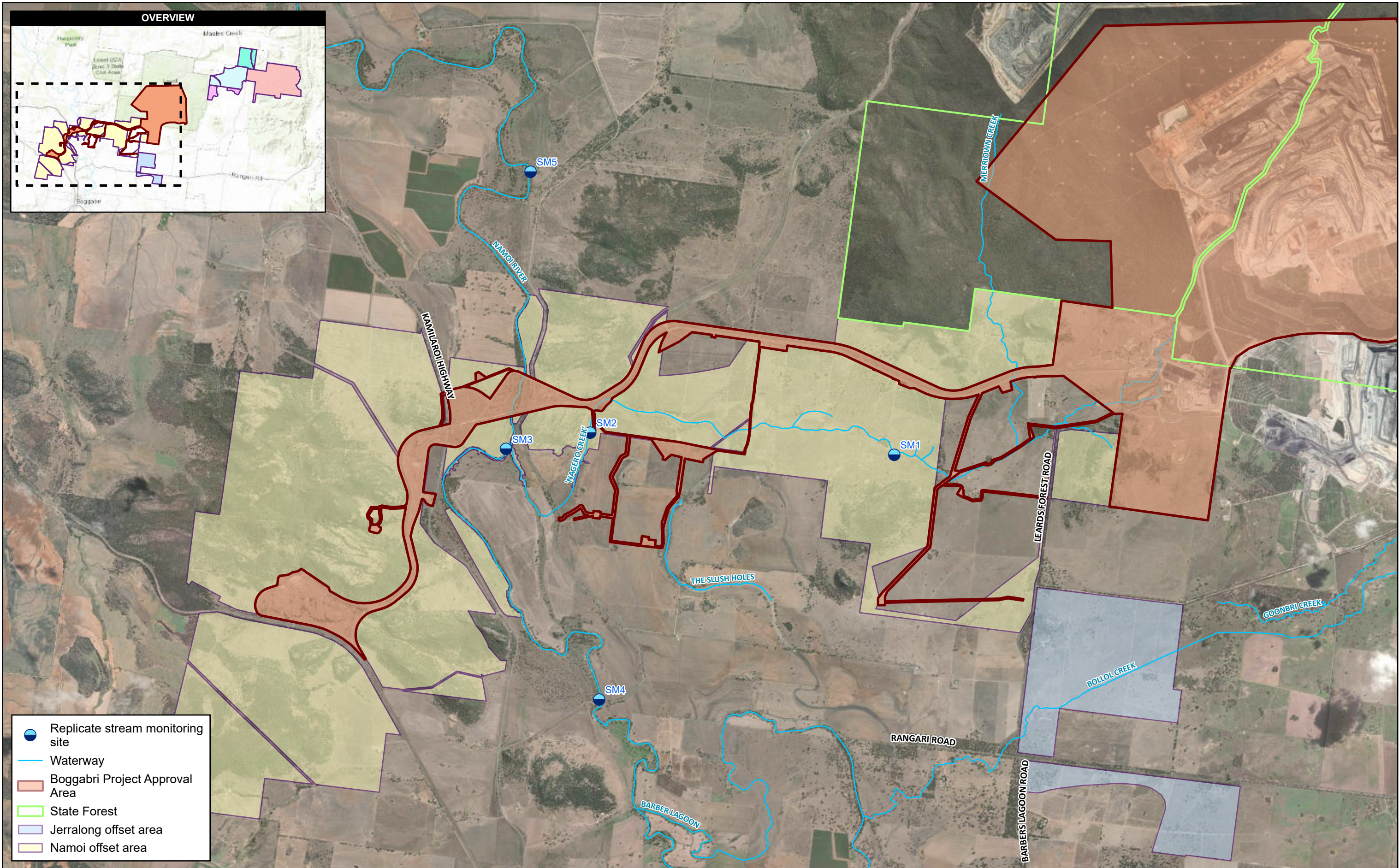
FIGURE **B-6**

TITLE: **LOCATION OF STYGOFAUNA MONITORING SITES**









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DOCUMENT: B\_8\_BC2026\_AEMR010\_MON\_Stream\_r1v1

AUTHOR: A.Carrillo

REVIEWED BY: N.Cooper

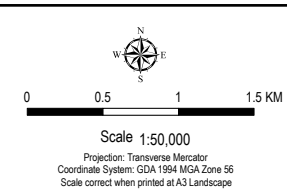
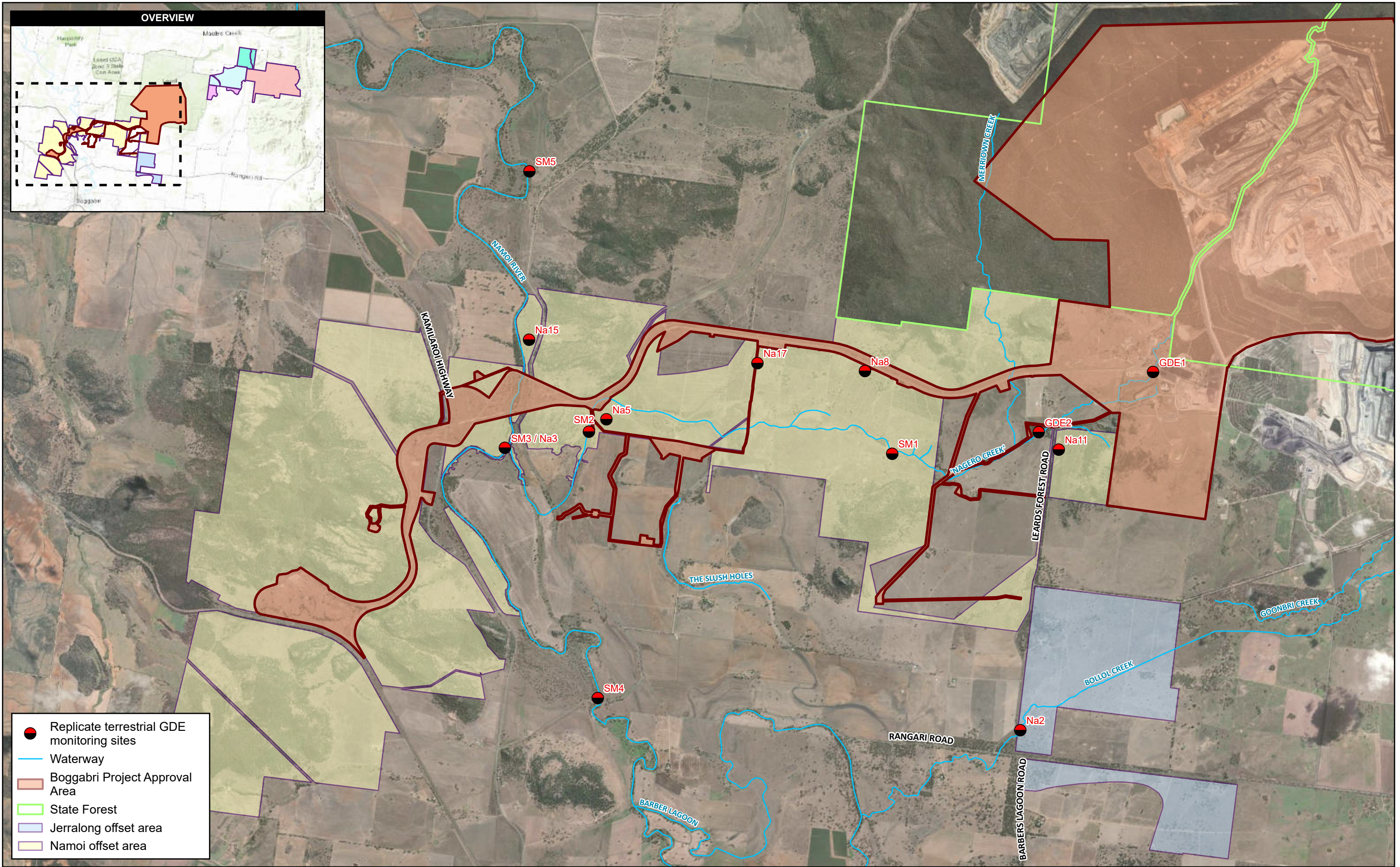
DATE: 26/03/2026



FIGURE **B-8**

TITLE: **LOCATION OF REPLICATE SURVEY SITES – STREAM AND RIPARIAN VEGETATION HEALTH MONITORING SITES**





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DOCUMENT: B\_9\_BC2026\_AEMR011\_MON\_TerrestrialGDE\_r1v1

AUTHOR.: A. Carrillo

REVIEWED BY.: N. Cooper

DATE.: 26/03/2026



FIGURE **B-9**

**LOCATION OF REPLICATE MONITORING SITES – TERRESTRIAL GROUNDWATER DEPENDENT ECOSYSTEM MONITORING**

TITLE:



## **Appendix D**

### **Regulator Correspondence**

NSW Planning ref: MP09\_0182-PA-92

Leticia Tolson (Environmental Operations Superintendent)

Boggabri Coal Pty Limited

Kamilaroi Country

Leard State Forest 386 Leards Forest Road

BOGGABRI NSW 2382

19/08/2025

---

Sent via the Major Projects Portal only

Subject: Boggabri Coal - Annual Review 2024

Dear Ms Tolson

I refer to the Boggabri Coal Mine Annual Review for the period 1 January 2024 to 31 December 2024, submitted as required by Schedule 5, Condition 4 of MP09\_0182 as modified (the consent) to the NSW Department of Planning, Housing and Infrastructure (NSW Planning) on 31 March 2025. I also refer to the amended Annual Review submitted as a response to RFI-88513463.

NSW Planning has reviewed the amended Annual Review and considers it to generally satisfy the reporting requirements of the consent and the NSW Planning Annual Review Guideline (October 2015). Please make publicly available a copy of the Annual Review on the company's website within 30 days.

Please note that the NSW Planning's acceptance of this amended Annual Review is not an endorsement of the compliance status of the project.

Non-compliances identified in the amended Annual Review with Schedule 3, Condition 10(a) and Condition 38(c) have been assessed by NSW Planning in accordance with its Compliance Policy, with NSW Planning on this occasion determining to record the breaches with no further enforcement action proposed. However, please note that recording the breach does not preclude NSW Planning from taking an alternative enforcement action, should it become apparent that an alternative response is more appropriate. All remaining non-compliances with the consent identified in the amended Annual Review have been previously addressed by NSW Planning, no further action is proposed at this time.

Should you wish to discuss the matter further, please contact Joel Curran, Senior Compliance Officer on 02 4904 2702 or email [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink that reads "H Watters".

Heidi Watters  
Team Leader  
Compliance

As nominee of the Planning Secretary



NSW Planning ref: ENF-83288457

Boggabri Coal Operations Pty Ltd  
Level 9, 175 Eagle Street  
BRISBANE QLD 4000  
08/05/2025

---

To the Proper Officer

Attention: Alex Williams

Subject: **OFFICIAL CAUTION** – BREACH OF SECTION 4.2 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Following an investigation, I, Joel Curran, an authorised person for the purposes of the Environmental Planning and Assessment Act 1979 (the Act) have formed the opinion that Boggabri Coal Operations Pty Ltd (BCO) (ACN 600 191 455) has committed an offence against section 4.2(1)(b) of the Act by carrying out development not in accordance with the conditions of development consent. Further details of the breach are set out below.

### **PARTICULARS OF BREACH**

BCO is the operator of the Boggabri Coal Mine Joint Venture, which currently comprises Idemitsu Australia Pty Ltd (Idemitsu) – through its subsidiary Boggabri Coal Pty Ltd (80%) – Chugoku Electric Power Australia Resources Pty Ltd (10%) and NS Boggabri Pty Limited (10%). BCO carries out the development known as the Boggabri Coal Mine (BCM) pursuant to MP09\_0182 as modified (the consent) on the land described in Appendix 1 of the consent.

Schedule 5, Condition 14 of the consent states (in part), *'The Proponent must immediately notify the Department and any other relevant agencies after it becomes aware of an incident..'*

'Incident' is defined in the consent as (in part) *'A set of circumstances that....breaches or exceeds the limits or performance measures/criteria in this approval'*.

On 15 January 2025, BCO submitted an incident notification to the NSW Department of Planning, Housing and Infrastructure (NSW Planning), notifying of an exceedance of the Schedule 2, Condition 10 ROM coal limit of 153 tonnes. NSW Planning issued BCO with a Notice to Furnish Information and Records on 10 February 2025 and a Show Cause on 20 March 2025, to which responses were received on 10 March 2025 and 16 April 2025 respectively.

BCO's response to the NSW Planning Notice to Furnish Information and Records notes that certain BCO individuals became aware of an exceedance of the Schedule 2, Condition 10 ROM coal limit on 3 February 2025.

I have considered BCO's responses to the Notice to Furnish Information and Records and Show Cause and note that BCO have since implemented additional governance, systems and procedural actions, and controls to ensure ongoing compliance.

### **OFFICIAL CAUTION**

The breach has been assessed in accordance with the NSW Department of Planning, Housing and Infrastructure (NSW Planning) Compliance Policy and the Attorney General's Caution Guidelines and it has been determined to issue Boggabri Coal Operations Pty Ltd with an Official Caution for the breach. In reaching this decision, NSW Planning has considered the particulars of the breach set out above and the following matters:

- BCO have a compliance history with NSW Planning.
- The breach duration was up to 12 days.
- There was no harm to the environment.
- There was no impact on the amenity of surrounding sensitive receivers.
- BCO have shown genuine remorse over the breach.
- BCO provided assistance throughout the investigation and were forthcoming with the details surrounding the breach.
- The offending behaviour did not involve risks to public safety, damage to property or financial loss, or have a significant impact on other members of the public.

An Official Caution is a formal enforcement action issued under Section 19A of the *Fines Act 1996* where it appears to an authorised person that a person has committed a Penalty Notice offence and that it is appropriate to issue an Official Caution in the circumstances. Section 4.2(1)(b) of the Act is a Penalty Notice offence.

The issue of an Official Caution does not preclude NSW Planning from taking further enforcement action in relation to the breach, if it becomes apparent that an alternative response is more appropriate.

Please note NSW Planning will retain a record of this Official Caution, and will have regard to it, should it become necessary for NSW Planning to consider taking any further enforcement action against Boggabri Coal Operations Pty Ltd in the future.

Should you wish to discuss the matter further, please contact myself on 02 4904 2702 or email [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink, appearing to be "Joel Curran".

Joel Curran  
Senior Compliance Officer  
Compliance

*Authorised person under the Environmental Planning and Assessment Act 1979*

NSW Planning ref: ENF-83288460

Boggabri Coal Operations Pty Ltd  
Level 9, 175 Eagle Street  
BRISBANE QLD 4000  
08/05/2025

---

To the Proper Officer

Attention: Alex Williams

Subject: **PENALTY NOTICE** – BREACH OF SECTION 4.2 OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Following an investigation, I, Joel Curran, an authorised person for the purposes of the Environmental Planning and Assessment Act 1979 (the Act) have formed the opinion that Boggabri Coal Operations Pty Ltd (BCO) (ACN 600 191 455) has committed an offence against section 4.2(1)(b) of the Act by carrying out development not in accordance with the conditions of development consent. Further details of the breach are set out below.

### **PARTICULARS OF BREACH**

BCO is the operator of the Boggabri Coal Mine Joint Venture, which currently comprises Idemitsu Australia Pty Ltd (Idemitsu) – through its subsidiary Boggabri Coal Pty Ltd (80%) – Chugoku Electric Power Australia Resources Pty Ltd (10%) and NS Boggabri Pty Limited (10%). BCO carries out the development known as the Boggabri Coal Mine (BCM) pursuant to MP09\_0182 as modified (the consent) on the land described in Appendix 1 of the consent.

Schedule 2, Condition 10 of the consent states, *'The Proponent must not extract more than 8.6 million tonnes of ROM coal from the site in any calendar year'*.

On 15 January 2025, BCO submitted an incident notification to the NSW Department of Planning, Housing and Infrastructure (NSW Planning), notifying of an exceedance of the Schedule 2, Condition 10 ROM coal limit of 153 tonnes. NSW Planning issued BCO with a Notice to Furnish Information and Records on 10 February 2025 and a Show Cause on 20 March 2025, to which responses were received on 10 March 2025 and 16 April 2025 respectively, confirming the exceedance.

I have considered BCO's responses to the Notice to Furnish Information and Records and Show Cause and note that BCO have since implemented additional governance, systems and procedural actions, and controls to ensure ongoing compliance with the ROM coal limit.

### **PENALTY NOTICE**

The breach has been assessed in accordance with the NSW Planning Compliance Policy and it has been determined to issue Boggabri Coal Operations Pty Ltd with a Penalty Notice for the breach. In reaching this decision, NSW Planning has considered the particulars of the breach set out above and the following matters:

- BCO have a compliance history with NSW Planning.
- There was wilful disregard of regulation/operational standards and misleading or dishonest conduct on behalf of certain BCO and Idemitsu Australia Pty Ltd personnel.
- BCO have realised financial gain by exceeding the ROM coal limit.
- The exceedance amount was minor.
- There was no measurable impact on the amenity of surrounding sensitive receivers.
- There was no measurable harm done to the environment.
- BCO have shown genuine remorse over the breach.
- BCO provided assistance throughout the investigation and were forthcoming with the details surrounding the breach.

A Penalty Notice is a formal enforcement action that may be taken when it appears to an authorised person that a person has committed a Penalty Notice offence. An offence against Section 4.2(1)(b) of the Act is a Penalty Notice offence.

A Penalty Notice in the amount of \$15,000 is enclosed by way of service for your attention.

A Penalty Notice is a notice to the effect that the person served with the Penalty Notice may (if they wish) pay the prescribed penalty amount instead of having the matter determined by a court. No further proceedings can be taken against a person in relation to the offence if the person pays the prescribed penalty amount. Payment of the fine is not an admission of guilt, and no conviction is recorded.

Please note NSW Planning will retain a record of this Penalty Notice, and will have regard to it, should it become necessary for NSW Planning to consider taking any further enforcement action against Boggabri Coal Operations Pty Ltd in the future.

Should you wish to discuss the matter further, please contact myself on 02 4904 2702 or email [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)



Yours sincerely

A handwritten signature in black ink, appearing to be "Joel Curran".

Joel Curran  
Senior Compliance Officer  
Compliance

*Authorised person under the Environmental Planning and Assessment Act 1979*

**Enclosed:** Penalty Notice



Notice Number 3514013  
Reference Number REG-6765  
Contact Ross Briggs  
Date of Issue 10-10-2025

BOGGABRI COAL OPERATIONS PTY LTD  
76 600 191 455  
PO BOX 12  
BOGGABRI NSW 2382

Dear The Proper Officer

### Why is the EPA writing to you?

The Environment Protection Authority ("EPA") has investigated an alleged offence under the Protection of the Environment Operations Act 1997. Based on the evidence obtained, it is alleged that at 1515hrs on 18-01-2025 the following offence was committed:

Contravene condition of licence - first offence - Corporation by BOGGABRI COAL OPERATIONS PTY LTD at 386 LEARDS FOREST ROAD BOGGABRI 2382 (**the Premises**) in contravention of Protection of the Environment Operations Act 1997.

Following the EPA's investigation, BOGGABRI COAL OPERATIONS PTY LTD has been issued with a Penalty Notice of \$30000.00 for the alleged offence Contravene condition of licence - first offence - Corporation. More details on the EPA's investigation findings are provided below.

The EPA considers a person's compliance history and other factors when deciding an appropriate regulatory response to a non-compliance. We may take other regulatory action, such as prosecution in court, if BOGGABRI COAL OPERATIONS PTY LTD is found committing future alleged offences. The maximum penalty that can be imposed on a corporation by a court for Contravene condition of licence - first offence - Corporation is \$2,000,000.00, with an additional penalty of \$240,000.00 for each day the offence continues.

If you have any queries about this matter, please contact Ross Briggs on 131555 or at [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au) marked for Ross' attention.

### Actions for you to take

Please read the instructions on the enclosed Penalty Notice. As the penalty notice recipient, you must respond to the fine. Your choices are to:

- (a) pay the amount in full by one of the payment methods listed,
- (b) elect to have the matter dealt with by a court, or
- (c) request a review of the fine and provide supporting evidence.

Your payment, court election or request for review must be received by Revenue NSW to avoid additional costs and recovery action.

The *Fines Act 1996* states that the amount payable under a penalty notice is the amount specified in the notice and the full amount payable is to be paid within the time required by the

notice.

### Reasons for the decision

A penalty notice is considered the appropriate regulatory response on this occasion considering the circumstances of the alleged offence and the EPA's Regulatory Policy, for the following reasons:

- (a) EPL 12407 contains condition O1.1 which states that *"Licensed activities must be carried out in a competent manner. This includes:
  - a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
  - b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity"*
- (b) The blast was triggered despite proper procedures not being followed. This includes not consulting with the Environmental Superintendent.
- (c) While BCOPL self-reported the incident it is still a breach.
- (d) The potential for harm existed at Wilberoi East given this property has been identified as sensitive receiver and hence is required to have blast monitors located on it.
- (e) While complaints have been received in the past, BCOPL have generally been complaint with their blasting conditions.
- (f) A formal warning was issued to BCOPL on 8 July 2020 for a breach of Condition L5.1 following an over pressure exceedance on 21 August 2019.
- (g) A penalty notice was issued to BCOPL for a breach of Condition L5.1 on 21 July 2022.
- (h) EPA has taken prosecuting actions against a neighbouring mine for overpressure issues that injured members of the community.
- (i) This is the second time that exceedances have been recorded at this monitor. If wind was a contributing factor that means the monitor may not be installed correctly, maintained correctly and/or protected from external influences.
- (j) If the exceedance was a result of a wind gust resulting from less than ideal weather conditions, the application of proper procedure and a balanced weighing up of environmental versus production outcomes, may have meant the blast was postponed and the issue was avoided.

### Investigation findings

The EPA has responsibility for the administration and enforcement of the Protection of the Environment Operations Act 1997.

The EPA's investigation found that:

1. You hold licence number 12407 (**the Licence**) for the activities of Mining for Coal > 5000000.00 T annual production capacity), Coal Works (> 5000000.00 T annual handling capacity) and crushing, grinding, or separating > 500000.00-2000000.00 T annual processing capacity).
2. Condition O1.1 of the Licence states:

"Licensed activities must be carried out in a competent manner. This includes:

  - a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
  - b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity."

3. You undertake the activities of Mining for Coal (> 5000000.00 T annual production capacity), Coal Works (> 5000000.00 T annual handing capacity) and crushing, grinding, or separating > 500000.00-2000000.00 T annual processing capacity) at 386 LEARD FOREST ROAD, BOGGABRI, NSW, 2382 (**the Premises**).
4. On 18.01.2025 at 1515 hrs, BCOPL fired blast #1455\_E\_MN26\_01\_C\_BR21\_30\_PS (the Blast). The blast was originally planned to be fired at 1500 hours on the 18.01.2025 (the Blast).
5. The EPA received a self-report from BCOPL on 28.01.2025 stating that "On 18 January 2025 Boggabri Coal Operations Pt Ltd.'s (BCOPL) 'Wilberoi East' blast monitor recorded an air blast overpressure level of 121.2dB (Lin Peak). This represents an exceedance of 1.2dB above the maximum 120dB (Lin Peak) limit Condition L5.1 of EPL 12407." This breach may be dealt with by separate regulatory actions.
6. The blast was triggered despite proper procedures not being followed. This includes not consulting with the Environmental Superintendent.
7. An internal review dated 7 March 2025 identified several issues with the blast including productivity pressures, inadequate oversight and lack of correct sign off, firing outside Green TARP conditions due to production gains outweighing environmental effects and 'Passive tolerance of violations non-conformance with processes and procedures.'

#### **Further information**

Further information on the EPA's responsibilities and powers, can be found on the EPA's website at <https://www.epa.nsw.gov.au/licensing-and-regulation/legislation-and-compliance>.

The EPA's Regulatory Policy, which summarises the EPA's regulatory approach to non-compliance, can be found at <https://www.epa.nsw.gov.au/publications/about/2024p4550-regulatory-policy>.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Khari Turnbull', with a long horizontal flourish extending to the right.

**Khari Turnbull**  
**A/ Unit Head**  
**Environment Protection Authority**

Enclosure: Penalty Notice



# Fine Notice

BOGGABRI COAL OPERATIONS PTY  
LTD  
PO BOX 12  
BOGGABRI  
NSW 2382

|                     |              |
|---------------------|--------------|
| Fine notice number: | 3173543001   |
| Date of offence:    | 18-01-2025   |
| Fine amount:        | 30000.00     |
| Amount due:         | 30000.00     |
| Date due:           | 07-11-2025   |
| To pay now, call:   | 1300 130 112 |



## NSW Environment Protection Authority

The NSW Environment Protection Authority (EPA) is the primary environmental regulator for New South Wales. We partner with business, government and the community to reduce pollution and waste, protect human health, and prevent degradation of the environment.

**Pay before the due date to avoid paying \$65 enforcement cost (or \$25 if you are under 18)**  
Your payment options are below. You can find other options over the page.

This is your notice under Section 21 of the *Fines Act 1996* that a penalty notice has been made for a fine.

### Details of the offence

**Offence Code:** 8102320  
**Offence:** Contravene condition of licence - first offence - Corporation  
**Date of issue:** 10-10-2025  
**Authorised Officer:** Kharl Turnbull



## How to Pay



**Online:** Reference number: **3173543001**

Visit [www.revenue.nsw.gov.au/pay](http://www.revenue.nsw.gov.au/pay) to pay by Mastercard or Visa\*



Take this to your nearest Service NSW Centre and pay by cash, cheque, or EFTPOS.



**Phone:**

Call **1300 130 112** to pay by Mastercard or Visa\*



Post  
Billpay

**Post Billpay:**

Take this to Australia Post and pay by cash, cheque or EFTPOS.

\*A card payment fee will apply. This is not subject to GST.

## Other ways to finalise this notice

### What if I can't pay the fine by the due date?

You can set up a payment plan to pay over a longer period by contacting us or submitting a payment plan application. This form can be downloaded from [www.revenue.nsw.gov.au](http://www.revenue.nsw.gov.au).

### What if I want to dispute the fine?

You can request a review in certain circumstances or if you believe an error has been made at [www.nsw.gov.au/money-and-taxes/fines-and-fees/fines/request-a-review](http://www.nsw.gov.au/money-and-taxes/fines-and-fees/fines/request-a-review).

### What if I want to apply to go to court for the fine?

If you would like to dispute your fine in court, you can find more information and the application form at [www.nsw.gov.au/money-and-taxes/fines-and-fees/fines/apply-to-go-to-court-for-a-fine](http://www.nsw.gov.au/money-and-taxes/fines-and-fees/fines/apply-to-go-to-court-for-a-fine). You will need to provide a residential address as we cannot send a court attendance notice to a PO Box. **Note:** The court may apply additional costs.

### No matter the problem, don't ignore it.

For free legal help visit LawAccess NSW at [www.lawaccess.nsw.gov.au](http://www.lawaccess.nsw.gov.au) for webchat, guided pathways for help with a fine or traffic offence or phone them on 1300 888 529 Monday to Friday 9am to 5pm (except public holidays).

### Privacy collection notice

Your information is being collected by Revenue NSW under the Fines Act 1996. We collect your information to manage your fine. Revenue NSW handles your personal information in accordance with Privacy and Personal Information Protection Act 1998 and Health Records and Information Privacy Act 2002. Your information may be provided to third parties as required or permitted by law. Please go to [www.revenue.nsw.gov.au/privacy](http://www.revenue.nsw.gov.au/privacy) for more information.

### Revenue NSW contact details

**Phone:** 1300 138 118

**Overseas callers:** +612 7808 6940

**Website:** [www.revenue.nsw.gov.au](http://www.revenue.nsw.gov.au)

**Hearing or speech impaired users:**

**TTY** 133 677 | **Speak and Listen** 1300 555 727

**Telephone Interpreter Service**

131 450 and ask the interpreter to phone 1300 138 118

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# Formal Warning Letter



Licence 12407

BOGGABRI COAL OPERATIONS PTY LTD  
76 600 191 455  
PO BOX 12  
BOGGABRI NSW 2382

Attention: The Proper Officer

Notice Number 3514082  
Reference Number REG-6768  
Date 10-10-2025

## FORMAL WARNING IN RELATION TO BREACHES OF ENVIRONMENT PROTECTION LICENCE No. 12407

BOGGABRI COAL OPERATIONS PTY LTD (**the Licensee**) is the holder of Environment Protection Licence No. 12407 (**the Licence**) for premises at 386 LEARD FOREST ROAD BOGGABRI NSW 2382.

### BACKGROUND

I refer to an incident that occurred on 18 January 2025 at 1515 hrs. the Licensee fired blast #1455\_E\_MN26\_01\_C\_BR21\_30\_PS (**the Blast**). The blast was originally planned to be fired at 1500 hours on the 18 January 2025.

The EPA received a self-report from Alex Williams of the Licensee on 28.01.2025 stating that *"On 18 January 2025 Boggabri Coal Operations Pt Ltd's (BCOPL) 'Wilberoi East' blast monitor recorded an airblast overpressure level of 121.2dB (Lin Peak). This represents an exceedance of 1.2dB above the maximum 120dB (Lin Peak) limit Condition L5.1 of EPL 12407. Pursuant to Condition 4.2 of the aforementioned licence BCO is writing to inform the EPA of this exceedance of blasting limits."*

### BREACH OF LICENCE CONDITION

The EPA is of the opinion that you have breached licence condition L5.1:

Condition L5.1 states:

"The airblast overpressure level from blasting operations at the premises at the premises must not exceed 120dB at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded."

# Formal Warning Letter

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Under section 64 of the *Protection of the Environment Operations Act 1997* it is an offence to contravene any licence condition. The maximum penalty for this offence is:

- in the case of a corporation - \$2,000,000 and, in the case of a continuing offence, a further penalty of \$240,000 for each day the offence continues, or
- in the case of an individual - \$500,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues.

By this letter, the EPA issues BOGGABRI COAL OPERATIONS PTY LTD with a formal warning in relation to this breach of licence condition L5.1.

## FURTHER ACTION REQUIRED

The EPA considers that further action is needed to comply with licence condition L5.1

You are required to:

1. Undertake an external audit of each blast monitor to ensure they are sited correctly, facing the optimal direction and are installed correctly and securely maximising sensitivity and minimising vibration and interference from external factors by 28 November 2025.
2. Within 30 days of the audit being completed, submit the audit report to the EPA.
3. Ensure that blasting should be carried out when overpressure measurements are not affected significantly by wind influences.

The EPA does not propose to take enforcement action on this occasion. However, if you continue to breach the conditions of Licence 12407 or do so in the future, the EPA may consider further enforcement action, for example, issuing an Official Caution, Penalty Infringement Notice or commencing a prosecution in accordance with the EPA Prosecution Guidelines and EPA Regulatory Policy. Further information on the EPA's approach to compliance and enforcement can be found in the EPA's Regulatory Policy at <https://www.epa.nsw.gov.au/>

If you have any queries or wish to discuss this matter, please contact Ross Briggs on 131555 or [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au) marked to Ross' attention.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Khari Turnbull', written over a horizontal line.

**Khari Turnbull**  
**A/ Unit Head**

Ns Boggabri Pty Limited  
GPO BOX 1331  
MELBOURNE  
VIC 3001

Authorisation Number: AUTH 339 (1973)AUTH  
339 (1973)  
Our Reference: NCG0006663  
LETT0010529

# Official Caution

The Resources Regulator, within the Department of Primary Industries and Regional Development (the Department), has conducted an investigation and established on reasonable grounds that you have committed the following offence(s) under the *Mining Act 1992* (Mining Act):

NS Boggabri Pty Limited (**NS**) (ACN 113 447 313) is one of three authorised title holder's for Auth 339 (Act 1973).

Schedule 2 of condition 8 of Auth 339 states the licence holder must submit annual activity reports prepared in accordance with the Exploration Guideline: Annual Activity Reporting for Prospecting Titles (July 2015) at the following times:

- (a) Annually, within one calendar month following the grant anniversary date of this licence;
- (b) On any other date or dates directed by the Secretary in writing; and
- (c) Within one calendar month following the cancellation or expiry of this licence.

## **Alleged Offence 1 (NCN0014380)**

For Mining Act Auth 339 (Act 1973): NS failed to comply with Schedule 2 of condition 8 when an Environmental and Rehabilitation Compliance Report (**ERCR**) was not submitted by the due date for compliance being 11 May 2024.

The date of the alleged offence is 12 May 2024.

## **Background**

On 11 April 2025, the Resources Regulator issued NS with a warning email which identified NS had not submitted its ERCR for the 2023-2024 reporting period. The warning email recommended the report be submitted by 28 May 2025, however NS failed to submit the report by this date.

On 4 June 2025, the Resources Regulator spoke to tenement manager Kim Paton (Paton) and reminded them of the warning email recommendation.

## **Investigation Findings**

The investigation included a review of information and documents held by the Department. NS were not invited to make a submission regarding the allegation.

The Resources Regulator notes the following;

- 5 June 2025, NS submitted 23-24 ERCR (REH0005356)

The Resources Regulator has taken into consideration factors including the seriousness of the alleged offence, the compliance history of NS and any key associates and relevant environmental issues.

As an authorised Mining Act Inspector, I have determined the following outcomes and enforcement responses are appropriate to the alleged offence:

Alleged Offence 1 is **sustained** and an Official Caution is issued to NS.

NS are reminded of your on-going obligations under the *Mining Act 1992* and associated regulations.

You should note that you will be subject to increased compliance monitoring and any further contraventions may result in escalated enforcement action being taken. Your compliance history will also be considered when determining any applications under the Mining Act.

Further information regarding your obligations is available at the department's website at <https://www.resources.nsw.gov.au/>.

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Please contact Adam Stephen on 0484902521 or via email on [adam.stephen@dpird.nsw.gov.au](mailto:adam.stephen@dpird.nsw.gov.au) should you have any queries or concerns.

**Adam Stephen**  
**Senior Compliance Officer**  
**MAI - Investigations**  
**Resources Regulator**

**29 October 2025**



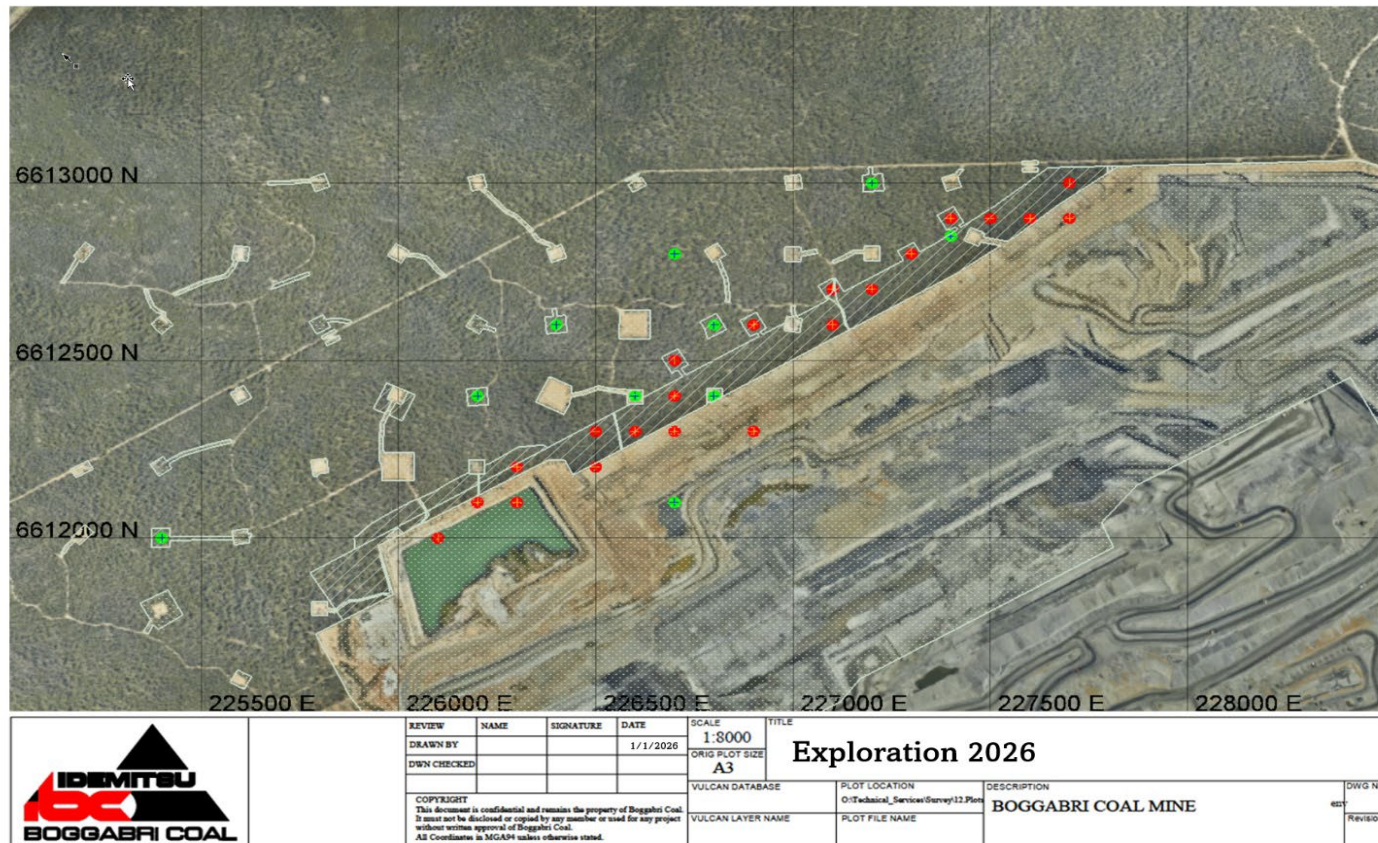
## **Appendix E**

### **BCM 2025 Actual and 2026 Proposed Exploration Drilling Program**

**Table E-1: Exploration Drilling Holes 2025**

| Borehole Name | MGA Easting | MGA Northing | Elevation (m) | Total Depth (m) | Drill Start | Drill Finish | STATUS   | Purpose      |
|---------------|-------------|--------------|---------------|-----------------|-------------|--------------|----------|--------------|
| BC2704CR      | 227786.23   | 6612892.78   | 355.54        | 264.23          | 3/02/2025   | 13/02/2025   | Cemented | Coal Quality |
| BC2724C       | 228034.9    | 6613002.74   | 365.173       | 195.20          | 21/01/2025  | 28/01/2025   | Cemented | Coal Quality |
| BC2726        | 227786.231  | 6612892.782  | 355.536       | 355.00          | 24/02/2025  | 27/02/2025   | Cemented | Structural   |
| BC2727C       | 225581.642  | 6611409.664  | 339.423       | 186.09          | 4/03/2025   | 9/04/2025    | Cemented | Coal Quality |
| BC2728C       | 225791.147  | 6612203.322  | 376.534       | 271.93          | 16/04/2025  | 14/05/2025   | Cemented | Coal Quality |
| BC2731C       | 225989.02   | 6612213.48   | 361.56        | 269.39          | 16/05/2025  | 29/05/2025   | Cemented | Coal Quality |
| BC2732C       | 226603.539  | 6612397.04   | 352.696       | 285.00          | 2/06/2025   | 27/06/2025   | Cemented | Coal Quality |
| BC2732CR      | 226589.019  | 6612397.255  | 353.495       | 66.00           | 28/08/2025  | 1/09/2025    | Open     | Coal Quality |
| BC2733C       | 225997.623  | 6612405.835  | 369.628       | 279.29          | 2/07/2025   | 28/07/2025   | Cemented | Coal Quality |
| BC2734C       | 226391.512  | 6612201.028  | 345.359       | 257.75          | 12/08/2025  | 27/08/2025   | Cemented | Coal Quality |
| BC2734CR      | 226383.13   | 6612199.88   | 345.37        | 251.35          | 20/10/2025  | 3/11/2025    | Open     | Coal Quality |
| BC2735C       | 227211.39   | 6612593.57   | 327.74        | 218.84          | 4/09/2025   | 18/09/2025   | Open     | Coal Quality |
| BC2736LD      | 226007.38   | 6612208.95   | 361.28        | 272             | 16/09/2025  | 2/10/2025    | Open     | Coal Quality |
| BC2737        | 227076.9    | 6612518.79   | 331.46        | 234             | 23/11/2025  | 24/11/2025   | Open     | Coal Quality |
| BC2738        | 226806.61   | 6612284.86   | 331.77        | 210             | 26/09/2025  | 1/10/2025    | Open     | Structural   |
| BC2739        | 226902.624  | 6612410.369  | 331.683       | 282.00          | 1/10/2025   | 8/10/2025    | Cemented | Structural   |
| BC2740        | 226995.662  | 6612487.22   | 334.795       | 228.00          | 9/10/2025   | 15/10/2025   | Cemented | Structural   |
| BC2741LD      | 226389.984  | 6612407.543  | 360.817       | 282.00          | 13/10/2025  | 6/11/2025    | Open     | Coal Quality |

**Figure E2: Proposed Exploration 2026**



## **Appendix F**

### **2023 BCM IEA Response Action Plan**

| Reference                         | Schedule and Condition Number        | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Compliance status                                           | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Recommendation                                                                                   | Response/Proposed action                                                                                                                  | Target Completion Date            |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
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| Project Approval 09_0182          |                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                           |                                   |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
| NC1                               | Schedule 2, Condition 2              | <p>The Proponent shall carry out the project: Generally in accordance with the EA; and In accordance with the statement of commitments and the conditions of this approval.</p> <p>Notes:<br/>The general layout of the project is shown in Appendix 1 and Appendix 2; and<br/>The Statement of Commitments is reproduced in Appendix 5.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Non-Compliant                                               | <p>This table and the IEA report have assessed compliance with the EA, statement of commitments and conditions of the approval. This indicates the BCM is generally in accordance with requirements of this condition. Non-compliances were noted against the following conditions:</p> <ul style="list-style-type: none"><li>- Condition 9 , Schedule 3</li><li>- Condition 15, Schedule 3</li><li>- Condition 22, Schedule 3</li><li>- Condition 38(b), Schedule 3</li><li>- Condition 38(c), Schedule 3</li><li>- Condition 68, Schedule 3</li><li>- Condition 4, Schedule 5</li><li>- Condition 5, Schedule 5</li><li>- Condition 8, Schedule 5</li><li>- Condition 14, Schedule 5</li><li>- Condition 15, Schedule 5</li><li>- Statement of Commitments 3</li><li>- Statement of Commitments 4</li></ul> <p>Non-compliances against these conditions are captured and addressed below in this table.</p> | Corrective actions are provided below for each of the non-compliances.                           |                                                                                                                                           | NA                                |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
| NC2                               | Schedule 3 Condition 9               | <p>The Proponent shall:</p> <p>(a) Ensure that:</p> <ul style="list-style-type: none"><li>• All new trucks, dozers, drills and excavators purchased for use on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units;</li><li>• Ensure that all equipment and nose control measures deliver sound power levels that are equal to or better than the sound power levels identified in the EA and that correspond to best practice or the application of best available technology economically achievable.</li><li>• Where reasonable and feasible, improvements are made to existing noise suppression equipment as technologies become available; and</li></ul> <p>(b) monitor and report on the implementation of these requirements annually on its website.</p>                                                                                                                                                | Non-Compliant                                               | <p><i>2020 IEA Recommendation: continue investigations and dialogue with DPIE regarding sound power level requirements.</i></p> <p>Sound power testing is undertaken annually and reported upon in the Annual Reviews, which are published on the website. As reported in the 2020, 2021 and 2022 Annual Reviews, sound power screening identified plant with exceedances of 3dB or greater, constituting a non-compliance with this condition.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CA 1: Continue to implement mitigation on plant identified as non-compliant with this condition. | Action 1:<br>While SPL testing shows exceedances of noise levels, investigations into suitable solutions will undertaken and implemented. | Ongoing                           |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
| NC3                               | Schedule 3 Condition 15              | <p>The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 6.</p> <table><tr><th>Location</th><th>Airblast overpressure (dB(Lin Peak))</th><th>Ground vibration (mm/s)</th><th>Allowable exceedance</th></tr><tr><td rowspan="2">Residence on privately owned land</td><td>120</td><td>10</td><td>0%</td></tr><tr><td>110</td><td>5</td><td>5% of the total number of blasts over a period of 12 months</td></tr><tr><td>All public infrastructure</td><td>-</td><td>50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version</td><td>0%</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner, and the Proponent has advised the Department in writing of the terms of this agreement.</p> | Location                                                    | Airblast overpressure (dB(Lin Peak))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ground vibration (mm/s)                                                                          | Allowable exceedance                                                                                                                      | Residence on privately owned land | 120 | 10 | 0% | 110 | 5 | 5% of the total number of blasts over a period of 12 months | All public infrastructure | - | 50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version | 0% | Non-Compliant | <p><i>2020 IEA Recommendation : Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review.</i></p> <p><i>2020 IEA Recommendation :Implement changes to the TARP notifications system to distinguish "triggers" from "exceedances" so that reportable exceedances are not missed</i></p> <p>A review of monitoring data indicated that there was one occasion where blasting criteria was exceeded. BCOPL received a penalty notice from the EPA on 21 July 2022 for this exceedance. BCOPL undertook an internal investigation and response to the EPA with the findings of the investigation, which determined that the exceedance was due to wind gusts and not blasting operation. The EPA withdrew the penalty notice in December 2022. In addition, DPE provided a response to the reported exceedance on 7 July 2023, stating that from the</p> | CA 2: Ensure that blast monitoring equipment is regularly maintained and working prior to blasting so that blasts are adequately reported | NO ACTION REQUIRED.<br>BCOPL will continue to ensure blast monitors are calibrated every 3 months and maintained as required as per contract with blast monitor supplier. | NA |
| Location                          | Airblast overpressure (dB(Lin Peak)) | Ground vibration (mm/s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Allowable exceedance                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                           |                                   |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
| Residence on privately owned land | 120                                  | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0%                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                           |                                   |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
|                                   | 110                                  | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5% of the total number of blasts over a period of 12 months |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                           |                                   |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |
| All public infrastructure         | -                                    | 50 or alternatively a specific limit determined to the satisfaction of the Secretary by the structural design methodology in AS 2187.2-2006, or its latest version                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0%                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                                                                                                                                           |                                   |     |    |    |     |   |                                                             |                           |   |                                                                                                                                                                    |    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                           |                                                                                                                                                                           |    |



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| NC4       | Schedule 3 Condition 22       | <p>The proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) Be submitted to the Secretary for approval within 6 months from the date of project work.</li> <li>(b) be prepared in consultation with the EPA, the CCC and interested members of the local community potentially affected by blasting operations;</li> <li>(c) propose any alternative ground vibration limits for public infrastructure in the vicinity of the site;</li> <li>(d) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> <li>• best management practice is being employed; and</li> <li>• compliance with the relevant conditions of this approval;</li> </ul> </li> <li>(e) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with Council;</li> <li>(f) include a specific blast fume management protocol to demonstrate how emissions will be minimised including risk management strategies if blast fumes are generated;</li> <li>(g) include a monitoring program for evaluating the performance of the project including: <ul style="list-style-type: none"> <li>• compliance with the applicable criteria; and</li> <li>• minimising fume emissions from the site; and</li> </ul> </li> <li>(h) include a Leard Forest Mining Precinct Blast Management Strategy that has been prepared in consultation with other mines within the Leard Forest Mining Precinct to minimise cumulative blasting impacts.</li> </ul> <p><i>Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</i></p> | Non-Compliant     | <p><i>2020 IEA Recommendation: Ensure blasts are undertaken under appropriate weather conditions. Delays to blasts should be implemented if required based on real time weather data review - recommendation was addressed in 2020 Annual Review, with target completion 01/08/2021</i></p> <p>The latest version of the Blast Management Plan (BMP) is dated November 2018 and was approved by DPIE on 21 February 2019. The Blast Management Strategy is dated April 2020.</p> <p>The preparation of the BMP meets the requirements of the relevant consent conditions The Blast Management Plan was originally prepared in January 2013, with this being within six months of the Project Approval. Key sections for items required by this condition:</p> <ul style="list-style-type: none"> <li>- Consultation summary - Appendix D</li> <li>- Alternate ground vibration limits - Section 5.1</li> <li>- Management Measures including road closures - Section 6</li> <li>- Blast fume management protocol - Appendix C</li> <li>- Weather monitoring program - Section 7.2 and 7.3</li> <li>- Leard Forest Mining Blast Management Strategy - Section 6.5 and Appendix E</li> </ul> <p>The Blast Management Plan is currently under revision. As described above, DPE have granted approval for the submission of the updated plans within three months of MOD8 determination which is currently being assessed.</p> <p>Implementation of the requirements over the audit period were generally satisfactory. However, as reported in the 2022 annual review, the continuous rainfall readings at the 60 m AWS were not recorded for the period between 5-12 May 2022. The readings for continuous solar radiation at the weather stations were also not recorded for the period between 21 July 2022 and 7 December 2022. BCOPL also advised that data capture for sigma theta was 90% in May 2023 due to a faulty sensor. The sensor has been fixed and is</p> | CA 3: Ensure that maintenance routines include the weather station for regular inspection and maintenance | NO ACTION REQUIRED.<br>BCOPL will continue to have all weather stations including the 60m AWS Met Station Calibrated and maintained on a biannual basis and as required as per the contract with supplier. | NA                     |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Recommendation                                                                                                                | Response/Proposed action                                                                                                                                                                   | Target Completion Date                                  |
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| NCS       | Schedule 3 Condition 38b      | <p>a Surface Water Management Plan, which includes:</p> <ul style="list-style-type: none"> <li>• detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project;</li> <li>• detailed baseline data on soils within the irrigation management area;</li> <li>• detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River;</li> <li>• a detailed description of the water management system on site, including the: <ul style="list-style-type: none"> <li>o clean water diversion systems;</li> <li>o erosion and sediment controls (dirty water system);</li> <li>o mine water management systems including irrigation areas;</li> <li>o discharge limits in accordance with EPL requirements;</li> <li>o water storages;</li> <li>o haul road and Boggabri Rail Spur Line and bridge flood and water diversions; detailed plans, including design objectives and performance criteria for: <ul style="list-style-type: none"> <li>o design and management of final voids;</li> <li>o design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials;</li> <li>o design and management for construction and operation of the Boggabri Rail Spur Line and bridge across the Namoi River floodplain and upstream adjoining Nagero/Bollol creek catchments;</li> <li>o reinstatement of drainage lines on the rehabilitated areas of the site; and</li> <li>o control of any potential water pollution from the rehabilitated areas of the site;</li> </ul> </li> <li>• performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project: <ul style="list-style-type: none"> <li>o the water management system;</li> <li>o soils within the irrigation area;</li> <li>o downstream surface water quality;</li> <li>o downstream flooding impacts, including flood impacts due to the construction and operation of the Boggabri Rail Spur Line and rail bridge; and</li> <li>o stream and riparian vegetation health, including the Namoi River;</li> </ul> </li> <li>• a program to monitor: <ul style="list-style-type: none"> <li>o the effectiveness of the water management system;</li> <li>o soils within the irrigation area; and</li> <li>o surface water flows and quality in the watercourses that could be affected by the project;</li> <li>o downstream flooding impacts; and</li> </ul> </li> <li>• reporting procedures for the results of the monitoring program;</li> <li>• a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and</li> </ul> </li> </ul> | Non-Compliant     | <p><i>2020 IEA Recommendation: continue to liaise with DPIE with regard to the approval of the revised water management system and the removal of the clean water diversion.</i></p> <p>The most recent approved Surface Water Management Plan is dated May 2017. Key sections that address the requirements of this condition:</p> <ul style="list-style-type: none"> <li>- Baseline information - Section 3</li> <li>- The Surface Water Management System - Section 4</li> <li>- Water Management Trigger Levels and Responses - Section 7</li> <li>- Monitoring program - Section 6</li> </ul> <p>The SWMP generally is compliant with the requirements of this condition, however as identified in the 2020 IEA the clean water drain presented in Appendix A of the SWMP to the north of the disturbance area has been mined through and has not been reinstated. BCOPL are preparing an update to the SWMP that depicts that this drain has been removed, however the updated plan has not been approved constituting a non-compliance against this condition. BCOPL are required to submit the updated plan within 3 months of the determination of MOD8.</p> | CA 4: Ensure the recommendations of the 2020 IEA are included in the updated SWMP                                             | Action 2:<br>BCOPL will include the recommendations of the 2020 IEA in the next version of the Surface Water Management Plan to be submitted within 3 months of MOD 8 approval by the DPE. | Within 3 months of MOD 8 approval by the DPE: completed |
| NC6       | Schedule 3 Condition 38(c)    | <p>a Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> <li>• detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Non-Compliant     | <i>2020 IEA Recommendation: Vary the EPL in consultation with EPA to align with the appropriate borehole locations and remove those that have been</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CA 5: Ensure that the updated GMP accurately reflects the Groundwater Monitoring Regime and the latest variation of EPL 12407 | Action 3:<br>The Groundwater Management Plan will be updated and sent for                                                                                                                  |                                                         |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Recommendation                                                                                       | Response/Proposed action                                                                                                                                                                          | Target Completion Date |
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|           |                               | <p>groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project;</p> <ul style="list-style-type: none"> <li>the monitoring and testing requirements specified in the PAC recommendations for groundwater management as set out in Appendix 6;</li> <li>detailed plans, including design objectives and performance criteria, for the design and management of the proposed final void;</li> <li>groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;</li> <li>a program to monitor and assess: <ul style="list-style-type: none"> <li>o groundwater inflows to the open cut mining operations;</li> <li>o the seepage/leachate from water storages, backfilled voids and the final void;</li> <li>o interconnectivity between the alluvial and bedrock aquifers;</li> <li>o background changes in groundwater yield/quality against mine-induced changes;</li> <li>o the impacts of the project on: <ul style="list-style-type: none"> <li>- regional and local (including alluvial) aquifers;</li> <li>- groundwater supply of potentially affected landowners;</li> <li>- aquifers potentially affected by the mine irrigation area;</li> <li>- groundwater dependent ecosystems (including potential impacts on stygo-fauna) and riparian vegetation.</li> </ul> </li> </ul> </li> <li>a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and</li> <li>a plan to respond to any exceedances of the performance criteria; and</li> </ul> |                   | <p><i>mined through.</i></p> <p>The most recent Groundwater Management Plan is dated 10 February 2020 and is generally compliant with the requirements of this condition. Key sections that address the requirements of this condition:</p> <ul style="list-style-type: none"> <li>- Baseline information - Section 3</li> <li>- Groundwater Monitoring Program - Section 4</li> <li>- Water Management Trigger Levels and Management Measures- Sections 6 and 7</li> </ul> <p>A review of water quality monitoring data indicates that there were exceedances of trigger values during the audit period. The following points were also not monitored over the reporting period:</p> <ul style="list-style-type: none"> <li>- IBC2181 - Unable to access in the March 2023 GME</li> <li>- IBC2181 - Unable to access in the November 2022 GME</li> <li>- MWP01 - Unable to access in the January 2021 GME</li> <li>- IBC2181 - Unable to access in the June 2021 GME</li> </ul> <p>The Annual Review documents note that the GMP is required to be reviewed to account for the destroyed monitoring bores. It is understood that BCOPL intend to submit an updated plan for DPE approval within 3 months of the determination of MOD8 which is currently being assessed.</p> <p>The groundwater model was reviewed and updated in late 2020 by Australasian Groundwater and Environmental Consultants. In response to 2020 IEA Improvement Recommendation, EPL 12407 was varied in 2021 to remove mined though bores.</p> |                                                                                                      | approval within 3 months of MOD 8 approval. It will reflect the latest variation of EPL 12407 and monitoring regime that is being undertaken on site.                                             | the DPE: Completed     |
| NC7       | Schedule 3 Condition 40       | <p>The Proponent shall commission and fund the preparation of a Leard Forest Mining Precinct Regional Biodiversity Strategy, jointly with all other coal mines within the Precinct. The Strategy shall be co-ordinated through the Department (refer condition 42 below) and prepared by suitably qualified, experienced and independent person/s whose appointment has been endorsed by BCS and subsequently approved by the Secretary, in the following stages:</p> <p>Stage 1 – Scoping Stage</p> <p>A scoping report for development of the Strategy must be submitted, within 6 months of the date of this approval, for endorsement by BCS and subsequent approval by the Secretary. The Secretary may extend this period with the agreement of BCS. The scoping report must:</p> <p>include terms of reference, scope and objectives for the Strategy, including recommendations for the Strategy’s geographic extent;</p> <p>identify the ongoing functions and members of the working group (see condition 41 of Schedule 3);</p> <p>include a project management plan of the Strategy, with a time schedule, indicative dates for working group meetings, review and milestones for completion;</p> <p>include a funding program for the development of the Strategy, including provision of adequate resources for the participation of working group members; and</p> <p>include a consultation/communications program for the</p>                                                                                                                                                                                                                                                                                                   | Non-Compliant     | <p>The Leard Forest Regional Biodiversity Strategy Stage 1 – Scoping Report was prepared in July 2015, prior to the commencement of this audit period.</p> <p>The Leard Forest Regional Biodiversity Strategy Stage 2 – Strategy Report was prepared in August 2017, prior to the commencement of this audit.</p> <p>Umwelt prepared a preliminary review of the Leard Forest Regional Biodiversity Strategy in 2018. The scope of the review was reduced to solely focussing on the implementation of the strategy in the revised biodiversity management plans to provide a list of recommendations to the BTM Complex for future revisions of the Leard Forest Regional Biodiversity Strategy.</p> <p>The preliminary review included a recommendation (recommendation 4.6) that a comprehensive review of the strategy should be undertaken by 31 December 2021. A letter of response was provided by BCD on 26 July 2019 providing comments on the preliminary review supported this recommendation.</p> <p>The Comprehensive Review of the strategy has not been undertaken and therefore the recommendations of the preliminary review have not been implemented. This is considered a non-compliance against this condition.</p>                                                                                                                                                                                                                                                                                   | CA 6: Undertake the comprehensive review of the Leard Forest Regional Biodiversity Strategy in 2024. | Action 4: BCOPL will work with other mines in the BTM complex and have a comprehensive review of the Leard Forest Regional Biodiversity Strategy completed by the 31 <sup>st</sup> December 2024. | 31/12/2024: Ongoing    |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Recommendation                                                                                                                                   | Response/Proposed action                                                                                                                            | Target Completion Date |
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|           |                               | <p>Strategy.</p> <p>Note: The broad terms of reference must be guided by the Planning Assessment Commission (PAC) merit review for the Boggabri Coal Mine (February 2012) – Recommendation 1 for the development of a regional biodiversity strategy.</p> <p>Stage 2 – Strategy Development</p> <p>The Strategy must be developed in accordance with the approved Scoping Stage report and submitted for endorsement by BCS and subsequent approval by the Secretary within 18 months of the date of this approval. The Secretary may extend this period with agreement of BCS.</p> <p>Stage 3 – Strategy Review</p> <p>The Strategy must be reviewed by the end of December 2018, following completion of audits of the rehabilitation and Biodiversity Offset Areas required to be undertaken under approvals for coal mines within the Precinct. The Review shall be conducted by suitably qualified, experienced and independent person/s whose appointment has been endorsed by BCS and approved by the Secretary. Any modifications to the Strategy arising from the review must be endorsed by BCS prior to approval by the Secretary</p>                                                                                                                                                                                                               |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                  |                                                                                                                                                     |                        |
| NC8       | Schedule 3 Condition 68       | <p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project;</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of;</p> <p>(c) monitor and report on the effectiveness of the waste minimisation and management measures in the Annual Review.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Non-Compliant     | <p>Generally waste was managed appropriately on site, with waste receptacles clearly labelled. The site is also neat and tidy. However it was noted that the correct waste was not always deposited into the correct bins, with plastic wrap observed in the steel bin, constituting a non-compliance.</p> <p>Waste is reported on in the annual reviews.</p>                                                                                                                                                                                                                                                                       | CA 7: Ensure that staff are made aware of correct waste management procedures and that waste slides are included in the toolbox talks quarterly. | Action 5: BCOPL will ensure quarterly waste toolbox talks are presented to the workforce.                                                           | 20/02/2024: Completed  |
| NC9       | Schedule 5 Condition 4        | <p>By the end of March each year, the Proponent shall review the environmental performance of the project for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>monitoring results of previous years; and</li> <li>relevant predictions in the EA;</li> </ul> <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.</p> | Non-Compliant     | <p><i>2020 IEA Improvement Recommendation: Include additional information in the annual reviews regarding longer term trends particularly in terms of surface water, noise and air quality</i></p> <p>The format and presentation of the Annual Review documents satisfies the requirements of this condition. BCOPL have also integrated the 2020 IEA recommendation of including additional information in the annual reviews regarding longer term trends particularly in terms of surface water, noise and air quality.</p> <p>As noted in the 2022 Annual Review, the 2021 Annual Review was submitted after the due date.</p> | CA 8: Ensure that annual reviews are submitted by the due date.                                                                                  | NO ACTION REQUIRED. BCOPL will continue to submit the Annual Review by the 31 <sup>st</sup> of March each year as required by the Project Approval. | NA                     |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Recommendation                                                                                                                                                         | Response/Proposed action                                                                                                                                                                           | Target Completion Date                                  |
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| NC10      | Schedule 5<br>Condition 5     | Within 3 months of the submission of:<br>(a) an annual review under condition 4 above;<br>(b) an incident report under condition 8 below;<br>(c) an audit under condition 10 below; and<br>(d) any modification to the conditions of this approval, the Proponent shall review the strategies, plans, and programs required under this approval.<br>Where this review results in revisions to any such document, then within 4 weeks of the completion of the revision, unless the Secretary agrees otherwise, the revised document must be submitted to the Secretary for approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Non-Compliant     | <i>2020 IEA Improvement Recommendation: Prepare a document review register to evidence dates when documents are reviewed. Register should identify if any changes are identified as being required.</i><br><br>It is noted that most plans required under this development consent have not been revised over the audit period and require updating, constituting a non-compliance against this condition. However it is noted that DPE have written to BCOPL indicating that they may submit the updated management plans for approval within 3 months of the determination of MOD8.<br><br>In response to the 2020 IEA Improvement Recommendation, BCOPL have developed a document register for EMS documents.                                                                                                                                                                                         | CA 9: Ensure that all plans required under this consent are reviewed and updated (if applicable) 3 months after the triggers outlined in Schedule 5, Condition 5 occur | Action 6:<br>Submit all required management plans to the DPE for approval within 3 months of MOD 8 approval. All other plans will be reviewed and updated (if applicable) in the same time period. | Within 3 months of MOD 8 approval by the DPE: Completed |
| NC11      | Schedule 5<br>Condition 8     | The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Non-Compliant     | No environmental incidents causing material harm have occurred during the audit period.<br>BCOPL provided the following notices relating to environmental non-compliances during the audit period:<br>- Notification of blast overpressure exceedance on 30 April 2022 sent to DPE (3 May 2022)<br>- Exceedance on 6 March 2023 of criteria at Glenhope HVAS sent to DPE on 2 May 2023. Given that this occurred more than a week from the incident occurring, this constitutes a non-compliance against this condition.                                                                                                                                                                                                                                                                                                                                                                                 | CA 10: Ensure that non-compliances are reported within 7 days of occurrence.                                                                                           | NO ACTION REQUIRED.<br>BCOPL will continue to report non-compliances within 7 days of becoming aware of an incident.                                                                               | NA                                                      |
| NC12      | Schedule 5<br>Condition 10    | By the end of June 2014 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:<br>be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;<br>include consultation with the relevant agencies;<br>assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease (including any assessment, plan or program required under these approvals);<br>assess whether the Proponent is implementing best noise, blasting and air quality management practice;<br>investigate and report on the measures taken to minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply, including:<br>the effectiveness of these measures in maintaining noise impacts within the relevant noise criteria in this approval and/or the limits in the relevant EPL; and<br>any additional measures available to mitigate noise impacts under such meteorological conditions<br>investigate and report on the measures taken to minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see condition 30(d) of Schedule 3), including:<br>the effectiveness of these measures in maintaining air quality impacts within the criteria in Table 9, Table 10 and Table 11 of Schedule 3; and | Non-Compliant     | Previous audits were undertaken in 2014, 2017 and 2020. The 2020 IEA was undertaken by SLR Consulting. This audit was undertaken in compliance with the requirements of this condition.<br><br>The audit team for this audit was approved on 31 August 2023. Key sections of this audit that demonstrate compliance with this condition are:<br>- Section 4.2 (summary of compliance)<br>- Section 4.6 (Adequacy of plans and strategies)<br>- Section 4.7 and Appendix B (Agency consultation)<br>- Section 5.2 (Corrective actions)<br>- This table (compliance assessment against the requirements of the consent, licences and leases)<br><br>This audit was commissioned on the 11 October 2023, four months after the end of June as required by this condition. BCOPL were not granted an extension from DPE, and therefore a non-compliance against this component of the condition is recorded. | CA 11: Ensure that future Independent Environmental Audits are commissioned by the end of June.                                                                        | Action 7:<br>BCOPL will commission the next independent environmental audit by 30 June 2026.                                                                                                       | 30/06/2026                                              |



| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Recommendation                                                                                                                                                         | Response/Proposed action                                                                                                                                      | Target Completion Date                                                                              |
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|           |                               | any additional measures available to mitigate air quality impacts under such conditions;<br>review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and<br>recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals.<br>Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, ecology, Aboriginal heritage and any other fields specified by the Secretary. |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                        |                                                                                                                                                               |                                                                                                     |
| NC13      | Schedule 5 Condition 14       | The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the application number and name) and set out the location and nature of the incident.                                                                                                                                                                                                                               | Non-Compliant     | As described in the compliance findings for Condition 8 of Schedule 5, the exceedance of air quality criteria at the Glenhope HVAS was sent to DPE more than a week from the incident occurring (incident occurring 6 March 2023, notification sent 2 May 2023).                                                                                                                                                                                                                                                       | CA 10: Ensure that non-compliances are reported within 7 days of occurrence.                                                                                           | NO ACTION REQUIRED.<br>BCOPL will continue to report non-compliances within 7 days of becoming aware of an incident.                                          | NA                                                                                                  |
| NC14      | Statement of Commitments 3    | Boggabri Coal's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in conditions of Project Approval.                                                                                                                                                                                                                                                                                                        | Non-Compliant     | The NMP, BMP, AQGHGMP and GMP have not been updated during the audit period. The WMP and SWMP have been submitted to DPE but not have not been approved. DPE have granted approval for the submission of the updated plans within three months of MOD8 determination.                                                                                                                                                                                                                                                  | CA 9: Ensure that all plans required under this consent are reviewed and updated (if applicable) 3 months after the triggers outlined in Schedule 5, Condition 5 occur | Action 8:<br>BCOPL will ensure review and update (if applicable) of management plans within 3 months of triggers outlined in Schedule 5, Condition 5.         | Within 3 months of MOD 8 approval by the DPE: Completed                                             |
| NC15      | Statement of Commitments 4    | Boggabri Coal's EMPs will be revised and updated as required, in consultation with the relevant regulators for approval by DP&I as specified in any conditions of Project Approval for Surface and Groundwater Management, Flora and Fauna, Rehabilitation and Landscape Management (including Void Management) and Aboriginal Archaeology and Cultural Heritage Management.                                                                                                                                                                                            | Non-Compliant     | The Biodiversity Management Plan, GMP and the CHMP have not been updated during the audit period. The WMP and SWMP have been submitted to DPE but not have not been approved. DPE have granted approval for the submission of the updated plans within three months of MOD8 determination. The RMP would be superseded following the approval of the new RMP (replacing the former MOP under the Mining Regulation 2016). This plan is currently in draft.                                                             | CA 9: Ensure that all plans required under this consent are reviewed and updated (if applicable) 3 months after the triggers outlined in Schedule 5, Condition 5 occur | See Action 8:<br>BCOPL will ensure the review and update (if applicable) of management plans within 3 months of triggers outlined in Schedule 5, Condition 5. | Within 3 months of MOD 8 approval by the DPE: BMP revision ongoing, HMP and GMP revision completed. |
| EPL 12407 |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                        |                                                                                                                                                               |                                                                                                     |
| NC16      | L3.1                          | The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.                                                                                                                                                                                                                                                               | Non-Compliant     | The EPA issued an Official Caution letter on 30 July 2021 in relation to burying 937 end-of-life haul truck tyres, at depth, between 2014 and 2020, constituting a non-compliance against this condition.<br><br>Condition L3.3 has since been added to the EPL permitting the disposal of tyres at BCM, and therefore no corrective action is required.                                                                                                                                                               |                                                                                                                                                                        | NO ACTION REQUIRED.                                                                                                                                           | NA                                                                                                  |
| NC17      | L3.3                          | The licensee may dispose of up to 300 end-of-life mining heavy plant tyres on the premises in each annual return year period up until 11 January 2023. Should the report provided in accordance with condition R3.5: be submitted to the EPAs satisfaction at intervals of 2 years; and find that recycling options are not feasible; then the onsite disposal of the end-of life heavy mining plant tyres may continue for the subsequent 2 annual reporting periods. Only waste tyres generated at the premises may be disposed of in accordance with this condition. | Non-Compliant     | Following the addition of this condition on the licence, BCOPL disposed of tyres within the pit as per this condition.<br><br>The R3.5 report has been prepared and was submitted to the EPA on 3 October 2023.<br><br>Based on the information supplied, BCOPL continued to dispose of tyres between 11 January 2023 and the date of submission for the R3.5 report, constituting a non-compliance against this condition. Given that the R3.5 report has been provided to the EPA, no corrective action is proposed. |                                                                                                                                                                        | No further action required.<br>Approval in place for onsite HV trye disposal from 11 January 2023 until 11 January 2025.                                      | NA                                                                                                  |
| NC18      | O1.1                          | Licensed activities must be carried out in a competent manner. This includes: the processing, handling, movement and storage of                                                                                                                                                                                                                                                                                                                                                                                                                                         | Non-Compliant     | Site inspection confirmed that site operations are undertaken in a competent manner. Generally, waste was managed appropriately with waste                                                                                                                                                                                                                                                                                                                                                                             | CA 7: Ensure that staff are made aware of correct waste management procedures                                                                                          | See Action 5 above:<br>BCOPL will ensure quarterly waste toolbox talks are presented to the                                                                   | 20/02/2024: Completed.                                                                              |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Recommendation                                                                                                                            | Response/Proposed action                                                                                                                                                                                   | Target Completion Date |
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|           |                               | materials and substances used to carry out the activity; and the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | receptacles clearly labelled. However, it was noted that the correct waste was not always deposited into the correct bins, with plastic wrap observed in the steel bin, constituting a non- compliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                           | workforce.                                                                                                                                                                                                 |                        |
| NC19      | M2.2                          | Air Monitoring Requirements Air Monitoring Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Non-Compliant     | <p><i>2020 IEA Recommendation: Continue to liaise with EPA regarding EPL variation to ensure that monitoring points in EPL align with those utilised by the site.</i></p> <p>Air monitoring was generally sampled in accordance with the requirements of this condition. In response to the 2020 IEA recommendation, monitoring points were modified as per the February 2021 variation.</p> <p>As reported in the 2021 Annual Review, the High Velocity Air Sampler (HVAS) unit located at the Glenhope property could not be accessed due to regional flooding and accordingly did not obtain samples on 23 and 29 November 2021. No corrective action is proposed. During 2021, PM10 samples were not taken for Monitoring Point 45 constituting a low risk non-compliance with this condition. This event has not occurred again and therefore no corrective action is proposed.</p> <p>In addition, the HVAS monitoring network in place for the BCM was not in line with monitoring sites specified within the EPL. The Cooboobindi HVAS was relocated to the Glenhope property during June 2020. An EPL variation was approved on 5 February 2021.</p> | No action proposed.                                                                                                                       | NO ACTION REQUIRED.                                                                                                                                                                                        | NA                     |
| NC20      | M4.1                          | For each monitoring point specified below in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency specified opposite in the other columns.                                                                                                                                                                                                                                                                                     | Non-Compliant     | <p>Weather monitoring over the reporting period was generally in accordance with the requirements of this condition.</p> <p>As reported in the 2022 annual review, the continuous rainfall readings at the 60 m AWS were not recorded for the period between 5-12 May 2022. The readings for continuous solar radiation at the weather stations were also not recorded for the period between 21 July 2022 and 7 December 2022. BCOPPL also advised that data capture for sigma theta was 90% in May 2023 due to a faulty sensor. The sensor has been fixed and is now capturing data continuously.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CA 3: Ensure that maintenance routines include the weather station for regular inspection and maintenance                                 | NO ACTION REQUIRED.<br>BCOPL will continue to have all weather stations including the 60m AWS Met Station Calibrated and maintained on a biannual basis and as required as per the contract with supplier. | NA                     |
| NC21      | M7.1                          | <p>To determine compliance with limit condition(s) for blasting:</p> <p>Airblast overpressure and ground vibration levels experienced at the following noise sensitive locations must be measured and recorded for all blasts carried out in or on the premises;</p> <p>- Identified on "Goonbri" and "Wilberoi East" identified on the map titled Plan No. 1 EPL Boundary and Environmental Monitoring locations dated 05/03/2019 (DOC19/227801)</p> <p>Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.</p> | Non-Compliant     | <p>As reported in the 2022 Annual Review, a blast which was conducted on 14 November 2022 was not recorded by the 'Goonbri' blast monitoring station, constituting a low risk non-compliance.</p> <p>BCOPL received a penalty notice from the EPA on 30 April 2022 for an alleged breach of blast criteria reported on 30 April 2022. BCOPPL undertook and internal investigation and response to the EPA with the findings of the investigation, which determined that the exceedance was due to wind gusts and not blasting operation. The EPA withdrew the penalty notice in December 2022.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CA 2: Ensure that blast monitoring equipment is regularly maintained and working prior to blasting so that blasts are adequately reported | NO ACTION REQUIRED.<br>BCOPL will continue to ensure blast monitors are calibrated every 3 months and maintained as required as per contract with blast monitor supplier.                                  | NA                     |

| Reference                                                     | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Compliance status | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Recommendation                                                                                                                      | Response/Proposed action                                                                                                         | Target Completion Date |
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|                                                               |                               | Note: A breach of the licence will still occur where airblast overpressure or ground vibration levels from the blasting operations at the premises exceeds the limit specified in conditions L3.1 to L3.4 at any noise sensitive locations other than the locations identified in the above condition.                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                  |                        |
| Standard Conditions Mining Regulation 2016 Schedule 8A Part 2 |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                     |                                                                                                                                  |                        |
| NC22                                                          | 11                            | The holder of a mining lease must amend the rehabilitation management plan for the mining lease as follows—<br>to substitute the proposed version of a rehabilitation outcome document with the version approved by the Secretary—within 30 days after the document is approved,<br>as a consequence of an amendment made under clause 14 to a rehabilitation outcome document—within 30 days after the amendment is made,<br>to reflect any changes to the risk control measures in the prepared plan that are identified in a rehabilitation risk assessment—as soon as practicable after the rehabilitation risk assessment is conducted,<br>whenever given a written direction to do so by the Secretary—in accordance with the direction. | Non-Compliant     | NSW Resources Regulator approved the rehabilitation objectives for the site on 13 October 2023. The latest revision of the RMP is dated 10 November 2023, which is within 30 days of the Rehabilitation Objectives approval. The updated RMP however does not incorporate the approved rehabilitation objectives as required by condition (a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CA 12: Ensure that the next update of the RMP captures the approved Rehabilitation Objectives and completion criteria for the site. | Action 9:<br>The final version of the RMP will include the Rehabilitation Objectives that were approved October 2023.            | Complete               |
| NC23                                                          | 15(1)                         | The holder of a mining lease must do the following before the end of the initial period—<br>prepare a rehabilitation management plan, and<br>prepare rehabilitation outcome documents and give them, other than the rehabilitation completion criteria statement, to the Secretary for approval, and<br>prepare a forward program and give it to the Secretary.                                                                                                                                                                                                                                                                                                                                                                                | Non-Compliant     | The initial period is defined as<br><i>'30 days, or other period approved by the Secretary, after this Division first applies to the mining lease, or if this Division applies to the mining lease because of an increase in the required security deposit—when the surface of the mining area is disturbed by activities under the mining lease, or at a later date approved by the Secretary.'</i><br><br>The Conditions of Schedule 8A were applicable to large mines on 2 July 2022, meaning that the initial period is defined as concluding 1 August 2022.<br><br>The RMP (Original, dated 2 July 2022) was prepared within the initial period and has since been updated.<br><br>According to Section 4.1.2 of the RMP, the proposed rehabilitation outcomes were submitted to DPE on 15 March 2023, outside the initial period. The forward program was submitted on 31 March 2023, which was also after the initial period. As the initial period has concluded, no corrective action is proposed. |                                                                                                                                     | NO ACTION REQUIRED                                                                                                               | NA                     |
| NC24                                                          | 15(2)                         | The holder of the mining lease must prepare a forward program and annual rehabilitation report and give them to the Secretary before—<br>60 days after the last day of each annual reporting period, commencing with the annual reporting period in which the forward program was given to Secretary under subclause (1)(c), or<br>a later date approved by the Secretary.                                                                                                                                                                                                                                                                                                                                                                     | Non-Compliant     | BCOPL requested a change in the annual reporting period to 1 January to 31 December. This was accepted by Resources Regulator on 22 December 2022.<br><br>The forward program was submitted on 31 March 2023, which was more than 60 days from the completion of the reporting period. The Annual Rehabilitation report reviewed did not have a date of submission, and therefore compliance with this condition cannot be verified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CA 13: Include the date of submission on the Annual Rehabilitation Report                                                           | ACTION 10:<br>The Annual Rehabilitation Report will be submitted by the 31 <sup>st</sup> March each year with the Annual Review. | 31/03/2024: Completed  |
| NC25                                                          | 16(2)                         | The holder of a mining lease must make a document to which this clause applies publicly available by—<br>publishing it on its website in a prominent position, or<br>if the holder does not have a website— providing a copy of it to a person—<br>on the written request of a person, and<br>without charge, and                                                                                                                                                                                                                                                                                                                                                                                                                              | Non-Compliant     | The forward program and rehabilitation report are published on the project website, however the Rehabilitation Management Plan is not, constituting a non-compliance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CA 15: Publish the Rehabilitation Management Plan on the website                                                                    | Action 11:<br>BCOPL will Publish the Rehabilitation Management Plan once finalised.                                              | 31/03/2024: Completed  |

| Reference | Schedule and Condition Number | Condition                                                                                                                                                                                                                                                                                                                                      | Compliance status | Evidence                                                                                                                           | Recommendation                                                   | Response/Proposed action                                                                         | Target Completion Date |
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|           |                               | within 14 days after the request is received.                                                                                                                                                                                                                                                                                                  |                   |                                                                                                                                    |                                                                  |                                                                                                  |                        |
|           | 16(3)                         | If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published—<br>for a rehabilitation management plan—within 14 days after it is prepared or amended, or<br>for a forward program or an annual rehabilitation report—within 14 days after it is given to the Secretary or amended, | Non-Compliant     | The rehabilitation management plan has not been published on the website despite it being more than 14 days since its preparation. | CA 15: Publish the Rehabilitation Management Plan on the website | As Above.<br>Action 11:<br>BCOPL will Publish the Rehabilitation Management Plan once finalised. | 31/03/2024: Completed  |

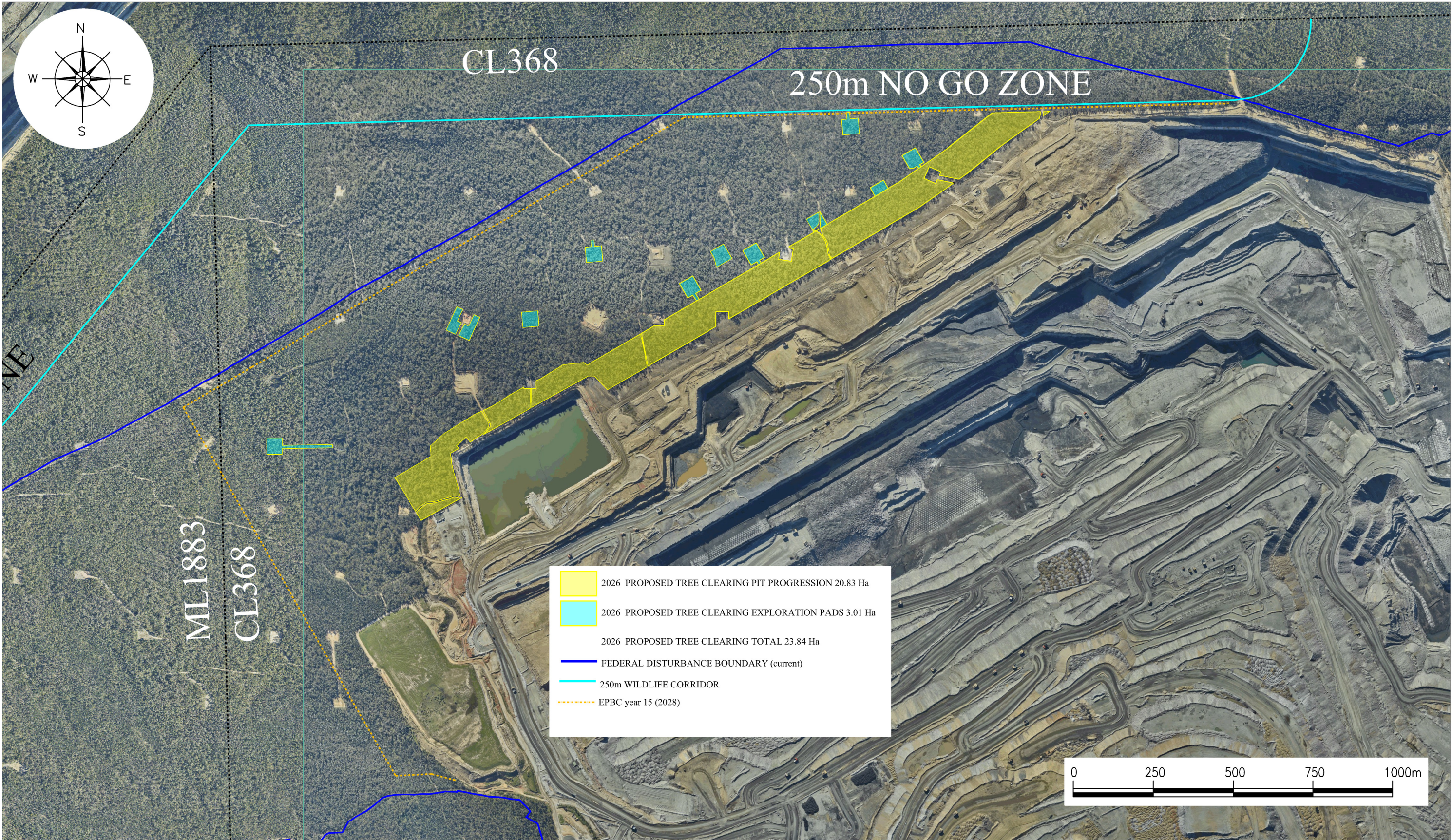
Recommendations

| Rec #            | Condition                  | Commentary                                                                                                                                                                                                                                                                                                                                                     | Recommendation                                                                                                                                      | Response                                                                                                                                                                                                                                | Target Completion Date                                                                  |
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| <b>MP09_0182</b> |                            |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                     |                                                                                                                                                                                                                                         |                                                                                         |
| REC 1            | Schedule 3 Condition 13    | The NMP was last updated in April 2019 (Rev. 2019). The 2020 IEA identified that the NMP is required to be updated to capture updated practices at BCOPL. This update has not occurred in the reporting period; however correspondence has been received from DPE approving the submission of the updated plan within 3 months from the determination of MOD8. | Update NMP to reflect the latest TARPS.                                                                                                             | BCOPL is currently revising the NMP to reflect the latest TARPS and will be submitted to the DPE within 3 months of MOD8 determination.                                                                                                 | Within 3 months of MOD8 determination: Completed.                                       |
| REC 2            | Schedule 3 Condition 20    | The 2020 IEA recommended that drone footage would continue longer so that future complaints could be verified. BCOPL have extended drone footage procedures beyond the initial blast. This procedural change was implemented in 2021. It is recommended that this procedure be captured in the updated Blast Management Plan.                                  | Include drone recording procedure in updated blast management plan.                                                                                 | BCOPL is currently revising the BMP and will include a blast recording procedure in the next update of the blast management plan to be submitted to the DPE within 3 months of MOD8 determination.                                      | Within 3 months of MOD8 determination: Completed.                                       |
| REC 3            | Schedule 3 Condition 31    | The 2020 IEA recommended a standard methodology should be developed for the investigation and reporting of any exceedances recorded by the air quality monitors                                                                                                                                                                                                | Ensure that the updated AQGGMP addresses issues outlined in the 2020 IEA. Consultation with parties outlined in this condition is also recommended. | BCOPL is currently revising the AQGHGMP and will include a procedure for investigating and reporting exceedances recorded by compliance air quality monitors. This will be submitted to the DPE within 3 months of MOD 8 determination. | Within 3 months of MOD8 determination: Completed.                                       |
| REC 4            | Schedule 3 Condition 38(a) | The most recent approved Site Water Balance is dated May 2017 and was approved by DPIE on 24 May 2017. An update to the Site Water Balance was completed and submitted to the DPIE for approval in July 2019.                                                                                                                                                  | Ensure the revised Site Water Balance and stormwater management systems are included in the updated SWMP                                            | BCOPL is currently revising the SWMP and will be submitted to the DPE with 3 months of MOD8 determination.                                                                                                                              | Within 3 months of MOD8 determination: Completed.                                       |
| REC 5            | Schedule 3 Condition 56    | The 2020 IEA recommended that the outstanding recommendations from the 2017 Audit as reported in the 2019 Annual Review be incorporated in the updated CHMP.                                                                                                                                                                                                   | Implement the outstanding recommendations from the 2017. Audit as reported in the 2019 Annual Review in the updated CHMP.                           | The CHMP is currently being revised and will include recommendations from previous Independent Environmental Audits.                                                                                                                    | Within 3 months of MOD8 determination: Completed.                                       |
| REC 6            | Schedule 5 Condition 1     | Ensure that the updated EMS reflects the updates to management plans outlined in this audit.                                                                                                                                                                                                                                                                   | Ensure that the updated EMS reflects the updates to management plans outlined in this audit                                                         | The EMS will be updated and submitted to the DPE within 3 months of MOD 8 determination.                                                                                                                                                | Within 3 months of MOD8 determination: Completed.                                       |
| <b>EPL 12407</b> |                            |                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                     |                                                                                                                                                                                                                                         |                                                                                         |
| REC 8            | P1.1                       | Monitoring locations and procedures are documented in the AQGHGMP and shown in Appendix A. EPA point 45 (HVAS 'Glenhope') is not shown on the map in the AQGHGMP. This should be updated next time the plan is reviewed.                                                                                                                                       | Improvement recommendation: Ensure the updated AQGHGMP reflects the current points outlined in EPL 12407                                            | This will be included in the AQGHGMP to be submitted to the DPE within 3 months of MOD8 determination.                                                                                                                                  | Within 3 months of MOD8 determination Within 3 months of MOD8 determination: Completed. |

## **Appendix G**

### **Tree Clearing 2025**





| REV                                                                                                                                                                                                                                                                                    | REVISIONS | DATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|
|                                                                                                                                                                                                                                                                                        |           |      |
|                                                                                                                                                                                                                                                                                        |           |      |
|                                                                                                                                                                                                                                                                                        |           |      |
| Completion of the Quality Record is evidence that the design and drawing have been verified conforming with the requirements of the Quality Plan. Where the Quality Record is incomplete all information on this drawing is intended for preliminary purposes only as it is unchecked. |           |      |



| QUALITY RECORD |             |           |         |
|----------------|-------------|-----------|---------|
| REVIEW         | NAME        | SIGNATURE | DATE    |
| DRAWN          | NIC GARDNER |           | 11/2/26 |
| DWG CHECKED    |             |           |         |
|                |             |           |         |

| SCALE         |
|---------------|
| See Bar Scale |
|               |

|                                                                  |
|------------------------------------------------------------------|
| FILE REF:<br>2026 proposed tree clearing areas 110226 split.dwg  |
| PLOT FILE:<br>2026 proposed tree clearing areas 110226 split.pdf |
| JOB REF:<br>0045                                                 |
| ORIG. FILE SIZE :<br>A3                                          |

|                    |  |                                     |  |  |  |  |     |  |  |  |  |
|--------------------|--|-------------------------------------|--|--|--|--|-----|--|--|--|--|
| Boggabri Coal Mine |  | DRAWING NO.:<br>110226b             |  |  |  |  |     |  |  |  |  |
|                    |  | 2026 TREE CLEARING AREA<br>PROPOSED |  |  |  |  | REV |  |  |  |  |



## **Appendix H**

### **2025 Site Water Balance**



# ENV-WAT-PLN-001-ATT- 001 Site Water Balance Report

March 2026





## Document details and history

### Document details

**Document title** ENV-WAT-PLN-001-ATT-001 Site Water Balance Report

**File name** SWBR Rev 17

### Document status and review

| Edition | Comments                                                           | Author                    | Authorised by | Date          |
|---------|--------------------------------------------------------------------|---------------------------|---------------|---------------|
| 0       | Issue to NSW DP&I, OEH, NOW, DRE, and NCMA.                        | L. Doeleman               | J. Rennick    | 27 Apr 2012   |
| 1       | -                                                                  | L. Doeleman               | J. Green      | 14 Sep 2012   |
| 2       | -                                                                  | N. Harcombe/A. Hedjripour | C. Dingle     | 19 Jul 2013   |
| 3       | Revised to address BCOPL comments. Issue to DP&I.                  | N. Harcombe/A. Hedjripour | C. Dingle     | 9 Oct 2013    |
| 4       | Revised to address DP&I comments. Issue to EPA and DoEE.           | N. Harcombe               | J. Green      | 18 Nov 2013   |
| 5       | Revised to address relevant agencies comments. Issue to DP&I       | K. Agllias                | J. Green      | 12 Feb 2014   |
| 6       | -                                                                  | L. Doeleman               | J. Green      | 4 Jun 2015    |
| 7       | -                                                                  | L. Doeleman               | J. Green      | 10 Sep 2015   |
| 8       | Include Modification 8 approval conditions.                        | T. Tinkler/A. Wyatt       | P. Forbes     | 18 May 2017   |
| 9       | 2020 Annual Review.                                                | M. Best/A. Wyatt          | H. Russell    | 23 Apr 2021   |
| 10      | Regular plan revision                                              | M. Best/A. Wyatt          | H. Russell    | 30 Aug 2021   |
| 11      | 2021 Annual Review                                                 | M. Best/A. Wyatt          | H. Russell    | 3 May 2022    |
| 12      | 2020 Annual Review                                                 | J O'Brien                 | A. Williams   | 27 Mar 2023   |
| 13      | 2023 Annual Review.<br>Include Modification 8 approval conditions. | J. O'Brien/S. Callander   | L. Tolson     | 10 April 2024 |

|    |                                                                                |                         |             |               |
|----|--------------------------------------------------------------------------------|-------------------------|-------------|---------------|
| 14 | 2024 Annual Review                                                             | H. Brichacek/J. O'Brien | L. Tolson   | 13 March 2025 |
| 15 | Revised to address agency comments following updated EPBC approval conditions. | J. O'Brien              | L. Tolson   | 28 May 2025   |
| 16 | Revised to address DPHI comments on V15 of SWMP                                | J. O'Brien              | L. Tolson   | 3 Oct 2025    |
| 17 | 2025 Annual Review                                                             | A. Harvey               | S. Torrance | 25 March 2026 |

Disclaimer Document uncontrolled when printed



# Table of contents

|            |                                          |          |
|------------|------------------------------------------|----------|
| <b>1.0</b> | <b>Introduction .....</b>                | <b>1</b> |
| 1.1        | Project description .....                | 1        |
| 1.2        | Purpose .....                            | 1        |
| 1.3        | Related water management documents ..... | 3        |
| 1.4        | Agency consultation .....                | 4        |
| 1.5        | Report preparation .....                 | 4        |
| <b>2.0</b> | <b>Statutory requirements .....</b>      | <b>5</b> |
| 2.1        | Relevant legislation .....               | 5        |
| 2.2        | Project approval conditions .....        | 5        |
| 2.2.1      | Commonwealth approval conditions .....   | 5        |
| 2.2.2      | Mining lease conditions .....            | 5        |
| 2.2.3      | State project consent conditions .....   | 6        |
| 2.3        | Permits and licences .....               | 7        |
| 2.3.1      | Environmental protection licence .....   | 7        |
| 2.3.2      | Water access licences .....              | 7        |
| <b>3.0</b> | <b>Site water balance .....</b>          | <b>8</b> |
| 3.1        | Overview .....                           | 8        |
| 3.2        | Water management .....                   | 8        |
| 3.3        | Model updates .....                      | 8        |
| 3.4        | Model validation .....                   | 11       |
| 3.4.1      | Water inventory .....                    | 11       |
| 3.4.2      | Water import .....                       | 14       |
| 3.4.3      | Dust suppression .....                   | 16       |
| 3.4.4      | Validation outcome .....                 | 16       |
| 3.5        | Forecast model results .....             | 16       |
| 3.5.1      | Model results summary .....              | 17       |
| 3.5.2      | Total site storage .....                 | 18       |
| 3.5.3      | Water stored in the pit .....            | 19       |
| 3.5.4      | Water supply reliability .....           | 19       |

|            |                                                               |           |
|------------|---------------------------------------------------------------|-----------|
| 3.5.5      | Intercepted catchment runoff.....                             | 21        |
| 3.5.6      | Offsite discharges.....                                       | 21        |
| <b>4.0</b> | <b>Water efficiency initiatives .....</b>                     | <b>23</b> |
| <b>5.0</b> | <b>Annual improvement program .....</b>                       | <b>24</b> |
| 5.1        | Recommended improvements .....                                | 24        |
| 5.2        | Validation program .....                                      | 24        |
| <b>6.0</b> | <b>Reporting and review .....</b>                             | <b>25</b> |
| 6.1        | Reporting.....                                                | 25        |
| 6.2        | Review.....                                                   | 25        |
| <b>7.0</b> | <b>Incident, non-compliance and complaint management.....</b> | <b>26</b> |
| 7.1        | Incident identification and notification .....                | 26        |
| 7.2        | Non-compliance notification .....                             | 26        |
| 7.3        | Complaints .....                                              | 26        |
| <b>8.0</b> | <b>References .....</b>                                       | <b>27</b> |
| <b>9.0</b> | <b>Abbreviations .....</b>                                    | <b>28</b> |

## List of diagrams and charts

|                                                                                              |    |
|----------------------------------------------------------------------------------------------|----|
| Figure 1–1: Local context .....                                                              | 2  |
| Figure 1–2: Water management plan document hierarchy .....                                   | 3  |
| Figure 3–1: Existing water management system – 2025 .....                                    | 10 |
| Figure 3–2: Observed vs modelled total site storage volume .....                             | 11 |
| Figure 3–3: Observed vs modelled MW5 storage volume .....                                    | 12 |
| Figure 3–5: Observed vs modelled SD10 storage volume .....                                   | 13 |
| Figure 3–6 Observed vs modelled MW11 storage volume .....                                    | 14 |
| Figure 3–7: Observed vs modelled water import: water year (July to June) .....               | 15 |
| Figure 3–8: Observed vs modelled dust suppression .....                                      | 16 |
| Figure 3–9: Modelled daily timeseries for total site volume.....                             | 18 |
| Figure 3–10: Modelled daily timeseries of water stored in-pit .....                          | 19 |
| Figure 3–11: Annual modelled water imports .....                                             | 20 |
| Figure 3–12: Annual modelled intercepted undisturbed catchment runoff.....                   | 21 |
| Figure 3–13: Annual modelled offsite discharges from dirty water storages.....               | 22 |
| Figure A-1: Monthly rainfall statistics – Boggabri Post Office and site rainfall gauge ..... | 33 |
| Table A.1: Comparison of rainfall depths in March 2025 .....                                 | 34 |
| Figure A-2: Monthly pan evaporation rates – Boggabri Post Office .....                       | 35 |
| Figure B-1: Schematic layout of the AWBM rainfall-runoff model (Boughton, 2004) .....        | 39 |
| Figure B-2: Estimated groundwater inflows to mining void (AGE, 2022) .....                   | 46 |

|                                                                               |    |
|-------------------------------------------------------------------------------|----|
| Figure B-3: Haul road lengths applied to the SWB model.....                   | 47 |
| Figure B-4: Recorded CHPP and MIA water use .....                             | 48 |
| Figure C-1: Water balance model schematic: Indicative conditions (2025) ..... | 50 |
| Figure C-2: Water balance model schematic: Indicative conditions (2026) ..... | 52 |
| Figure C-3: Water balance model schematic: Indicative conditions (2033) ..... | 54 |

## List of tables

|                                                                     |    |
|---------------------------------------------------------------------|----|
| Table 1-1: Related water management documents .....                 | 3  |
| Table 1-2: Agency consultation .....                                | 4  |
| Table 2-1: Site water balance related EPBC approval conditions..... | 5  |
| Table 2-2: Site water balance related consent conditions.....       | 6  |
| Table 3-1: Median site water balance for select mine years .....    | 17 |
| Table 4-1: Water balance initiatives action plan.....               | 23 |
| Table 6-1: Reporting requirements.....                              | 25 |
| Table 6-2: Review requirements.....                                 | 25 |
| Table B-1: Adopted AWBM parameter values .....                      | 39 |
| Table B-2: Water storage assumptions .....                          | 40 |
| Table B-3: Catchment areas over life of mine .....                  | 41 |
| Table B-4: Pump operating rules .....                               | 43 |

## Appendices

|            |                                          |    |
|------------|------------------------------------------|----|
| Appendix A | Climate data .....                       | 31 |
| Appendix B | Water balance methodology .....          | 36 |
| Appendix C | Water management system schematics ..... | 49 |

## 1.0 INTRODUCTION

### 1.1 Project description

Boggabri Coal Mine (BCM or the project) is an open cut coal mine located 15 kilometres (km) north-east of the township of Boggabri in north-western New South Wales (NSW) (refer to Figure 1–1). BCM is managed by Boggabri Coal Operations Pty Ltd (BCOPL), a subsidiary of Idemitsu Australia Resources Pty Limited (Idemitsu).

Mining activities at BCM commenced in 2006. The mine currently operates under State Significant Development (SSD) Project Approval (SSD 09\_0182), which allows BCOPL to produce 8.6 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from BCM until the end of 2036. Approval was granted by the NSW Planning Assessment Commission (PAC) under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 18 July 2011 and has been subject to several modifications.

### 1.2 Purpose

The purpose of this Site Water Balance Report (SWBR) is to define the components of the Site Water Balance (SWB) model at BCM with respect to current Life-of-Mine (LOM) planning and all relevant available information. The SWBR was prepared to directly address SWB related conditions outlined in the Project Approval (SSD 09\_0182), the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval and mining lease conditions. The key objectives of this SWBR are to:

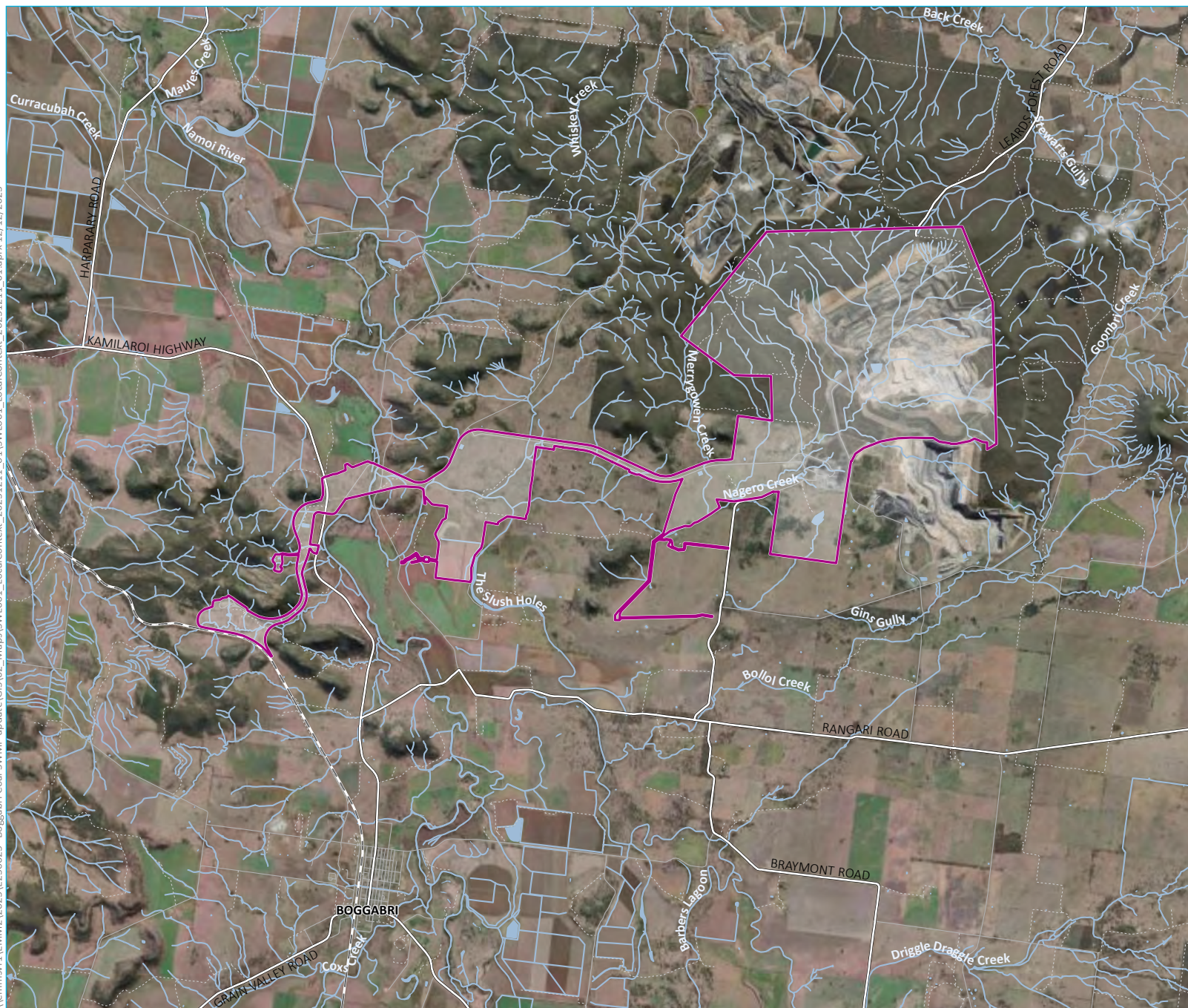
- address the relevant approval conditions
- describe any changes to the SWB model since the 2024 SWBR (BCOPL, 2025)
- validate the SWB model using observed climate and operational data recorded since the 2024 SWBR (BCOPL, 2025)
- forecast the future water balance for the water management system (WMS) over the approved LOM
- describe proposed water efficiency initiatives, improvement programs and reporting requirements.

This SWBR was prepared with consideration of the relevant statutory requirements (Commonwealth, State or local), regulations, and environmental planning instruments relevant to mine water management, as summarised in Chapter 2.0.

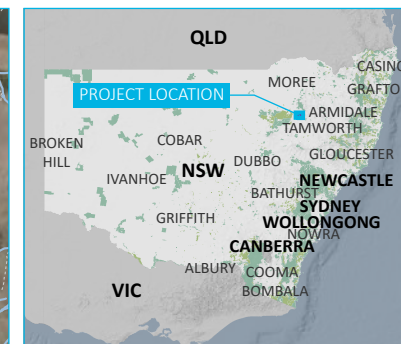
The WMS that forms the basis of the SWB is documented in the BCM Surface Water Management Plan (SWMP). This SWBR should be read in conjunction with the SWMP.



\\lemmsvr1\EMM2\2023\E230625 - Boggabri Coal SWMP update\GIS\02\_Maps\SWI001\_LocalContext\_20231211\_01.aprx 12/12/2023



Source: EMM (2023); BCO (2023); ABS (2021); DCSSS (2023); ESRI (2023); GA (2009)



#### KEY

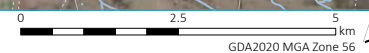
- Project approval area
- Existing environment
- Rail line
- Major road
- Minor road
- Vehicular track
- Watercourse/drainage line
- Waterbody

#### INSET KEY

- NPWS reserve
- State forest

Local context

Boggabri Coal Operations Pty Ltd  
Site Water Balance Report  
Figure 1.1





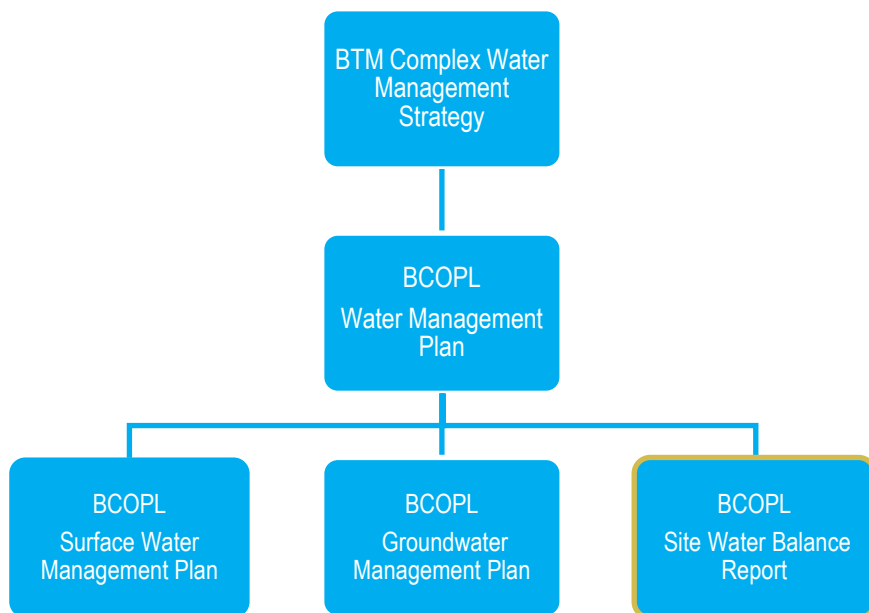
### 1.3 Related water management documents

This SWBR is a subplan of the overarching BCOPL Water Management Plan (WMP). The water management documents applicable to the BCM are listed in Table 1-1. The WMP document hierarchy is shown in Figure 1–2.

**Table 1-1: Related water management documents**

| Document                                                                     | Description                                                                                                                                               |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Boggabri – Tarrawonga – Maules Creek (BTM) Complex Water Management Strategy | Regional strategy prepared in consultation with Tarrawonga Coal Pty Ltd (TCPL) and Maules Creek Coal Project (MCC).                                       |
| BCOPL Water Management Plan (WMP)                                            | Overarching document setting out water management framework, statutory requirements, and procedural requirements.                                         |
| BCOPL Surface Water Management Plan (SWMP)                                   | Surface water baseline data, performance criteria, monitoring program, response plan, water management system description, erosion and sediment controls. |
| BCOPL Groundwater Management Plan (GWMP)                                     | Groundwater baseline data, performance criteria, monitoring program, response plan, and groundwater model validation program.                             |
| BCOPL Site Water Balance Report (SWBR)                                       | Water balance modelling methodology, assumptions and results, and mine water management system operating philosophy.                                      |

**Figure 1–2: Water management plan document hierarchy**



## 1.4 Agency consultation

As required by consent condition 38 of Schedule 3 of the Project Approval, previous versions of the SWBR and this version of the SWBR were prepared in consultation with several NSW government agencies. The most recent set of agency comments is provided in Table 1-2.

**Table 1-2: Agency consultation**

| Agency                                                                                                                                      | Date received | Comment                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Department of Climate Change, Energy, the Environment and Water – Water (DECCEW Water) <sup>1</sup>                                         | 8 April 2025  | Recommendation to ensure BCOPL has sufficient water entitlement prior to the commencement of each water year. Addressed in Section 3.5.4. |
| Department of Climate Change, Energy, the Environment and Water – Conservation Programs, Heritage and Regulation (DECCEW CPHR) <sup>2</sup> | 21 March 2025 | No comment                                                                                                                                |
| North West Local Land Services (NW LLS) <sup>3</sup>                                                                                        | 10 April 2025 | No comment                                                                                                                                |
| Narrabri Shire Council                                                                                                                      | 8 April 2025  | No comment                                                                                                                                |
| Community Consultative Committee (CCC)                                                                                                      | -             | SWBR disseminated to CCC 23 May 2025 but no comments received.                                                                            |
| Environment Protection Authority (EPA)                                                                                                      | 9 May 2025    | Comment to keep water management plans consistent with EPL12407 and Protection of Environment Operations Act 1997.                        |

Notes: 1. Formerly Department of Planning and Environment (DPE) – Water (DPE-Water).

2. Formerly DPE – Biodiversity, Conservation and Science (BSC).

3. Formerly Namoi Catchment Management Authority (NCMA).

## 1.5 Report preparation

This revision of the SWBR has been prepared by Water Resources Engineer Adrienne Harvey and reviewed by Associate Water Resources Engineer Jason O'Brien. Adrienne has four years' experience as a water resource engineer preparing surface water impact assessments, water management plans, water balance modelling and water regulation assessment. Jason has 10 years' experience in the water industry specialising in surface water assessments and management plans, water balance assessments, water quality assessments, hydrologic and hydraulic modelling and floodplain impact assessment, and risk management development and policy.

## 2.0 STATUTORY REQUIREMENTS

### 2.1 Relevant legislation

Key legislation that is relevant to this SWBR include:

- *Environmental Protection and Biodiversity Conservation Act (1999)* (EPBC Act) – Commonwealth
- *Environmental Planning and Assessment Act 1979* (EP&A Act) – NSW
- *Mining Act 1992* – NSW
- *Protection of the Environment Operations Act 1997* (POEO Act) – NSW
- *Water Management Act 2000* (WM Act) – NSW.

### 2.2 Project approval conditions

#### 2.2.1 Commonwealth approval conditions

Commonwealth approval for the project was granted 11 February 2013 pursuant to Sections 130 (1) and 133 of the EPBC Act (EPBC Act referral 2009/5256). A variation to the EPBC Act conditions of approval was authorised in February 2020.

Commonwealth approval for Modification 8 (EPBC Act referral 2021/8875) was granted 19 December 2024. However, the approval conditions associated with EPBC Act referral 2021/8875 are not directly relevant to the SWBR and are addressed in the SWMP and GWMP.

The EPBC Act approval conditions relevant to this SWBR are reproduced in Table 2-1.

**Table 2-1: Site water balance related EPBC approval conditions**

| Condition                                                                    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Where addressed                                                                                                                                                                       |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPBC Act referral 2009/5256 – Surface Water and Groundwater Management Plans |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                       |
| No. 18                                                                       | <p>The person taking the action must within 6 months of this approval, or such other timeframe specified by the Minister, provide to the Minister a report on:</p> <ul style="list-style-type: none"> <li>a) any updated modelling of surface and groundwater impacts that has been undertaken in preparing the surface and groundwater management plans</li> <li>b) how the surface and groundwater management plans addressed groundwater and surface water impacts on native vegetation.</li> </ul> | <p>Updated surface water modelling is provided in Chapter 3.0.</p> <p>Groundwater impacts are addressed in the GWMP.</p> <p>Impacts to riparian health are addressed in the SWMP.</p> |

#### 2.2.2 Mining lease conditions

The objectives of the *Mining Act 1992* are to encourage and facilitate discovery and development of mineral resources having regard to the need to encourage ecologically sustainable development. In relation to water, the Act requires that BCOPL ensure effective rehabilitation of disturbed land and water and to ensure mineral resources are identified and developed in ways that minimise impact to the environment. BCOPL hold coal lease CL368 under this Act. Mining lease conditions are not directly relevant to the SWBR and are addressed in the SWMP.

### 2.2.3 State project consent conditions

State development consent (SSD 09\_0182) was granted 18 July 2012 pursuant to Section 75J of the EP&A Act by the Planning and Assessment Commission of NSW as delegate of the Minister for Planning. Development consent for Modification 8 was issued in January 2024. The NSW State development consent conditions relevant to this SWBR are reproduced in Table 2-2.

**Table 2-2: Site water balance related consent conditions**

| Condition             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Where addressed                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| Water Supply          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |
| Sch 3, 33             | The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Secretary.                                                                                                                                                                                                                                                                                                                     | Section 3.5.4                  |
| Water Management Plan |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |
| Sch 3, 38             | The Proponent must prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must be prepared in consultation with the EPA, DPE Water, North West LLS and the CCC, by suitably qualified and experienced person/s whose appointment has been approved by the Secretary, and be submitted to the Secretary for approval within 6 months of the date of this approval.<br><br>In addition to the standard requirements for management plans (see Schedule 5, Condition 3), this plan must include: | Section 1.4<br>Section 1.5     |
|                       | (c) a Site Water Balance, that:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |
|                       | <ul style="list-style-type: none"> <li>includes details of:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                |
|                       | – sources and security of water supply, including direct and indirect water take, and contingency for future reporting periods                                                                                                                                                                                                                                                                                                                                                                                                                       | Section 3.5.4<br>Section 3.5.5 |
|                       | – prioritisation strategy for water sources                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Appendix B.3.6                 |
|                       | – water use onsite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Appendix B.3.7                 |
|                       | – water management on site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Section 3.2                    |
|                       | – any off-site water discharges and management of water during high rainfall years and periods of flooding, including water storage options                                                                                                                                                                                                                                                                                                                                                                                                          | Section 3.5.6                  |
|                       | – reporting procedures, including the preparation of a site water balance for each calendar year                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Chapter 6.0                    |
|                       | – a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions                                                                                                                                                                                                                                                                                                                                                                                 | Section 5.2                    |



| Condition | Description                                                                                                                                                                                                                                                                                                                | Where addressed |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|           | <ul style="list-style-type: none"> <li>methodologies used in the preparation of the site water balance, including provision of data sources, measurement type (direct sample/mass balance/engineering calculations/ factors) and formulas used for all inflows, processes and outflows</li> </ul>                          | Appendix B      |
|           | <ul style="list-style-type: none"> <li>is supported by an annual improvement program to identify and address deficiencies and improvements within monitoring, measurement and calculation methods</li> </ul>                                                                                                               | Chapter 5.0     |
|           | <ul style="list-style-type: none"> <li>includes an action plan and schedule to implement annual water efficiency initiatives, and the recommendations in the Advisory peer review report titled "Peer Review of Site Water Use Aspects of Boggabri Coal MOD 5 Project, 22 July 2016", as set out in Appendix 6A</li> </ul> | Chapter 4.0     |
|           | <ul style="list-style-type: none"> <li>describes the measures that would be implemented to minimise clean water use on site.</li> </ul>                                                                                                                                                                                    | Appendix B.3.6  |

## 2.3 Permits and licences

### 2.3.1 Environmental protection licence

Environmental protection licence (EPL) No. 12407 applies to the BCM operations. The EPL outlines surface water quality monitoring requirements and discharge criteria. The EPL also includes a requirement to maintain an air capacity (cumulative freeboard) of 1,000 megalitres (ML) within the BCM mine water inventory. EPL water quality and quantity monitoring requirements are addressed in the SWMP.

### 2.3.2 Water access licences

BCOPL are required to hold water access licences (WAL) for surface water take associated with the BCM. Water licensing requirements, existing WALs and water supply works approvals, and the methodology to account for surface water take at the BCM are described in the SWMP. Water licensing requirements and existing WALs associated with groundwater take are described in the GWMP.

## 3.0 SITE WATER BALANCE

### 3.1 Overview

The SWB model is built using GoldSim software and was originally developed as a part of the Continuation of Boggabri Coal Mine Project Surface Water Assessment (WSP, 2010). The SWB model is updated annually to reflect development of the mine and ensure on-site conditions are adequately simulated.

The SWB model is a key strategic planning tool to assess the resilience of the BCM WMS by testing it under a wide range of climate scenarios that may occur over the LOM, each generated by sampling historic rainfall records. By simulating the BCM WMS under these scenarios, the corresponding water inflows, outflows and the likely range of water deficits, surpluses, and discharges from BCM can be quantified.

The SWB model is based on the mine plan layout and WMS documented in *the Continuation of Boggabri Coal Mine Environmental Assessment* (Hansen Bailey, 2010), *Boggabri Coal Forward Program: Sunday 1 January 2023 to Wednesday 31 December 2025*, and *Modification 8 (MOD 8) Amendment Report* (JBA, 2022).

This chapter summarises on site water management and how it relates to the SWB model, describes the SWB model updates that have been made since the 2024 SWBR (BCOPL, 2025), presents the outcomes of the model validation process, and provides forecast model results for the WMS over the approved LOM. The WBM methodology including key inputs and assumptions is described in Appendix B.

### 3.2 Water management

The BCM WMS is designed to control and manage water across the site, and includes diversion drains, sediment control measures, water management dams, water storages, pumps and pipelines. These components work together to support operational needs, minimise water use and offsite discharges, and meet regulatory requirements.

The WMS is closely aligned with the SWB model. The SWB model is structured to reflect the physical layout and components of the WMS to provide an accurate representation of site conditions. In turn, the SWB model informs WMS operations by tracking inputs, outputs, and storage volumes, supporting decisions around water use, discharge, and infrastructure capacity.

Appendix B outlines how the WMS has been incorporated into the SWB model, while a detailed description of the WMS is provided in the Site Water Management Plan SWMP.

### 3.3 Model updates

The following key components of the WMS were reviewed as part of the 2025 SWB model update:

- Rainfall data observed at the site weather station (AWS compliance tower)
- catchment areas and land use
- pump rates and transfers
- storage data (including number of storages, capacity and operating levels)
- Australian Water Balance Model (AWBM) runoff parameters.

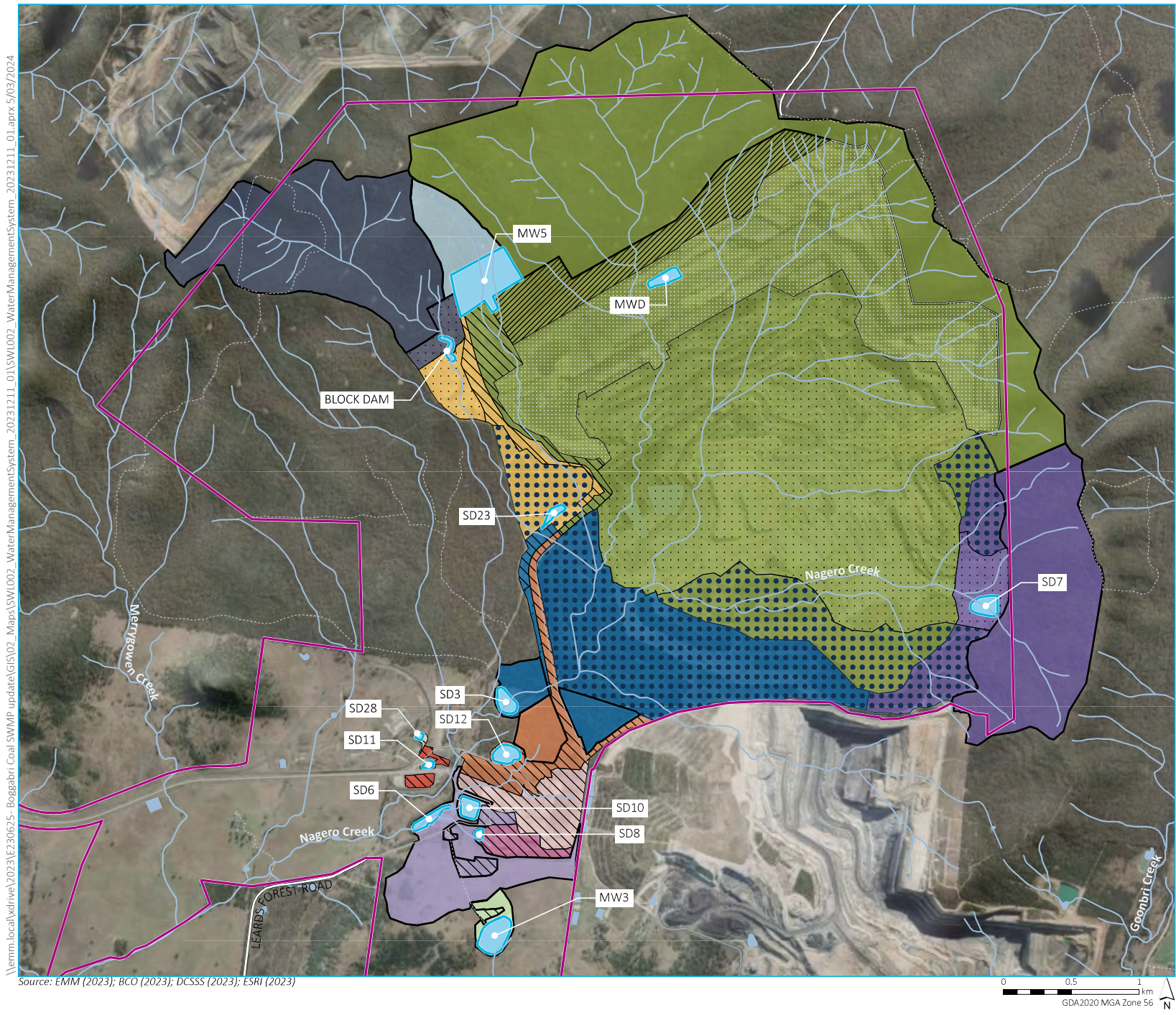
The following key updates were made to the model:

- Haul road lengths for 2025 were adjusted to 17 km to remain consistent with observed conditions onsite.
- Decommissioning of MW5 was delayed from the start of January 2026 to mid January 2026.
- Decommissioning of SD23 in April 2025.

- Commissioning of MW11 at the start of December 2025.
- Dewatering of MW5 to MW11 from the start of December 2025.
- Groundwater extraction import rules were updated to align with total storage trigger volumes per the Trigger Action Response Plan (TARP) presented in the SWMP.

In general, the 2025 SWB remains consistent with the 2024 SWB (BCOPL, 2025).

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- KEY
- Project approval area
  - Water storage
  - Storage catchment
  - MW3
  - MW5
  - Pit
  - Block Dam
  - SD3
  - SD4
  - SD6
  - SD7
  - SD8
  - SD10
  - SD11
  - SD12
  - SD23
  - SD28
  - Land use type
  - Industrial
  - Mine void
  - Pre strip
  - Rehabilitation
  - Undisturbed
  - Unshaped spoil dump
  - Existing environment
  - Major road
  - Minor road
  - Vehicular track
  - Regulation hydroline
  - Waterbody

Existing water management system-  
2025

Boggabri Coal Operations Pty Ltd  
Site Water Balance Report  
Figure 3.1





### 3.4 Model validation

This section presents the outcomes of the model validation for the 2025 calendar year. Model validation was completed by comparing modelled results to observed results for the following key model elements:

- total site water storage volume
- stored water volume at key storages (MW5, SD10 and MW11)
- external water import
- dust suppression water use.

#### 3.4.1 Water inventory

BCOPL routinely records storage levels in accordance with the monitoring program described in the SWMP. Recorded storage levels were used to validate storage volumes for the total site, MW5, and SD10.

##### 3.4.1.1 Total site storage

The observed and modelled total site stored volume from January 2020 to February 2026 are compared in Figure 3–2.

**Figure 3–2: Observed vs modelled total site storage volume**

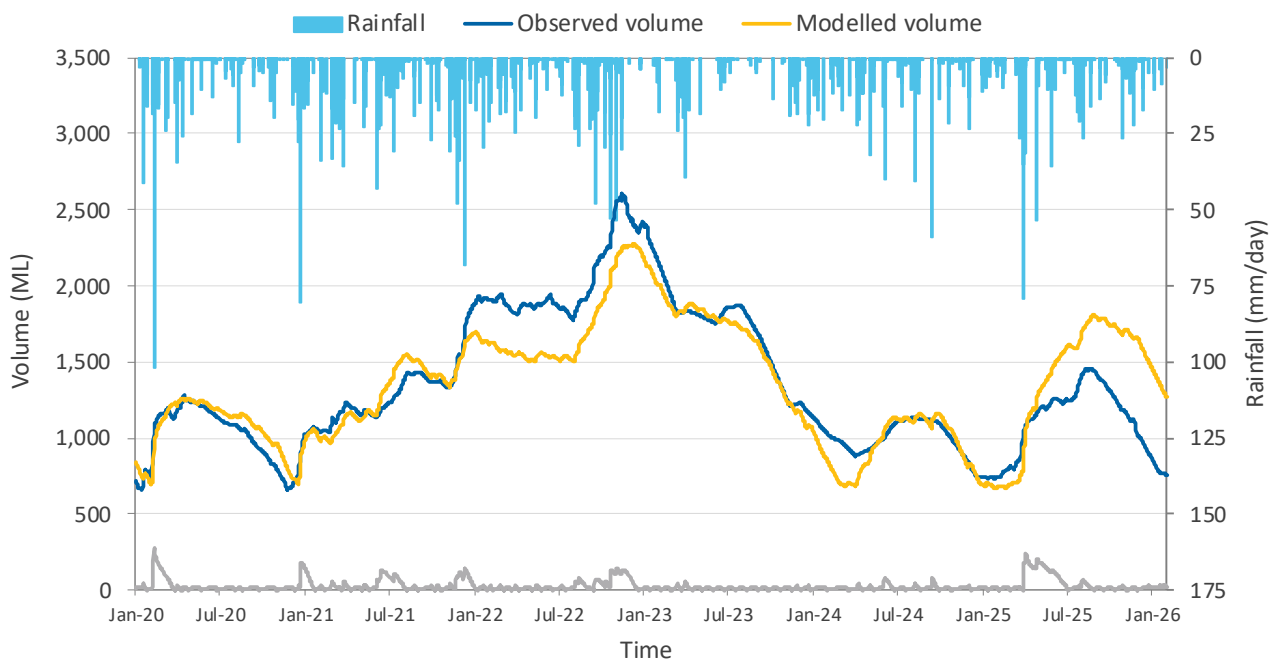


Figure 3–2 shows the modelled storage volume (yellow line) provides a good representation of the observed storage volume (blue line) with similar responses to rainfall occurring for both results. The modelled and observed storage volume are a good match from January 2020 to November 2021. The modelled results show a subdued response to the wet weather period in November and December 2021. The modelled and observed storage volume are a good match from January 2022 to March 2025. The modelled results show a large response to the wet weather period in March and April 2025 compared with observed. After which, the modelled results are shown to follow a similar rise and fall in response to rainfall and storage outflows to the



end of 2025. The total modelled storage volume from January 2022 to January 2023 is generally lower than the observed storage volume due to the underestimation of the use of groundwater production bores in 2022. As the storage volume held across the site was greater than 700 ML, no production bore use is simulated during this period (refer to Figure 3–7). The modelled discrepancies in total storage from March 2025 onwards are predominantly induced by 181.8 mm of rainfall received between 21 March and 3 April 2025, driving sharp increases in rainfall runoff. Analysis of site rainfall gauge data is provided in Appendix A, which validates this rainfall event. However, as water storage within the pit is not included within the total storage calculations, it is not clear whether additional water was stored within the pit during this period. It is also possible that there is a slightly higher proportion of stockpiles/rehab areas than assumed in the model, which if amended may reduce the rainfall runoff response, however this discrepancy is of less consequence than simulated pit transfers to operational storages.

Overall, the model shows an acceptable fit for total inventory, with the modelled rate of drawdown after rainfall events correlating well with the observed data. Except for the November and December 2021 and March and April 2025 rainfall events, the magnitude of inflows from rainfall events is also captured by the runoff model. It is noted that these events have seemingly resulted in different responses in storage to large rainfall events, which is likely a combination of land use timing inaccuracies and pit dewatering.

#### 3.4.1.2 MW5 storage

The observed and modelled storage volume in MW5 from January 2022 to February 2026 are compared in Figure 3–3.

**Figure 3–3: Observed vs modelled MW5 storage volume**

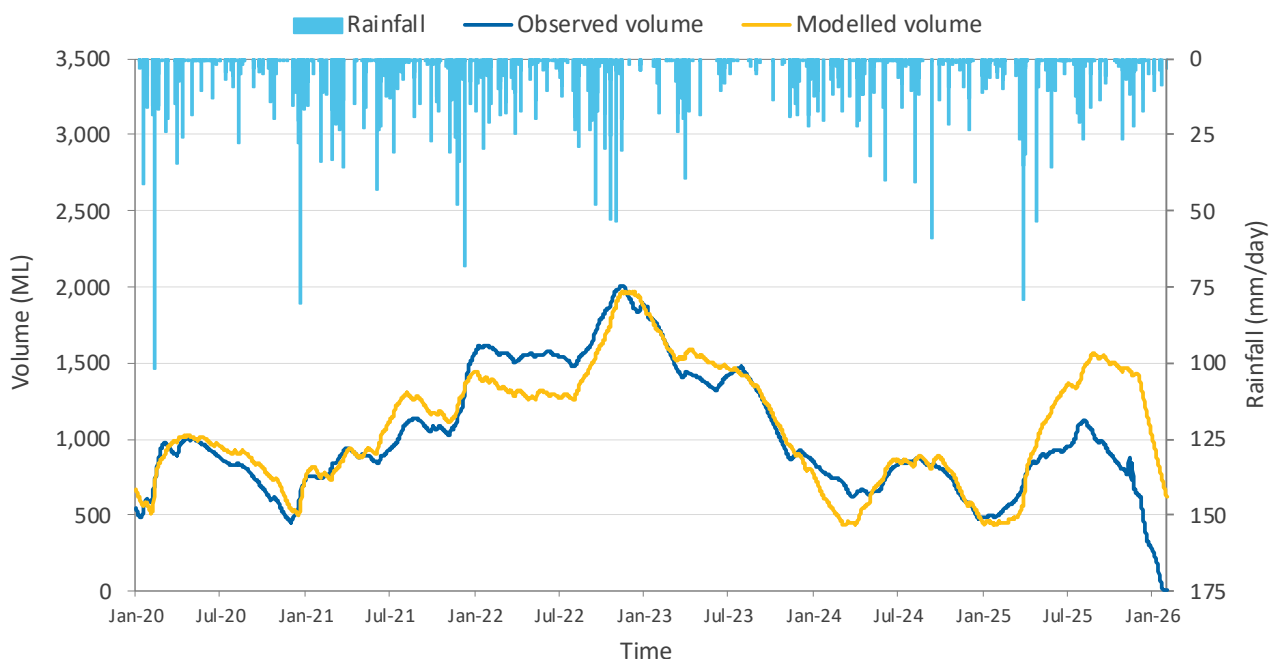


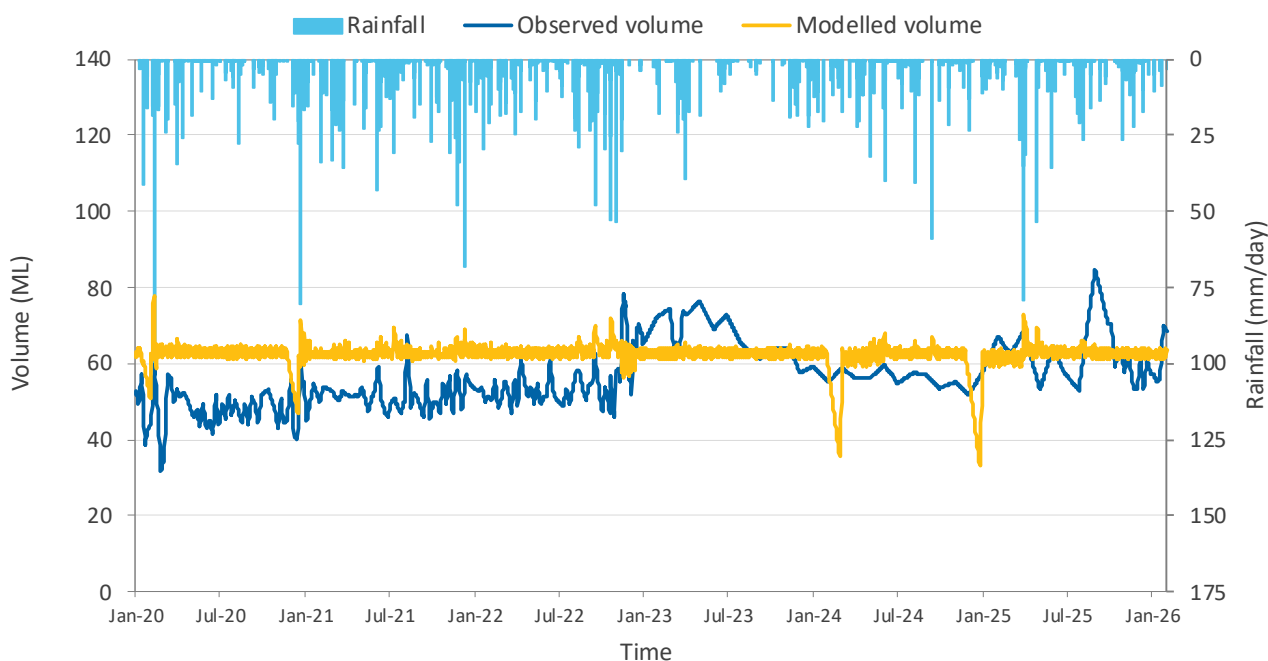
Figure 3–3 shows the modelled storage volume in MW5 is a good match to the observed storage volume with similar responses to rainfall occurring for both results up until November and December 2021 and again in March 2025. The modelled MW5 volume matches the observed peak that occurred during the November 2022 rainfall event as the pumping and transfer rules described in Appendix B preferentially send water to MW5 from the rest of the WMS whenever an excess is observed up until MW5 reaches its HOV.

The modelled volume is overestimated following the March and April 2023–45 rainfall event as per the total site stored water. Review of the water balance for this period indicates it is largely driven by pumped transfers from the pit and SD10, while total rainfall/ runoff remains a relatively small contributor. Given the pit storage volumes through this period are not known, the model operating rules are still considered suitable. MW5 was decommissioned and will be mined through in 2026. A new replacement storage, MW11, was commissioned in December 2025. Dewatering to MW11 commenced in December 2025. The exact timing of when transfers to MW5 ceased is not known, however; based on the observed storage, these transfers appeared to stop in August 2025. Similar trends in dewatering rates from MW5 in August 2025 onwards are shown between the modelled and observed volumes, despite the surplus retained in MW5.

### 3.4.1.3 SD10 storage

The observed and modelled storage volume in SD10 from January 2022 to February 2026 are compared in Figure 3–5.

**Figure 3–5: Observed vs modelled SD10 storage volume**

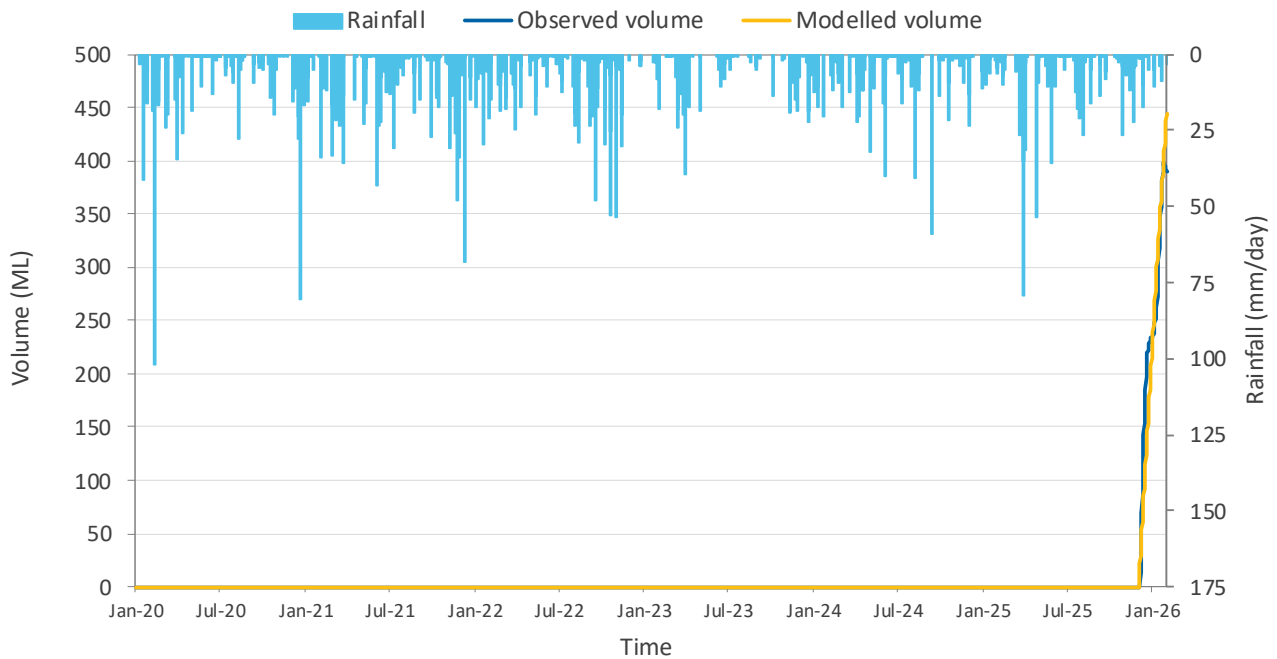


SD10 operates as a transfer point for water to and from MW5 as well as supplying water to the CHPP and MIA. Modelled storage volumes are elevated compared to observed values prior to January 2023. The modelled storage volumes are similar to observed values from January 2023 to approximately July 2025. Modelled storage volumes are shown to follow a relatively stable trend as per the observed values. This is expected as SD10 has a relatively small contributing catchment area and is therefore strongly influenced by pumped transfers to and from other aspects of the WMS. The observed storage volume fluctuates more than the modelled volume due to day-to-day operational decisions which may vary from the strict rules implemented within the WBM. For example, the large ~20 ML spike in storage volume is likely due to an increase in dewatering from either the pit or MW5 as a result of interim operational requirements. The modelled operating logic is considered to be capturing the operation of SD10 adequately.

#### 3.4.1.4 MW11 storage

The observed and modelled storage volume in MW11 from January 2022 to February 2026 are compared in Figure 3–6.

**Figure 3–6 Observed vs modelled MW11 storage volume**



MW5 is planned to be decommissioned and mined through in 2026. The new replacement storage MW11 was constructed and commissioned in December 2025. Dewatering to MW11 commenced in December 2025. As shown in 2025, the approximate dewatering rate is matched based on the modelled increase in storage. MW11 has been constructed in place of SD23 and as such has a limited contributing catchment area.

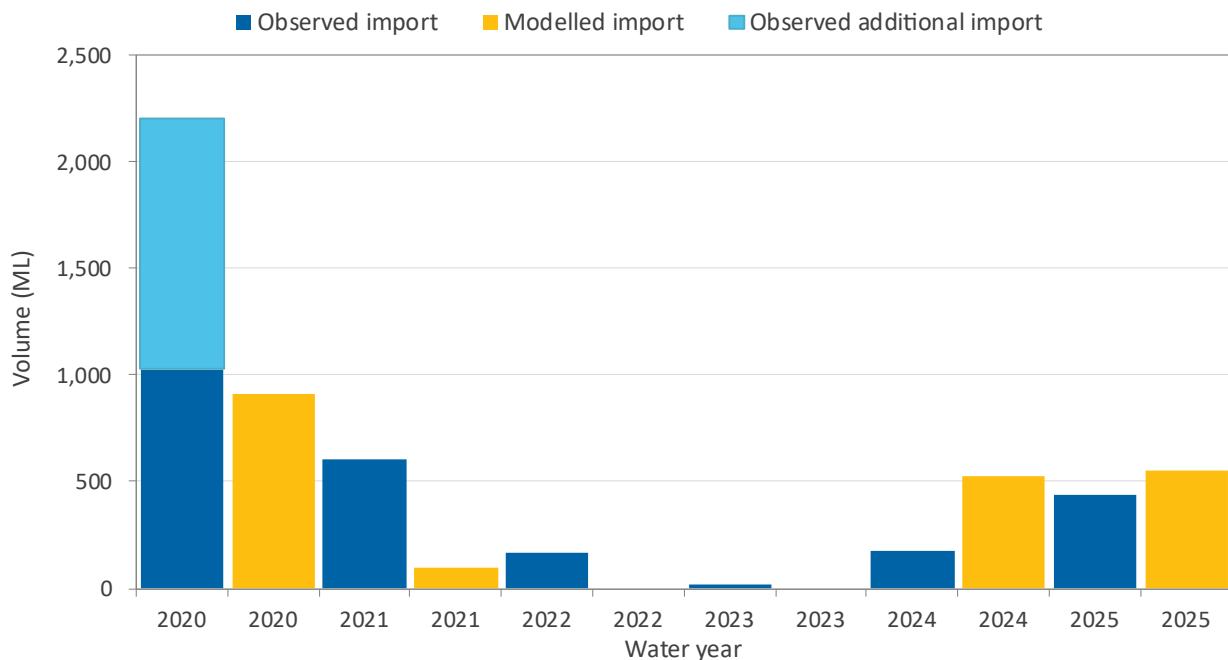
#### 3.4.1.5 Summary

Modelled storage volumes generally match observed storage volumes with the key trends in rainfall and runoff adequately represented. Typically, modelled results differ from observed results due to the model operating rules described in Appendix B. In reality, water may be preferentially held in one storage or another on a case-by-case basis which is difficult to replicate in a model based on rules and assumptions. This is evident in the decommissioning and dewatering of MW5, with sharp increases in storage observed across storages such as MW3 and SD10, which is not replicated by the SWBM.

#### 3.4.2 Water import

Consistent with the water source prioritisation strategy described in the SWMP and summarised in Appendix B.3.6, the SWB model preferentially sources import water from groundwater sources as water from the Namoi River is often unreliable during dry periods. As a result, modelled water import has been classified as either groundwater import or additional import, where the additional import is assumed to be sourced from the purchase of additional temporary groundwater entitlements (but other options such as river water may be explored). Modelled water imports are compared to observed water imports on a water year (July to June) basis in Figure 3–7.

**Figure 3–7: Observed vs modelled water import: water year (July to June)**



The SWB model is shown to generally underestimate the volume of water imported from the borefield or additional sources. The volumes presented occur on a water year basis, where the timing of extractions are not known. The underestimation of imported water between 2020 and 2023 is primarily associated with the updated SWB model logic which preferentially sources CHPP and MIA water demand (several hundred megalitres a year) from SD10 via a filtration system (implemented in the 2022 calendar year) rather than directly from the borefield.

Due to the substantial volume of water stored onsite (refer to Figure 3–2) through 2022 and 2023, only 13.6 ML was imported from the borefield during the 2022/2023 water year. The SWB model predicted zero water imports during 2022 and 2023 which is consistent with the observed values.

The water balance model predicted that all water take in 2024 would occur in the first half of the year (i.e. during the 2023/2024 water year). BCM recorded a water take volume of 177 ML (refer to Figure 3–2) in the first half of 2024, however 396 ML was extracted over the full year.

The water take volume predicted in 2025 was approximately 553 ML, which is approximately 26% less than observed (437.5 ML).

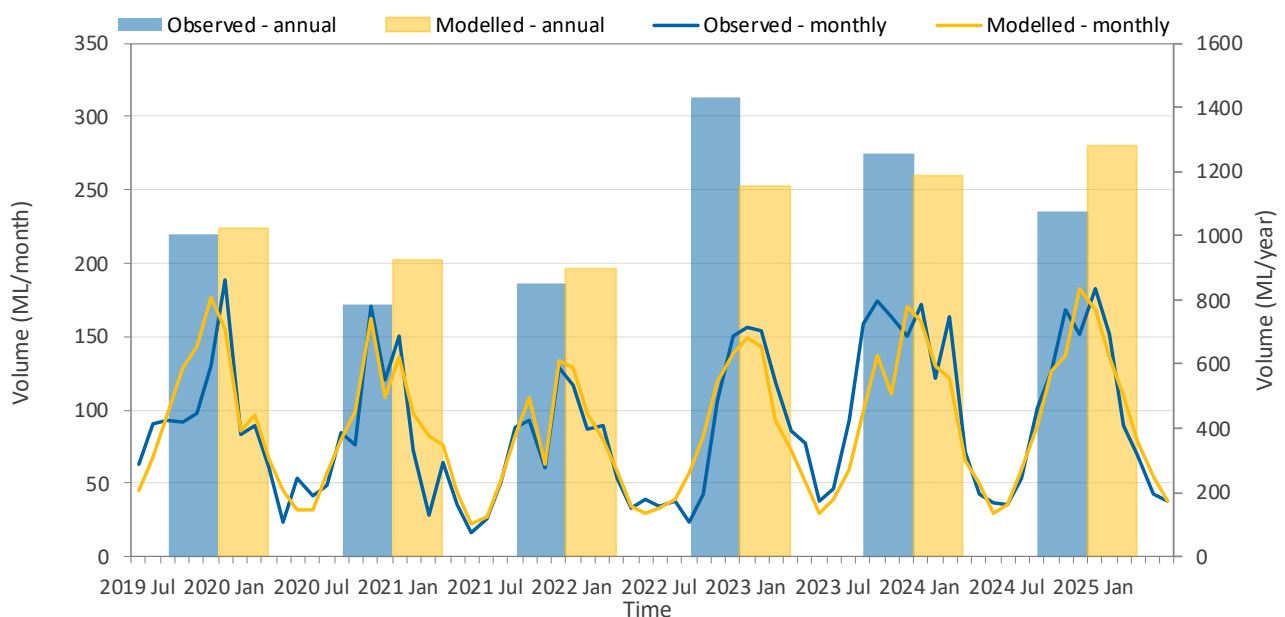
The difference in water take timing and volume can be attributed to differences between the model logic and timing of operational decisions. In future, it would be preferable to implement daily or monthly observations of water imported to site from the borefield within the model to reduce the uncertainty in modelled water supply arrangements at the site.

### 3.4.3 Dust suppression

Monthly and annual modelled dust suppression use is compared to observed values in Figure 3–8. Modelled dust suppression usage generally shows a good match to observed values. Annual modelled dust suppression values range from 19% less than observed values in 2023 to 19% higher observed values in 2025. Monthly modelled dust suppression is shown to follow similar trends to observed values (i.e. higher in summer and lower in winter).

Total haul road area and the applied evaporation rate both have a degree of uncertainty around them when estimating dust suppression, as such the small variance from observed usage is acceptable for the SWB model. The methodology for modelling dust suppression is outlined in Appendix B.3.7.

**Figure 3–8: Observed vs modelled dust suppression**



### 3.4.4 Validation outcome

The validation of the SWB model against total and key storage volumes, water import, and dust suppression was found to provide a suitable estimation of observed values. As a result, the SWB model is considered adequate and suitable to forecast conditions for the LOM. Recommendations to improve validation outcomes and the veracity of the model in future model updates are made in Section 5.1.

### 3.5 Forecast model results

The SWB model was used to forecast the performance of the BCM WMS over the LOM to assess the risk of water shortfall or water excess and to allow for mine planning to be undertaken to mitigate potential risks.

The SWB model was run for a total of 130 times using simulated rainfall and evaporation conditions sampled from the historical climate record (refer to Appendix A). The results of the simulation are presented in the following sections.



### 3.5.1 Model results summary

The median annual site water balance for the 2026, 2028, 2033 and 2036 mine years is provided in Table 3-1. It should be noted the median values of the different inflows and outflows do not coincide and result in an increase or decrease in site water storage volumes. Unlike mean values, the median of the total inflows and total outflows do not balance exactly. Nonetheless, median values have been shown as they are a more representative measure of central tendency for processes with skewed distribution such as rainfall/runoff.

**Table 3-1: Median site water balance for select mine years**

| Water management system component       | 2026         | 2028         | 2033         | 2036         |
|-----------------------------------------|--------------|--------------|--------------|--------------|
| <b>Inflows (ML)</b>                     |              |              |              |              |
| Runoff and direct rainfall:             |              |              |              |              |
| • Dirty water storages                  | 121          | 365          | 441          | 452          |
| • Contaminated water storages and pit   | 647          | 422          | 404          | 393          |
| Groundwater interception                | 582          | 238          | 230          | 127          |
| Imported water from borefield           | 637          | 751          | 538          | 645          |
| Import water from additional sources    | 0            | 0            | 0            | 0            |
| Total inflows (ML)                      | <b>1,987</b> | <b>1,776</b> | <b>1,613</b> | <b>1,618</b> |
| <b>Outflows (ML)</b>                    |              |              |              |              |
| Demands                                 |              |              |              |              |
| • Dust suppression – haul roads         | 1,424        | 1,432        | 1,139        | 1,115        |
| • CHPP/MIA                              | 310          | 311          | 310          | 297          |
| Evaporation:                            |              |              |              |              |
| • Dirty water sediment dams             | 43           | 135          | 217          | 232          |
| • Contaminated water dams, MWDs and pit | 225          | 186          | 165          | 159          |
| Discharges:                             |              |              |              |              |
| • Dirty water sediment dams             | 0            | 0            | 0            | 0            |
| • Mine water dams and pit               | 0            | 0            | 0            | 0            |
| Total outflows (ML)                     | <b>2,002</b> | <b>2,064</b> | <b>1,831</b> | <b>1,802</b> |

| Water management system component | 2026 | 2028 | 2033 | 2036 |
|-----------------------------------|------|------|------|------|
| <b>Change in Storage (ML)</b>     |      |      |      |      |
| Change in storage (ML)            | -87  | -38  | 12   | 23   |

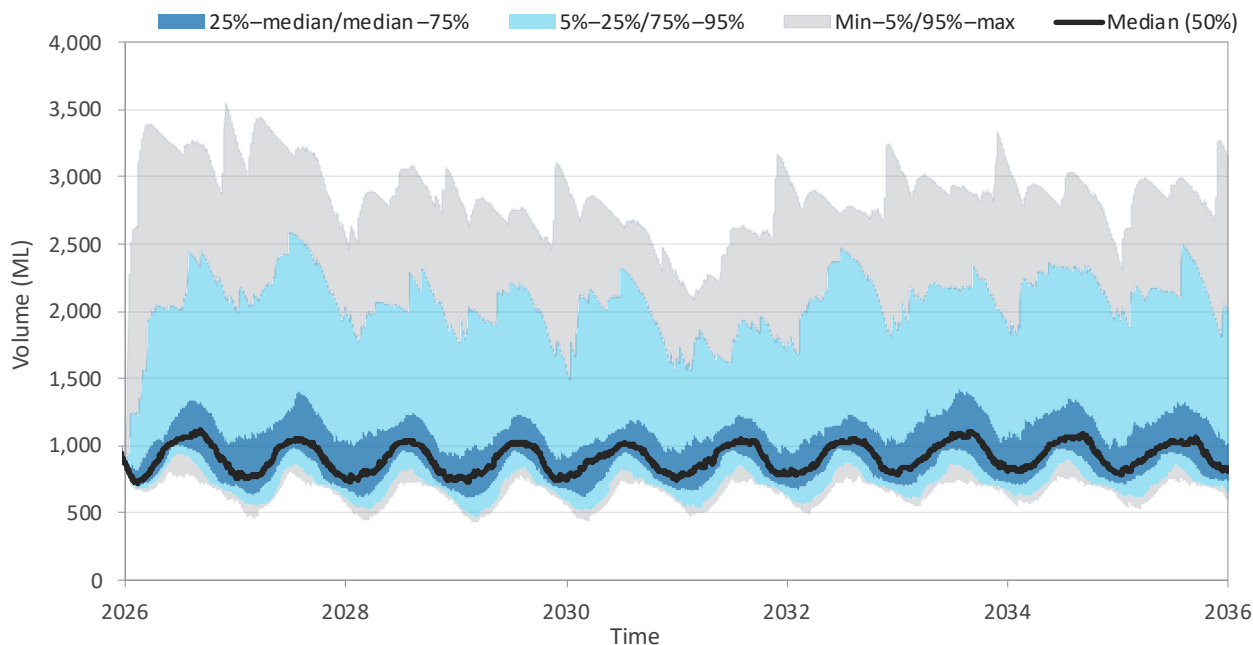
The SWB model results presented in Table 3-1 indicate water imported from the borefield represents between 32% and 48% of total median inflows. Rainfall and runoff make up between 39% and 52% of total median inflows while groundwater interception represents between 8% and 29% of total median inflows. Import from additional water sources is not predicted to be required under median conditions.

Water used for dust suppression is the largest outflow from the system, representing between 62% and 71% of total median outflows. CHPP and MIA water demand represent between 15% and 17% of total median outflows while evaporation losses range from 13% to 22% of total median outflows. No discharges are expected under median conditions.

### 3.5.2 Total site storage

Forecasted estimates for total site storage volume (less the volume stored in the pit) are shown in Figure 3–9. The results are presented as the range between the minimum and 5<sup>th</sup> percentile, 5<sup>th</sup> percentile and 25<sup>th</sup> percentile, 25<sup>th</sup> percentile and median, median and 75<sup>th</sup> percentile, 75<sup>th</sup> percentile and 95<sup>th</sup> percentile, and 95<sup>th</sup> percentile and maximum values. Note the percentile values for stored volumes represent the daily results, whereas the values shown in Table 3-1 represent annual results.

**Figure 3–9: Modelled daily timeseries for total site volume**

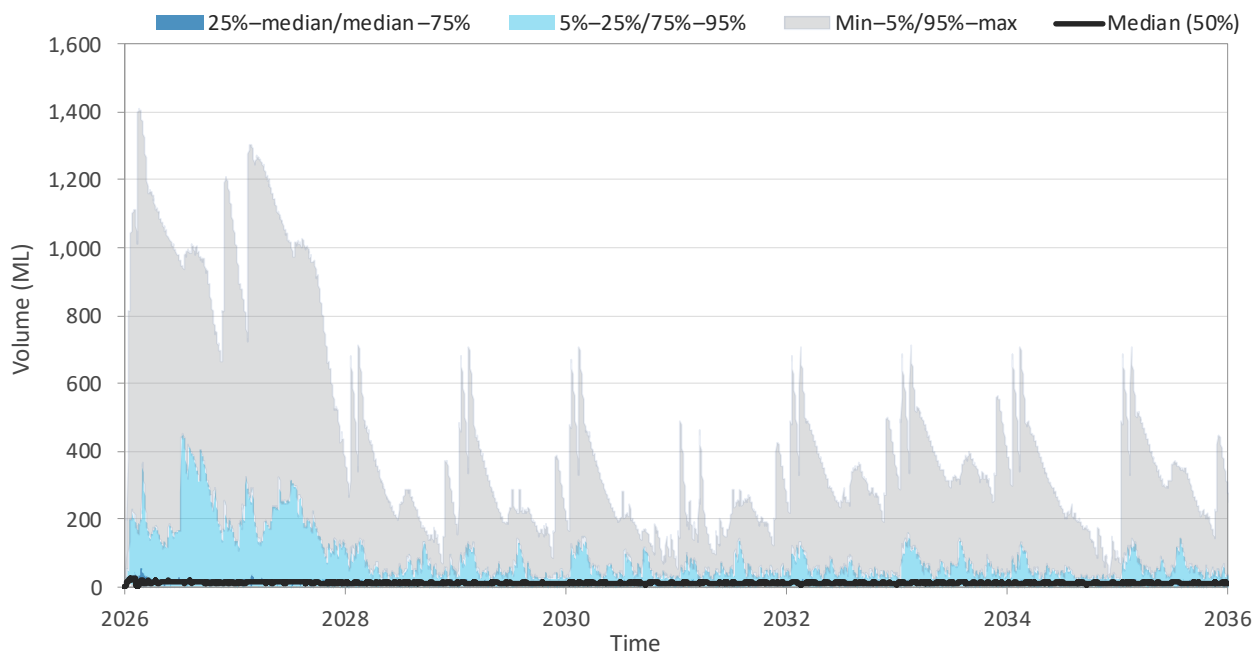


Total site storage is shown to remain relatively stable as the mine progresses with minimum to 75<sup>th</sup> percentile value range tightly grouped to the median result (shown as the black line). This is expected as the mine is generally in water deficit on an annual basis as rainfall and runoff volumes are typical less than water demands. Hence, the volume of stored water in the system is maintained at a constant level due to imports from the borefield. The 75<sup>th</sup> percentile to maximum result represents the WMS response to significant wet weather periods that could occur in the future (based on historical rainfall events).

### 3.5.3 Water stored in the pit

Forecasted model results of water stored in the pit over the LOM are provided in Figure 3–10. The pit void is predicted to be empty most of the time with the maximum predicted volume stored in the pit estimated at 1,400 ML. The volume of water that is expected to be stored in the pit decreases over time as the contributing catchment area to the pit decreases as rehabilitation progresses.

**Figure 3–10: Modelled daily timeseries of water stored in-pit**



### 3.5.4 Water supply reliability

Annual predicted water imports (based on the water year) over the LOM are shown in Figure 3–11. The volume of imported water is compared to BCOPL's existing groundwater entitlements (1,028 unit shares) to extract from the borefield and surface water entitlements (322 unit shares) to extract from the Namoi River. BCOPL preferentially sources import water from groundwater sources and typically utilises account carryover as set out under the rules of the water sharing plan or the temporary trade of entitlement to meet onsite water demands. However, the use of river water is still an option and has therefore been included for consideration in this section.

**Figure 3–11: Annual modelled water imports**

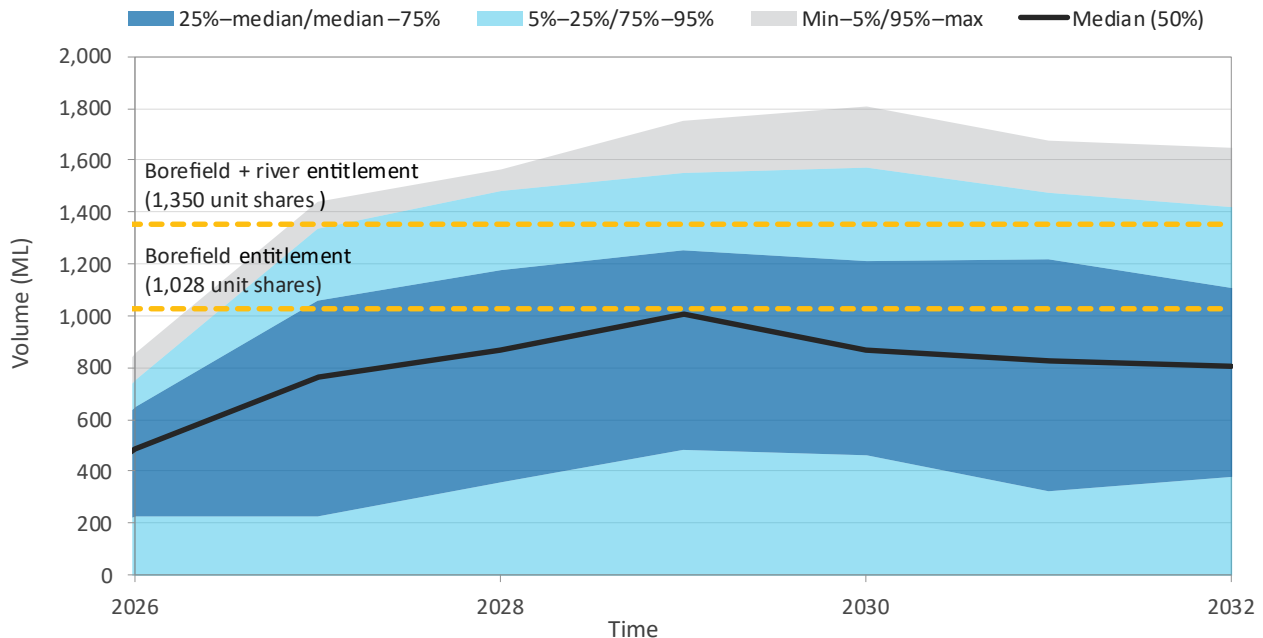


Figure 3–11 shows imported water is expected to peak at the end of 2030 due to increased dust suppression requirements associated with longer proposed haul roads and decreased runoff potential as larger areas of the existing mine void become rehabilitated. The maximum predicted volume of 1,808 ML/year exceeds BCOPL’s existing groundwater and surface water entitlements by 458 ML. The probability of requiring additional water entitlements in excess of BCOPL’s existing entitlements ranges from 5–25% per year over the LOM.

Condition 33 of the Project Approval requires BCOPL to have sufficient water for all stages of the Project, and if necessary, adjust the scale of mining operations on site, to match its available water supply. Water requirements in excess of BCOPL’s entitlements have historically been met via account carryover rules that are applicable to groundwater sources within the Water Sharing Plan for the Namoi Alluvial Groundwater Sources 2020 (the Namoi Alluvial WSP) or via temporary trade within the Upper Namoi Zone 4, Namoi Valley Groundwater Source.

The water allocation account management rules in the Namoi Alluvial WSP permit the carryover of 2 ML per unit share of entitlement from one water year to the next, allowing BCOPL to carry over up to 2,056 ML for use in the following water year. Under typical climate conditions, account carry over is expected to provide sufficient available water to meet demands. Account carryover becomes less effective following several consecutive dry years as the available carryover volume decreases each year (i.e. due to use). Temporary trade of groundwater entitlements is undertaken to meet water demands when account carry over is depleted.

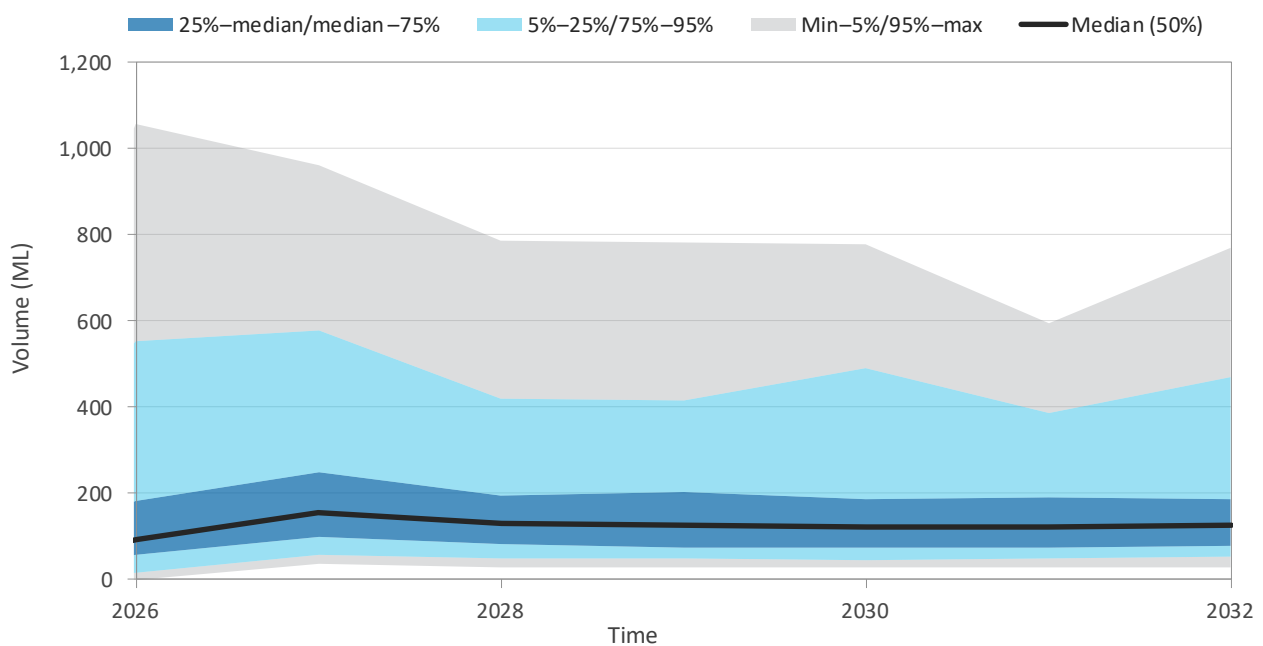
The Upper Namoi Zone 4, Namoi Valley Groundwater Source has a total of 21,000 unit-shares of aquifer access licences and an active trading market. BCOPL has historically been successful in temporary trading water entitlements to meet operational water demands during drier periods including during the 2018 to 2019 drought. The significant number of entitlements available and active water market provides confidence that BCOPL will be able to continue using temporary trade as a viable option to secure any additional water entitlements that may be needed during drier periods.

However, there remains a residual risk that mining operations may be impacted if BCOPL are unable to successfully temporary trade additional water entitlements to meet potential water demands in the future.

### 3.5.5 Intercepted catchment runoff

Annual runoff from undisturbed catchment area that is predicted to be intercepted over the LOM is shown in Figure 3–12. It should be noted the volumes shown in Figure 3–12 represent all intercepted runoff from undisturbed catchment areas including runoff that is licensable and runoff that does not require licensing due to exemptions.

**Figure 3–12: Annual modelled intercepted undisturbed catchment runoff**



The predicted volume of intercepted runoff generally decreases over time as mining progresses to the north, reducing the overall contributing catchment area. The annual median runoff volumes over the LOM range from 94 ML/year to 154 ML/year while the annual 75<sup>th</sup> percentile values vary between 182 ML/year to 249 ML/year. BCOPL hold 93-unit shares in the Bluevale Water Source to account for the licensable portion of intercepted catchment runoff. Water accounting is completed monthly and reported on quarterly using recorded data and the SWB model. This allows for the actual volume of water take to be accounted for in the year that the take occurs and for the total catchment area that requires licensing to be modified as mining progresses. Additional entitlements are purchased via temporary trade should the SWB model indicate BCOPL may exceed their entitlement during these estimates.

### 3.5.6 Offsite discharges

The modelled offsite discharges from dirty water storages are shown in Figure 3–13. No discharges are predicted under median conditions due to the design capacity of MW5/MW11 providing storage space for dirty water runoff in small to moderate rainfall events.

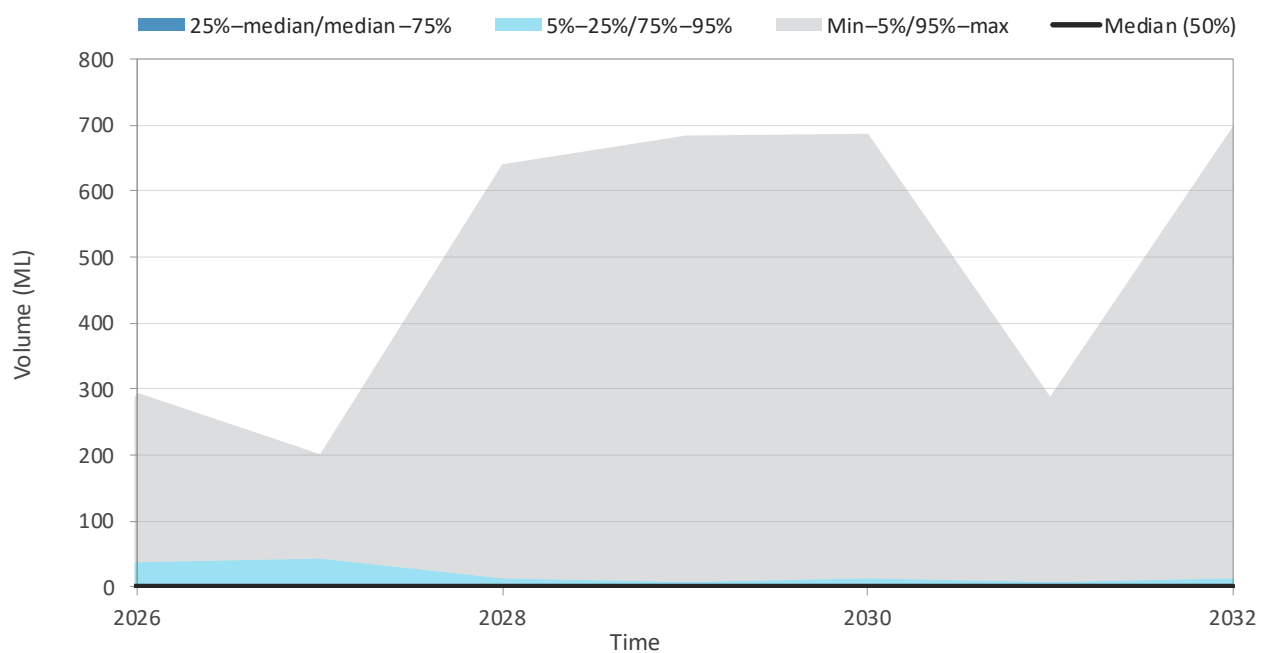


The occurrence of dirty water discharges generally increases over the LOM as rehabilitation progresses and a larger portion of the disturbance area drains to dirty water dams rather than the mine void. A maximum dirty water overflow of up to 810 ML/year is predicted to occur in 2033 when a substantial portion of the disturbed area will drain to sediment dams which are not currently proposed to be harvested from for reuse onsite.

All offsite discharges will be managed in accordance with the conditions of EPL 12407 as described in the SWMP.

No offsite discharges from contaminated water dams are predicted for the LOM. Any excess contaminated water will be stored in the pit to prevent overflows.

**Figure 3–13: Annual modelled offsite discharges from dirty water storages**



## 4.0 WATER EFFICIENCY INITIATIVES

The action plan to implement water efficiency initiatives and the recommendations (Advisian, 2016) referenced in Appendix 6A of the Project Approval are provided in Table 4-1.

**Table 4-1: Water balance initiatives action plan**

| Action plan                                                                                                                                                                                                                                                                                                | Schedule                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| BCOPL water efficiency initiatives                                                                                                                                                                                                                                                                         |                                                                                                       |
| Propose water efficiency initiatives.                                                                                                                                                                                                                                                                      | Annually during the SWB review process                                                                |
| Report on the effectiveness of water efficiency initiatives.                                                                                                                                                                                                                                               | Annually in the Annual Review                                                                         |
| Water efficiency initiatives (Project Approval Appendix 6A)                                                                                                                                                                                                                                                |                                                                                                       |
| Install meters for all major water flows including: <sup>1</sup>                                                                                                                                                                                                                                           |                                                                                                       |
| Water transfers from sediment dams and mine pits into mine water storages.                                                                                                                                                                                                                                 | Installed, monitoring ongoing and used to inform Annual SWBR                                          |
| All water-cart fill points.                                                                                                                                                                                                                                                                                | Installed, monitoring ongoing and reported in Annual SWBR (Section 3.4.3)                             |
| All elements of the anticipated water demand for various purposes associated with CHPP (as identified in Table 4 of the letters dated 8 July).                                                                                                                                                             | Installed, monitoring ongoing and reported in Annual SWBR (Appendix B.3.7)                            |
| All water imports including any bore water obtained onsite.                                                                                                                                                                                                                                                | Installed, monitoring ongoing and reported in Annual SWBR (Section 3.4.2)                             |
| Install water level meters on all significant water storages as a check on inflows and outflows and a means of assessing evaporation and seepage losses. This data will also provide a basis for improving estimates of runoff from different surface types (hardstand, mine pit, 'raw' overburden, etc.). | Installed, monitoring ongoing and reported in Annual SWBR as part of model validation (Section 3.4.1) |
| Collect moisture content data for all coal flows associated with the CHPP to permit full water balance accounting.                                                                                                                                                                                         | In progress                                                                                           |
| Record all flow meters and water levels at least weekly (preferable by means for continuous recording) and analyse the data on a monthly basis to develop a full accounting of all water sources and losses.                                                                                               | Installed, monitoring ongoing and reported in Annual SWBR (Section 3.4)                               |
| Compare monitored gains from rainfall and losses by evaporation from water storages to the rainfall and evaporation data from the weather station.                                                                                                                                                         | Modelled storage volumes are compared to observed storage volumes in Section 3.5.                     |
| Update the site water balance annually based on monitored data and provide details in the Annual Report to the Department.                                                                                                                                                                                 | Commitment to update annual SWB provided in Section 5.2.                                              |

Notes: 1. All storages and transfers with level loggers and flow meters are identified in the SWMP.

## **5.0 ANNUAL IMPROVEMENT PROGRAM**

### **5.1 Recommended improvements**

BCOPL undertake annual reviews to identify and address deficiencies and make improvements to the monitoring, measurement, and calculation methods presented in the SWB. The results of the improvement program will be incorporated into the annual revision of the SWB.

It is recommended the following elements of the water balance are reviewed as part of the 2026 SWBR:

- Model calibration – verification of water import volumes following the implementation of water efficiency initiatives at SD6 and SD10 was limited in 2022 and 2023 due to extended wet weather removing the need to import water (refer to Section 3.4.2). Water import volumes were similar between modelled and observed values over the 2025 calendar year. The performance of modelled water imports should be reviewed again in 2026 and if necessary, calibration should be reviewed accordingly. This may involve review of daily or monthly water imports to site, including groundwater extraction volumes.
- Record keeping of water volumes stored in the mining pit sump/area. This gap produces some uncertainty within the model, particularly during extended wet periods and the ability to store water in the pit.
- Review of AWBM parameters and surface water catchments – data from the expanded BCM surface water monitoring program should be utilised to improve calibration of the AWBM runoff parameters including for undisturbed catchment areas. Review of the catchment areas and land uses should also be undertaken each year to confirm the model is accurately representing the site.
- Water storage staging – the staging of any new storages or storage upgrades should be reviewed to make sure they are current for the 2026 calendar year and forecasted mine plan.

### **5.2 Validation program**

BCOPL is committed to performing a validation of the SWB model annually. In this validation procedure, the existing model is used to simulate the WMS for the previous year using observed climate data as an input. The modelled results such as water imports, dust suppression water use, and storage volumes (total, MW5, MW11, and SD10) are then compared to observed values.

If the SWB model is not representative of the WMS, an investigation into any discrepancies will be conducted with the aim of calibrating the model correctly. The updated model will be used to update the predictions described in Section 3.5.

A summary of the annual validation program outcomes will be included in the Annual Review report.

## 6.0 REPORTING AND REVIEW

Regular reporting on environmental performance and requirements relevant to the SWBR will be conducted in accordance with Schedule 5, Condition 9 of Development Consent SSD09\_0182. Annual reporting and reviews relevant to the SWBR are described in the sections below.

### 6.1 Reporting

General and specific reporting requirements relevant to this SWBR are described in Table 6-1.

**Table 6-1: Reporting requirements**

| Reporting aspect             | Reporting procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Annual Return                | EPL 12407 contains conditions that require BCOPL supply the EPA with an Annual Return. Details of the Annual Return reporting requirements and procedures are documented in Section 5.1.1 of the WMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Incidents and non-compliance | In accordance with Schedule 5, Conditions 4 of Development Consent SSD 09_0182, BCOPL will notify the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment at the earliest convenience. Any other incident associated with BCM will be reported as soon as practicable. A report will be provided the relevant stakeholders within 7 days of the date of the incident.<br><br>BCOPL will manage and report environment incidents, complaints, non-conformances with relevant statutory requirements and exceedances of performance criteria as outlined in the BCOPL Incident Management Standard and described in Chapter 7.0. |
| Annual SWBR                  | BCOPL will prepare an annual SWBR in accordance with Schedule 3, Condition 38 of the Development Consent SSD 09_0182. A summary of the annual SWBR will be included in the Annual Review report for each calendar year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

### 6.2 Review

General and specific review requirements relevant to this SWBR are described in Table 6-2.

**Table 6-2: Review requirements**

| Review aspect | Review procedure                                                                                                                                                                                                         |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Annual Review | BCOPL prepares and submits an Annual Review with respect to the environmental performance of the development to relevant agencies. Details of the Annual Review requirements are documented in Section 5.1.2 of the WMP. |
| SWB review    | BCOPL will review the SWB in accordance with Schedule 5, Condition 4 of Development Consent SSD 09_0182. Details of the review process are documented in the WMP.                                                        |

## **7.0 INCIDENT, NON-COMPLIANCE AND COMPLAINT MANAGEMENT**

### **7.1 Incident identification and notification**

In accordance with Schedule 5, Condition 14 of Development Consent SSD 09\_0182, BCOPPL will immediately notify the Department and any other relevant agencies after it becomes aware of an incident that was a result of the BCM. The notification must:

- Be in writing via the Department's Major Projects Website.
- Identify the development (including the application number and name).
- Set out the location and nature of the incident.

In accordance with Condition 34 and 35 of EPBC 2021/8875, BCOPPL will notify DCCEEW within two business days of becoming aware of an incident. Within 12 business days of becoming aware of the incident, BCOPPL will notify DCCEEW of the potential impacts, corrective actions taken and their timing, and any required changes to EPBC 2021/8875 conditions or management plans.

Further details on the incident identification, notification and reporting process are provided in Section 6.1 of the WMP.

### **7.2 Non-compliance notification**

In accordance with Schedule 5, Condition 15 of Development Consent SSD 09\_0182, within seven days of becoming aware of a non-compliance, BCOPPL will notify the Department of the non-compliance. The notification will be in writing via the Department's Major Projects Website and will:

- Identify the development (including the application number and name).
- Set out the condition of the development consent that the development is non-compliant with.
- State why it does not comply and give the reasons for the non-compliance (if known).
- Detail what actions have been, or will be, undertaken to address the non-compliance.

A non-compliance which has been notified as an incident will not also be notified as a non-compliance.

Further details on the non-compliance notification process are provided in Section 6.2 of the WMP.

### **7.3 Complaints**

In accordance with Schedule 5, Condition 12 of Development Consent SSD 09\_0182, BCOPPL will maintain a complaints register, which will be updated monthly, to receive, respond to and record community complaints.

A summary of complaints for each operational year is available on the Idemitsu website, detailing the date and nature of each complaint, along with the actions taken by BCOPPL to investigate the matter.

Further details on the complaints management process are provided in Section 6.3 of the WMP.



## 8.0 REFERENCES

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- WSP (2010). *Boggabri Coal Mine Project Surface Water Assessment*.

## 9.0 ABBREVIATIONS

| Abbreviation | Definition                                                                                                   |
|--------------|--------------------------------------------------------------------------------------------------------------|
| ARI          | Average Recurrence Interval                                                                                  |
| ASCF         | Aboriginal Stakeholder Consultation Forum                                                                    |
| BCM          | Boggabri Coal Mine                                                                                           |
| BCOP         | Boggabri Coal Operations Pty Ltd                                                                             |
| BCSD         | Department of Planning and Environment – Biodiversity Conservation and Science Division                      |
| BCT          | Boggabri Coal Terminal                                                                                       |
| BMP          | Biodiversity Management Plan                                                                                 |
| BOA          | Biodiversity Offset Areas                                                                                    |
| BTM          | Boggabri, Tarrawonga, Maules Creek                                                                           |
| CBIMP        | Common Boundary Integration Management Plan                                                                  |
| CCC          | Community Consultative Committee                                                                             |
| CEC          | Cation Exchange Capacity                                                                                     |
| CFMP         | Clearing and Fauna Management Protocol                                                                       |
| CHMP         | Cultural Heritage Management Plan                                                                            |
| CHPP         | Coal Handling and Preparation Plant, including By-pass crusher                                               |
| CL           | Coal Lease                                                                                                   |
| CSIRO        | Commonwealth Scientific and Industrial Research Organisation                                                 |
| DA           | Development Application                                                                                      |
| DCCEEW       | Commonwealth Department of Climate Change, Energy, the Environment and Water                                 |
| DECC         | Former Department of Environment and Climate Change                                                          |
| DECCW        | Former Department of Environment, Climate Change and Water                                                   |
| DPI          | NSW Department of Primary Industries                                                                         |
| DPE          | Former Department of Planning and Environment (now Department of Planning Housing and Infrastructure (DPHI)) |
| DPHI         | Department of Planning Housing and Infrastructure                                                            |
| DRE          | Former NSW Department of Trade and Investment - Division of Resources and Energy                             |

| Abbreviation        | Definition                                                                           |
|---------------------|--------------------------------------------------------------------------------------|
| DRG                 | Former Department of Planning and Environment – Division of Resources and Geoscience |
| DTIRIS              | Former NSW Department of Trade and Investments, Regional Infrastructure and Services |
| EA                  | Environmental Assessment                                                             |
| EC                  | Electrical Conductivity                                                              |
| EMPs                | Environment Management Plans                                                         |
| EP&A Act            | Environmental Planning and Assessment Act, 1979                                      |
| EPBC Act            | Environment Protection and Biodiversity Conservation Act, 1999                       |
| EPL                 | Environment Protection Licence                                                       |
| GMP                 | Groundwater Management Plan                                                          |
| GSC                 | Gunnedah Shire Council                                                               |
| IA                  | Idemitsu Australia Pty Ltd                                                           |
| Km                  | Kilometre                                                                            |
| MCA                 | Minerals Council of Australia                                                        |
| MEG                 | Department of Regional NSW – Mining, Exploration and Geoscience                      |
| MIA                 | Mine Infrastructure Area                                                             |
| ML                  | Mining Lease                                                                         |
| Mt                  | Million Tonnes                                                                       |
| Mtpa                | Million Tonnes Per Annum                                                             |
| NOW                 | Former NSW Office of Water                                                           |
| NSC                 | Narrabri Shire Council                                                               |
| NSW                 | New South Wales                                                                      |
| OEH                 | Former NSW Office of Environment and Heritage                                        |
| PAC                 | Former NSW Planning and Assessment Commission                                        |
| PAF                 | Potentially Acid Forming                                                             |
| POEO Act            | Protection of the Environment (Operations) Act, 1997                                 |
| Resources Regulator | Department of Regional NSW – Resources Regulator                                     |
| RMP                 | Rehabilitation Management Plan                                                       |

| Abbreviation | Definition                             |
|--------------|----------------------------------------|
| RL           | Relative Level                         |
| RMS          | NSW Roads and Maritime Services        |
| ROM          | Run of Mine                            |
| SCMP         | Spontaneous Combustion Management Plan |
| SD           | Sediment Dam                           |
| SWB          | Site Water Balance                     |
| SMP          | Soil Management Protocol               |
| SWC          | State Water Corporation                |
| SWMP         | Surface Water Management Plan          |
| t            | Tonne                                  |
| TARP         | Trigger Action Response Plan           |
| TCPL         | Tarrawonga Coal Pty Limited            |
| TSS          | Total Suspended Solids                 |
| WMP          | Water Management Plan                  |
| WMS          | Water Management Strategy              |

# Appendix A

## Climate data



## A.1 Rainfall data

Daily rainfall data at the Boggabri Post Office gauge was obtained as SILO (Scientific Information for Land Owners) patched point data from the Queensland Climate Change Centre of Excellence. SILO patched point data is based on historical data from the BoM rainfall stations, with missing data 'patched' in by interpolating data from nearby operating stations. SILO data was obtained and implemented in the SWBM for Boggabri Post Office gauge from January 1889 to December 2022. The Boggabri Post Office gauge ceased data collection in March 2023.

Monthly rainfall statistics for the Boggabri Post Office gauge between January 1889 and December 2022 are shown in

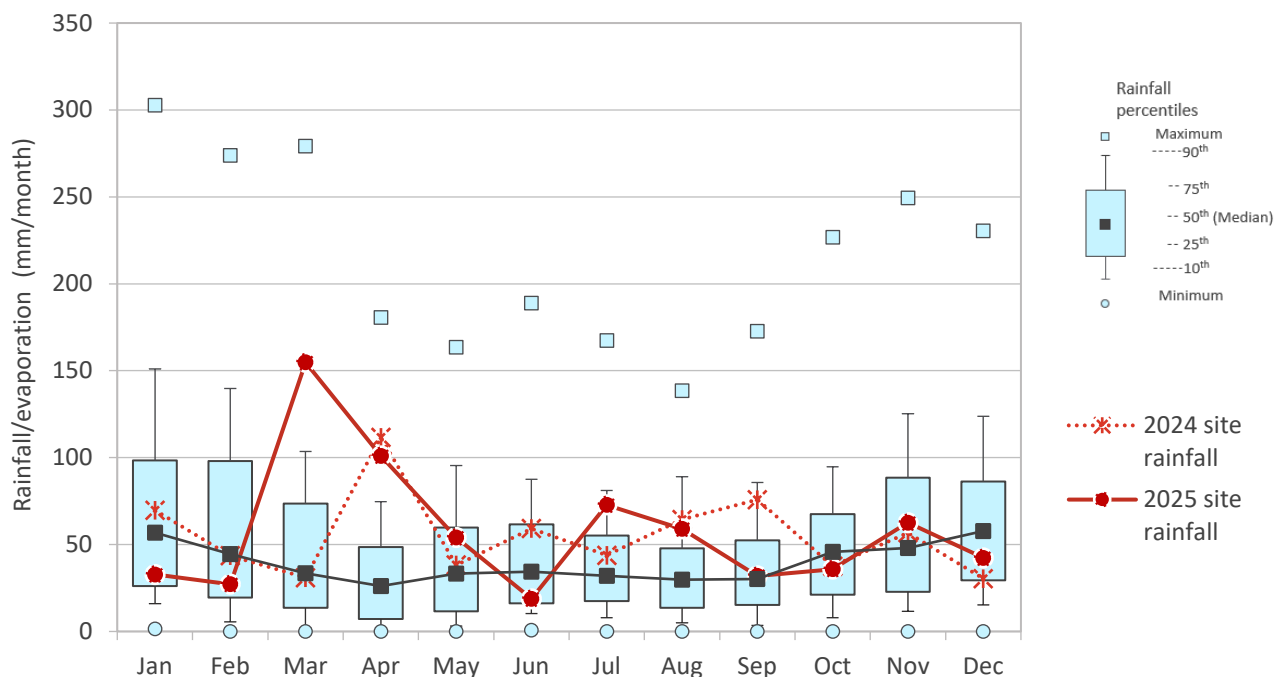


Figure A-1. In future assessments, an extended dataset may need to be obtained from other nearby SILO gauges that are actively recording data.

Daily rainfall data is collected by BCOPPL from rainfall gauges associated with BCM. These gauges include:

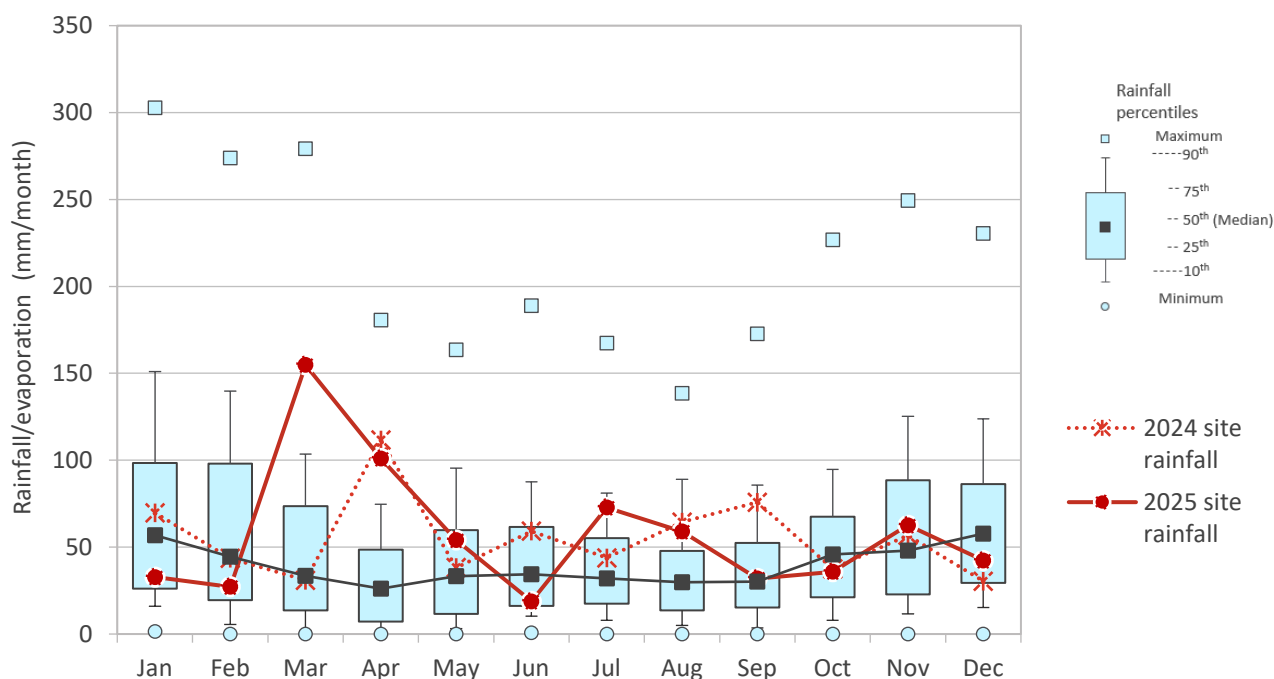
- AWS Compliance tower gauge, located at BCM approximately 4.3 km south of MW5 and 0.5 km south of SD10.
- RL395 AWS gauge, located 3km south east of MW5 and 2.5 km north east of SD10.
- Goonbri rain gauge, located at a property approximately 7 km east of the site.

Monthly rainfall totals for the 2024 and 2025 calendar year recorded at the AWS Compliance tower rainfall gauge are also shown for comparative purposes.

Rainfall during the 2024 and 2025 calendar year was generally wetter than typical conditions with most months having rainfall totals greater than the historical median value at Boggabri Post Office gauge. 2024 rainfall only exceeded the 90<sup>th</sup> percentile rainfall total in April. All other months had above average rainfall totals excluding March, October and December.

Monthly rainfall totals in 2025 in March, April, May, July, August and November had above average rainfall totals with March exceeding the 90<sup>th</sup> percentile rainfall totals (i.e. rainfall conditions that are only exceeded in 10% of years). All other months had below average rainfall totals with January, February, July and September total above the lower quartile range indicating some variability in rainfall throughout the year.

The 2024 annual rainfall of 662 mm equates to roughly a 66<sup>th</sup> percentile rainfall year based on the 135 years of rainfall data at the Boggabri Post Office gauge. The 2025 annual rainfall total at the site gauge of 693 mm is approximately equivalent to a 72<sup>nd</sup> percentile rainfall year based on the historical record.



**Figure A-1: Monthly rainfall statistics – Boggabri Post Office and site rainfall gauge**

#### A.1.1 March 2025 rainfall event

Between the 21 March 2025 and 3 April 2025, over 181 mm of rain was recorded by the compliance tower rainfall gauge at BCM, with 79 mm rainfall recorded in a single day on 29 March 2025.

Review of the [BOM NSW Rainfall totals](#) map reveals three distinct rainfall events which occurred within this period. Between 21 March and 24 March, a rain front moved from the south of NSW across the landmass towards northern NSW and on to the east coast, with daily rainfall totals exceeding 25 mm occurring near Narrabri and Boggabri NSW. On 27 March, a rain band advanced from north of the Queensland Border to central-northern NSW, before concentrating rainfall around the Walgett, Narrabri and Boggabri areas on 29 March. The mapping shows the front moved east to the coast, with localised areas of rainfall exceeding 50 mm rain around Narrabri and Tamworth areas on 30 March. Between 1 April and 3 April, another smaller rainfall event (less than 50 mm) occurred in northern NSW.

To clarify rainfall trends around the BCM and to improve SWBM validation during this period, a review of rainfall gauge data collected at BCM and at nearby BOM rainfall gauges was completed to determine if any anomalies in rainfall depths were reported by the site gauges. An overview of rainfall totals is provided in Table A.1.

**Table A.1: Comparison of rainfall depths in March 2025**

| Rainfall gauge                  | Approx. distance from MW5 | Rainfall 29 March 2025 (total) (mm) | Rainfall 21 March to 3 April 2025 (mm) | GDA 94, MGA 56 |           |
|---------------------------------|---------------------------|-------------------------------------|----------------------------------------|----------------|-----------|
|                                 |                           |                                     |                                        | Easting        | Northing  |
| 395 Tower (site)                | 3.09 km south             | 84.4                                | 183.8                                  | 228,215        | 6,609,583 |
| AWS Compliance Tower (site)     | 4.49 km south             | 79.4                                | 181.8                                  | 217,466        | 6,598,820 |
| Goonbri Rain Gauge (off site)   | 10.74 km south east       | 70.2                                | 180.2                                  | 236,980        | 6,611,800 |
| Boggabri (Retreat) (55044)      | 17.62 km south east       | 85                                  | 172.7                                  | 239,171        | 6,599,991 |
| Caroda (Roseberry Park) (54125) | 51.29 km north            | 111                                 | 224                                    | 225,064        | 6,663,238 |
| Narribri Mollee (53026)         | 58.44 km north west       | 107                                 | 235.5                                  | 180,422        | 6,648,244 |
| Barraba (Clifton Lane) (54003)  | 77.72 km north east       | 61.2                                | 191.2                                  | 300,049        | 6,636,314 |

As shown in Table A.1, during 21 March to 3 April 2025, rainfall totals were generally comparable across all gauges, with distinct regional trends. Mount Kaputar at nearly 1,500 m AHD, affects the distribution of rainfall in the region. Greater rainfall totals were observed to the north of Mount Kaputar during the period, which is observed at the Caroda (Roseberry Park) and Narribri (Mollee) gauges. The following observations are made:

- The rainfall received during the period at AWS Compliance tower and 395 Tower at BCM were comparable, each receiving over 181 mm of rainfall.
- South east of the site, at Goonbri Rain Gauge and Boggabri (Retreat). Approximately 180 mm of rainfall was received.
- Far north and north west of the site, at Caroda (Roseberry Park) and Narribri (Mollee), more intense rainfall were received than at the site gauges, with over 220 mm of rainfall received throughout the period. Approximately half of this total was received on 29 March 2025.
- Far north east of the site at Barraba (Clifton Lane), slightly more intense rainfall was received than at the site gauges, with 191 mm rainfall received.

The single-day rainfall totals recorded on 29 March 2025 (ranging from 61 mm to 111 mm across all gauges) follow a similar spatial distribution pattern to the cumulative period totals. The rainfall received by the AWS Compliance Tower at BCM is likely to accurately reflect the rainfall trends observed across the site, given the consistency between other site gauges and gauges to the southeast of the site. Accordingly, the AWS Compliance Tower data will continue to be used to validate the SWBM.

## A.2 Evaporation data

Daily evaporation rates were obtained as SILO patched point data at the Boggabri Post Office gauge over the January 1889 to December 2024 period. Evaporation data was sourced as Class A pan evaporation, Morton's potential evapotranspiration, and Morton's shallow lake evaporation.

The BoM records daily evaporation data at the Gunnedah Resource Centre (GRC) (055024) weather station which is approximately 46 km south-east of the site. The GRC weather station has recorded evaporation data since 1948. The Gunnedah Resource Centre evaporation data is compared to the SILO patched point data for Boggabri Post Office in Figure A-2. The comparison is intended to provide confidence the SILO data reflects actual recorded evaporation values. Average monthly rainfall totals are also presented in Figure A-2 for context.

**Figure A-2: Monthly pan evaporation rates – Boggabri Post Office**

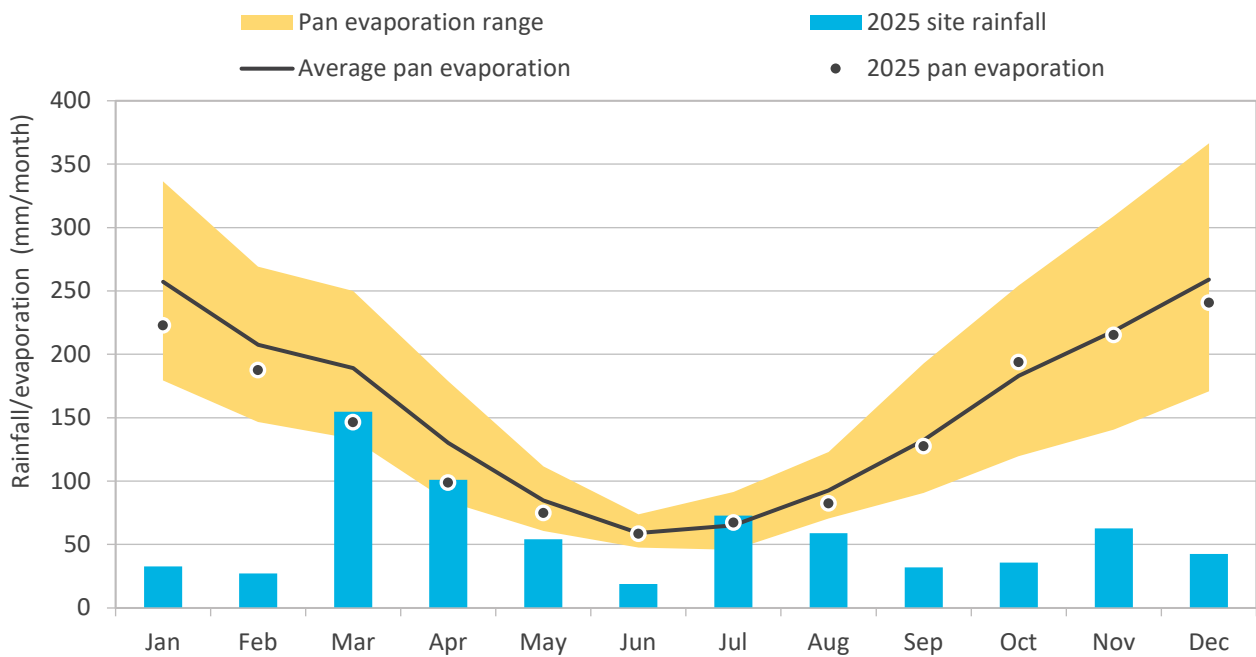


Figure A-2 shows the monthly evaporation totals are up to four times larger in summer compared to winter. Monthly evaporation totals are shown to have substantially exceeded monthly rainfall totals in most months over the 2025 calendar year.

# Appendix B

## Water balance methodology



## B.1 Overview

The Site Water Balance (SWB) model was developed in GoldSim (version 14). The model applies a continuous simulation methodology that assesses the performance of the Boggabri Coal Mine (BCM) water management system (WMS) under a range of climate conditions. The model was created by representing the WMS as a series of elements, each containing pre-set rules and data, that were linked together to simulate the interaction of these elements.

The water balance model simulated the volume of water stored within the BCM WMS based on the following equation:

$$\text{Change in volume over time} = \text{inflows} - \text{outflows}$$

Where:

- Modelled inflows consisted of direct rainfall onto the water surface area of each storage, catchment runoff, groundwater inflows, and make up water imported from the BCM borefield and the Namoi River.
- Modelled outflows consisted of evaporation from the water surface area of each storage, dust suppression water use, Coal Handling and Preparation Plant (CHPP) and Mine Infrastructure Area (MIA) water use, and via discharge from storage outlets due to overflows.

The modelled WMS including how each component is linked is shown schematically in Appendix C.

## B.2 Modelling approach

### B.2.1 Simulation period

The SWB model simulates the historical WMS performance (back to approximately 2019) for verification purposes as well as the next 11 years (between 2026 and 2036) of the Life-of-Mine (LOM) for forecasting purposes. The simulation period can be updated as needed to investigate a shorter or longer LOM or future operational scenarios.

The SWB model includes 135 years of historical rainfall and evaporation data allowing the LOM to be simulated using a range of climate conditions (refer to Appendix C).

### B.2.2 Timestep

Water is pumped across the BCM WMS based on pre-determined rules and pump rates (refer to Table B-4). Daily pump rates for some transfers, such as those between MW5 and SD23 to meet dust suppression demands, may exceed the actual volume of water that requires pumping in each day resulting in more water being transferred than what would occur under actual operations.

A sub-daily timestep is required to allow less than the maximum daily pump rate to be transferred per day. The SWB model applies a 6-hour timestep to adequately simulate the ability to operate pumps at sub-daily intervals.

## B.3 Model assumptions

### B.3.1 *Climate*

#### Rainfall

Historical daily rainfall data from 1889 to 2023 (135 years) obtained as patched point data from the SILO database, as discussed in Appendix A was applied the SWB model. Daily rainfall was applied to calculate direct rainfall onto the simulated water surface of each modelled storage whereby the volume of direct rainfall was calculated as the product of the simulated rainfall depth and the water surface area of the storage, calculated from surveyed stage-storage-area relationships.

Daily rainfall was also applied to the rainfall runoff model described in Appendix B.3.2 to estimate runoff from the WMS contributing catchment.

#### Evaporation

Daily evaporation rates at the Boggabri Post Office gauge were obtained as SILO patched point data from 1889 to 2023 (135 years). Evaporation data was sourced as Morton's potential evapotranspiration and Morton's shallow lake evaporation and applied to the SWB model as follows:

- Morton's potential evapotranspiration – applied to the rainfall runoff model and to calculate dust suppression demand.
- Morton's shallow lake evaporation – applied to calculate evaporation from pond water surface areas.

### B.3.2 *Runoff model*

#### Australian Water Balance Model (AWBM) overview

The volume of surface water runoff from the mine site catchment has been estimated using the Australian Water Balance Model (AWBM). The AWBM was developed by Boughton (2004) and is widely used across Australia to estimate stream flow and runoff. The AWBM has been incorporated into the SWB model.

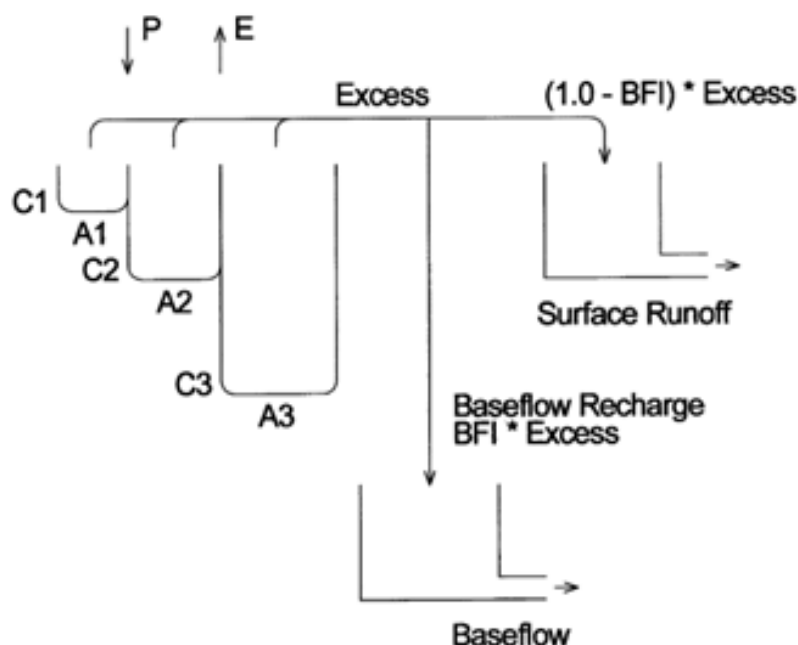
The AWBM is a 'bucket model'. It describes catchment runoff processes using the concept of surface stores (buckets), which trap rainfall and must fill before runoff can occur. Spatial variability is incorporated by using three stores, each with a different capacity (C1, C2 and C3) and partial areas (A1, A2 and A3, where  $A1+A2+A3=1$ ). Hence, parts of the catchment generate runoff after only a small depth of rain has fallen, while other parts of the catchment only generate runoff after significant ponds have formed and overflowed.

Since the AWBM is a continuous simulation model, antecedent moisture conditions within the catchment are tracked over time within the stores such that catchment wetness from preceding rainfall affects runoff generated by subsequent rainfall. For example, the first day of rain after a dry summer may generate a lower percentage of runoff than subsequent days of rainfall.

The AWBM was used to estimate catchment runoff from the various land use categories across BCM. The land use categories considered were undisturbed, rehabilitated spoil, industrial (hardstand and infrastructure areas), mining void (pit), active spoil and pre-strip.

A schematic of how the AWBM represents rainfall runoff is shown in Figure B-1.

**Figure B-1: Schematic layout of the AWBM rainfall-runoff model (Boughton, 2004)**



#### AWBM model parameters

The AWBM is defined by nine parameters: three soil storage capacities, three partial areas, and three recession parameters. The AWBM parameters were selected to reflect the different hydrological responses of each of the six catchment land use types included in the SWB model. The AWBM parameters applied to the SWB model are presented in Table B-1. The model validation results presented in Section 3.4 indicate the adopted AWBM parameters are representing the WMS processes adequately.

**Table B-1: Adopted AWBM parameter values**

| Land use       | BFI  | K <sub>base</sub> | K <sub>surf</sub> | A1    | A2    | A3    | C1 | C2  | C3  |
|----------------|------|-------------------|-------------------|-------|-------|-------|----|-----|-----|
| Industrial     | 0.0  | 0.0               | 0.0               | 0.134 | 0.433 | 0.433 | 10 | 35  | 85  |
| Open cut       | 0.0  | 0.0               | 0.0               | 0.2   | 0.2   | 0.6   | 15 | 50  | 150 |
| Pre-strip      | 0.2  | 0.98              | 0.0               | 0.134 | 0.433 | 0.433 | 15 | 60  | 150 |
| Rehabilitation | 0.6  | 0.99              | 0.0               | 0.2   | 0.2   | 0.6   | 20 | 120 | 200 |
| Spoil          | 0.9  | 0.99              | 0.0               | 0.2   | 0.2   | 0.6   | 20 | 130 | 220 |
| Undisturbed    | 0.05 | 0.98              | 0.0               | 0.134 | 0.433 | 0.433 | 13 | 120 | 200 |

### B.3.3 Water storages

All water management dams to be included in the water balance model, and their key operating volumes, are summarised in Table B-2. BCOPL maintain an in-pit mine water dam (MWD) during operations. The in-pit MWD is typically relocated and renamed frequently as the mine progresses. However, the functionality of the storage to transfer water from the pit to MW5/MW11 and to provide a dust suppression fill point for the pit area remain similar over time.

**Table B-2: Water storage assumptions**

| Storage           | Type                   | Online | Dead storage (ML) | LOV (ML) | HOV (ML) | Capacity (ML) | Overflows to |
|-------------------|------------------------|--------|-------------------|----------|----------|---------------|--------------|
| Existing storages |                        |        |                   |          |          |               |              |
| MW3               | Contaminated water dam | -      | 1.0               | 5.0      | 131.0    | 153.5         | Bollol Creek |
| MW5               | Mine water dam         | -      | 1.0               | 600      | 1,961    | 2,200         | Pit          |
| MWD               | Contaminated water dam | -      | 1.0               | 1.0      | 33.8     | 92.8          | Pit          |
| Pit               | Mining void            | -      | 1.0               | 25.0     | 200.0    | -             | -            |
| SD3               | Sediment dam           | -      | 16.7              | 33.3     | 34.3     | 102.3         | Nagero Creek |
| SD6               | Sediment dam           | -      | 8.7               | 17.4     | 18.4     | 55.9          | Nagero Creek |
| SD7               | Sediment dam           | -      | 11.7              | 23.3     | 24.3     | 95.1          | Pit          |
| SD8               | Sediment dam           | -      | 1.6               | 3.3      | 4.3      | 13.4          | SD6          |
| SD10              | Mine water dam         | -      | 9.7               | 19.4     | 61.7     | 116.4         | SD6          |
| SD11              | Contaminated water dam | -      | 1.4               | 2.7      | 3.7      | 16.4          | Nagero Creek |
| SD12              | Contaminated water dam | -      | 17.2              | 34.4     | 35.4     | 206.6         | Nagero Creek |
| SD23              | Contaminated water dam | -      | 1.6               | 3.2      | 4.2      | 17.0          | Pit          |
| SD28              | Sediment dam           | -      | 1.0               | 0.6      | 1.6      | 3.5           | Nagero Creek |
| Proposed storages |                        |        |                   |          |          |               |              |
| SD19              | Sediment dam           | 2028   | 30.0              | 60.0     | 61.0     | 179.9         | SD3          |

| Storage | Type           | Online | Dead storage (ML) | LOV (ML) | HOV (ML) | Capacity (ML) | Overflows to |
|---------|----------------|--------|-------------------|----------|----------|---------------|--------------|
| SD20    | Sediment dam   | 2033   | 7.0               | 13.9     | 14.9     | 41.8          | SD19         |
| SD21    | Sediment dam   | 2033   | 9.3               | 18.5     | 19.5     | 55.6          | Nagero Creek |
| SD22    | Sediment dam   | 2033   | 1.0               | 0.8      | 1.8      | 2.4           | Nagero Creek |
| SD24    | Sediment dam   | 2033   | 1.2               | 2.4      | 3.4      | 7.3           | Nagero Creek |
| MW11    | Mine water dam | 2025   | 1.0               | 600      | 1,583    | 1,798         | Pit          |

#### B.3.4 Catchment areas

The contributing catchment area to each water management dam at several stages in the LOM are provided in Table B-3. The contributing catchment area to each storage is linearly interpolated between these years for the purposes of the water balance model.

It is assumed the Tarrawonga Coal Mine (TCM) catchment area to Nagero Creek discharging across the western boundary of mining lease 1579 discharges directly to Nagero Creek. However, it is understood that these discharges are captured within SD6. The volumes discharged from TCM are not expected to result in any material impact to the SWB model due to the relatively large volume of water storage available at BCM and have therefore been excluded from the SWB model.

**Table B-3: Catchment areas over life of mine**

| Catchment | Catchment area (ha) |                   |       |      |      |
|-----------|---------------------|-------------------|-------|------|------|
|           | 2024                | 2025 <sup>1</sup> | 2026  | 2028 | 2033 |
| Existing  |                     |                   |       |      |      |
| MW3       | 10.7                | 10.7              | 10.7  | 10.7 | 10.7 |
| MW5       | 208                 | 208               | -     | -    | -    |
| MWD       | 1.7                 | 1.7               | 1.7   | 1.7  | 1.7  |
| Pit       | 1,405               | 1,342             | 1,532 | 782  | 782  |
| SD3       | 194                 | 314               | 314   | 314  | 314  |
| SD6       | 64                  | 64                | 64    | 64   | 64   |
| SD7       | 208                 | 208               | 208   | 208  | 208  |
| SD8       | 10.9                | 10.9              | 10.9  | 10.9 | 10.9 |



| Catchment    | Catchment area (ha) |                   |              |              |              |
|--------------|---------------------|-------------------|--------------|--------------|--------------|
|              | 2024                | 2025 <sup>1</sup> | 2026         | 2028         | 2033         |
| Existing     |                     |                   |              |              |              |
| SD10         | 32                  | 32                | 32           | 32           | 32           |
| SD11         | 3.9                 | 3.9               | 3.9          | 3.9          | 3.9          |
| SD12         | 46                  | 46                | 46           | 46           | 46           |
| SD23         | 57                  | 0                 | -            | -            | -            |
| SD28         | 0.6                 | 0.6               | 0.6          | 0.6          | 0.6          |
| MW11         | -                   | -                 | 16.2         | 16.2         | 16.2         |
| Proposed     |                     |                   |              |              |              |
| SD19         | -                   | -                 | -            | 657          | 657          |
| SD20         | -                   | -                 | -            | 95           | 95           |
| SD21         | -                   | -                 | -            | -            | 116          |
| SD22         | -                   | -                 | -            | -            | 7            |
| SD24         | -                   | -                 | -            | -            | 17           |
| <b>Total</b> | <b>2,242</b>        | <b>2,242</b>      | <b>2,242</b> | <b>2,242</b> | <b>2,382</b> |

Note: 1 As at April 2025

### B.3.5 Pump transfers

The operating rules applied to pump transfers in the water balance model are summarised in Table B-4. All pumping operations and rules are based on the existing and proposed infrastructure. The pumps are modelled to switch on when the on trigger occurs and the specific conditions are true. The pump remains on until the off trigger occurs, or the conditions become false. The pump triggers and conditions are based on the low operating volume (LOV) and high operating volume (HOV) for each storage. It was assumed that pumping occurs at an average pump rate and no allowance has been made for changes to flowrate with changes in head.

**Table B-4: Pump operating rules**

| Pump from | Pump to | Pump rate (ML/day)                      | On trigger                | Off trigger               | Conditions              |
|-----------|---------|-----------------------------------------|---------------------------|---------------------------|-------------------------|
| Existing  |         |                                         |                           |                           |                         |
| Pit       | MW8     | 5.0 (10.0 if pit volume exceeds 200 ML) | Pit > LOV                 | Pit < LOV                 | MW8 < HOV               |
| Pit       | MW5     | 5.0 (10.0 if pit volume exceeds 200 ML) | Pit > LOV                 | Pit < LOV                 | MW5 < HOV               |
| Pit       | SD23    | 5.0 (10.0 if pit volume exceeds 200 ML) | Pit > LOV                 | Pit < LOV                 | SD23 < HOV              |
| MW3       | SD10    | 3.5                                     | MW3 > HOV                 | MW3 < LOV                 | SD10 < HOV              |
| MW5       | MWD     | 5.0                                     | MW5 > dead storage volume | MW5 < dead storage volume | MWD < HOV               |
| MW5       | SD23    | 5.0                                     | MW5 > dead storage volume | MW5 < dead storage volume | SD23 < HOV              |
| MW5       | SD10    | 5.0                                     | MW5 > dead storage volume | MW5 < dead storage volume | SD10 < HOV              |
| SD3       | SD12    | 5.0                                     | SD3 > HOV                 | SD3 < LOV                 | SD12 < HOV<br>Pit < HOV |
| SD6       | SD10    | 2.0                                     | SD6 > HOV                 | SD6 < LOV                 | SD10 < HOV<br>Pit < HOV |
| SD7       | SD12    | 10.0                                    | SD7 > HOV                 | SD7 < LOV                 | SD12 < HOV              |
| SD8       | SD10    | 1.9                                     | SD8 > HOV                 | SD8 < LOV                 | SD10 < HOV              |

| Pump from | Pump to | Pump rate<br>(ML/day)                         | On trigger                           | Off trigger                          | Conditions             |
|-----------|---------|-----------------------------------------------|--------------------------------------|--------------------------------------|------------------------|
| SD10      | MW5     | 10.0                                          | SD10 > HOV                           | SD10 < HOV                           | MW5 < HOV              |
| SD10      | MW3     | 10.0                                          | SD10 > HOV                           | SD10 < HOV                           | MW3 < HOV<br>MW5 > HOV |
| SD10      | Pit     | 10.0                                          | SD10 > HOV<br>MW3 > HOV<br>MW5 > HOV | SD10 < HOV<br>MW3 < HOV<br>MW5 < HOV | -                      |
| SD11      | SD10    | 2.0                                           | SD11 > HOV                           | SD11 < LOV                           | SD10 < HOV             |
| SD12      | MW5     | 20.0                                          | SD12 > HOV                           | SD12 < LOV                           | MW5 < HOV              |
| SD23      | MW5     | 3.0                                           | SD23 > HOV                           | SD23 < HOV                           | MW5 < HOV              |
| Proposed  |         |                                               |                                      |                                      |                        |
| Pit       | MW11    | 5.0 (10.0 if pit<br>volume exceeds<br>200 ML) | Pit > LOV                            | Pit < LOV                            | MW11 < HOV             |
| MW5       | MW11    | 10                                            | At date                              | Storage empty                        | MW11 < HOV             |
| MW11      | MWD     | 5.0                                           | MW11 > dead<br>storage volume        | MW11 < dead<br>storage volume        | MWD < HOV              |
| MW11      | SD10    | 5.0                                           | MW11 > dead<br>storage volume        | MW11 < dead<br>storage volume        | SD10 < HOV             |
| SD10      | MW11    | 10.0                                          | SD10 > HOV                           | SD10 < HOV                           | MW11 < HOV             |
| SD12      | MW11    | 20.0                                          | SD12 > HOV                           | SD12 < LOV                           | MW11 < HOV             |
| SD19      | MW11    | 3.0                                           | SD23 > HOV                           | SD23 < HOV                           | MW11 < HOV             |

### B.3.6 Water sources

#### Water prioritisation strategy

Water is required for several activities on site including dust suppression, use in the CHPP and as washdown water in the MIA. To minimise clean water use on site, water requirements are sourced from water storages and supplemented with imported water in the following priority:

1. surface water captured on site in contaminated water dams and sediment dams and stored in mine water dams
2. imported groundwater from the Upper Namoi Zone 4 Groundwater Source via the borefield

3. imported surface water from the Lower Namoi Regulated River Water Source via the pump station on the Namoi River.

The water balance model sources water in accordance with the above priorities. Further details on clean water management and water source prioritisation are provided in the SWMP.

#### Rainfall and runoff

Surface water runoff that drains into the water management dams is stored for use onsite. The volume of inflows to each storage is calculated as the sum of direct rainfall onto the storage water surface and the runoff generated from the contributing catchment.

The volume of direct rainfall is calculated as the product of the rainfall depth and the storage water surface area. Each storage includes a stage storage relationship whereby the assumed exposed surface area of stored water varies with the volume of water stored each day.

The volume of catchment runoff is calculated as the product of catchment area (refer to Table B-3) and the runoff depth calculated by the AWBM described in Appendix B.3.2.

#### Water Imports

External water supply can be sourced from the BCM borefield or the Namoi River via pump and pipeline. Water imports are triggered in the model when the volume of water stored in MW5/MW11 recedes below the LOV of 600 ML. Water imports enter the WMS via SD10 prior to being pumped to the CHPP and MIA to meet water demands or MW5/M11 to meet dust suppression demands via the fill points in SD23 and the MWD. Water imports are assumed to occur at a rate of 5.6 ML/day.

Allowing MW5/MW11 to drawdown to the LOV before importing water is intended to maximise the reuse of dirty and contaminated water stored on site before sourcing water from external sources.

#### Groundwater

Historical groundwater inflows to the mining area were adopted from the *Groundwater Impact Assessment Boggabri Coal Mine Modification 10* (AGE, 2025), which represents the most current hindcast results for the Boggabri, Tarrawonga, Maules Creek (BTM) Complex.

Forecast groundwater inflows to the mining area were adopted from *Groundwater Impact Assessment Boggabri Coal Mine MOD 8 Amendment to SSD 09\_0182* (AGE, 2022), which represents the most current groundwater modelling results for the Boggabri, Tarrawonga, Maules Creek (BTM) Complex. The historic and predicted annual groundwater inflow volumes for BCM were applied to the water balance model and are presented in Figure B-2.

**Figure B-2: Estimated groundwater inflows to mining void (AGE, 2022)**

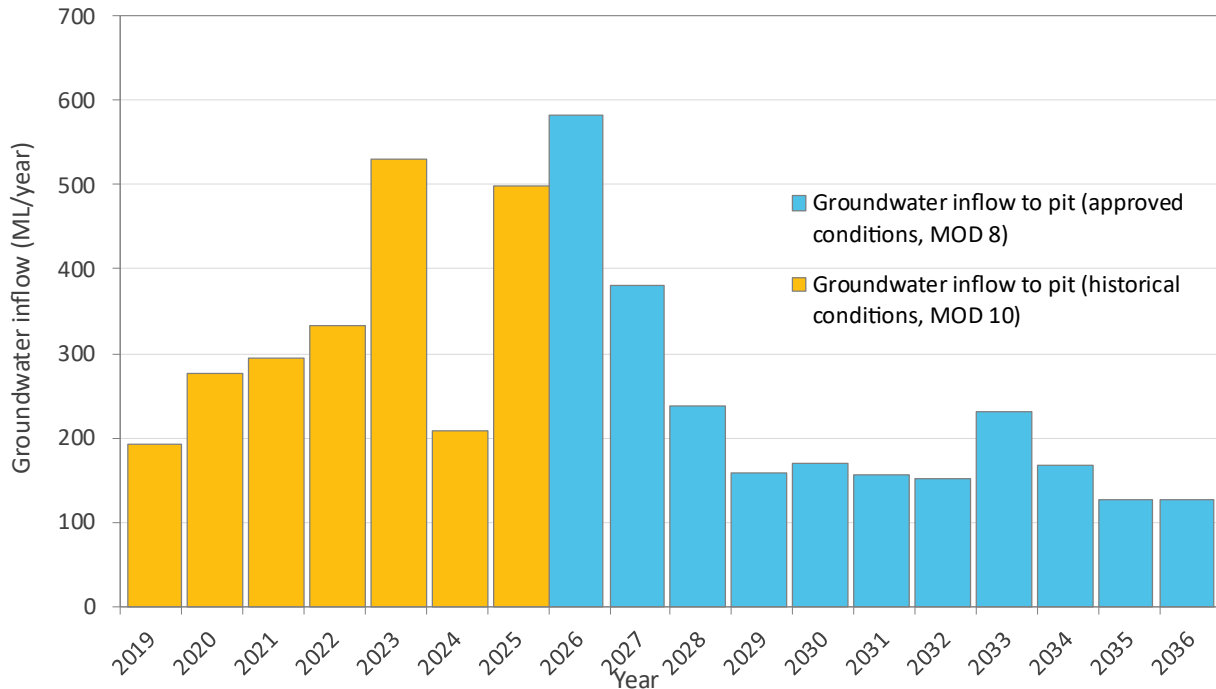


Figure B-2 shows groundwater inflows to the mining void are predicted to peak in 2024 and 2026. After which, groundwater inflows are predicted to gradually decline over the LOM so that inflows are approximately 150 ML/year from 2029 onwards. Some of the predicted groundwater inflows will be lost through evaporation. Any excess groundwater that is collected in the mine void is pumped to the water storages in accordance with the pump operational rules described in Table B-4.

#### **B.3.7 Water demands**

##### Evaporation

Evaporation loss from each storage water surface was calculated as the product of the daily Morton's shallow lake evaporation depth and the water surface area of the storage. Morton's potential evapotranspiration data was used in the AWBM runoff calculations to estimate soil moisture losses.

##### Dust Suppression

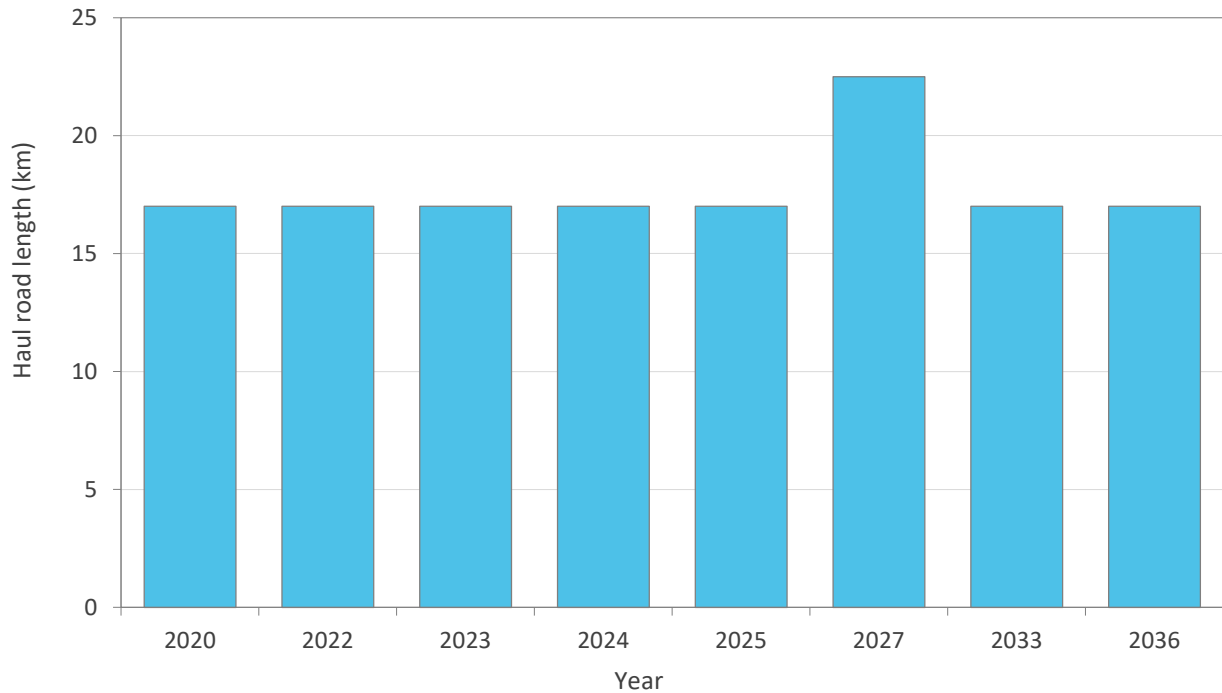
Water is required for dust suppression on haul roads and other disturbed areas. Dust suppression for the CHPP coal stockpiles, coal crushing areas, and coal loading areas and MIA are accounted for in the CHPP demands (refer to Appendix B.3.7).

Modelled dust suppression demand is calculated as a factor of haul road surface area multiplied by the daily evaporation rate less rainfall so that no dust suppression occurs on days where the rainfall rate exceeds the evaporation rate. An effective width of 50 m was assumed for all haul roads as calibrated in previous versions of the SWB model. Future haul length roads were adopted from the Modification 8 surface water impact assessment (Engeny, 2022) whereby values were interpolated between years. The haul road lengths applied to the SWB model are shown in Figure B-3.



Water used for dust suppression is preferentially sourced from recycled contaminated water from various storages depending on the mine progression. Currently, there are fill points at the MWD and SD23. There is also a fill point located at SD7 which is not currently being utilised.

**Figure B-3: Haul road lengths applied to the SWB model**



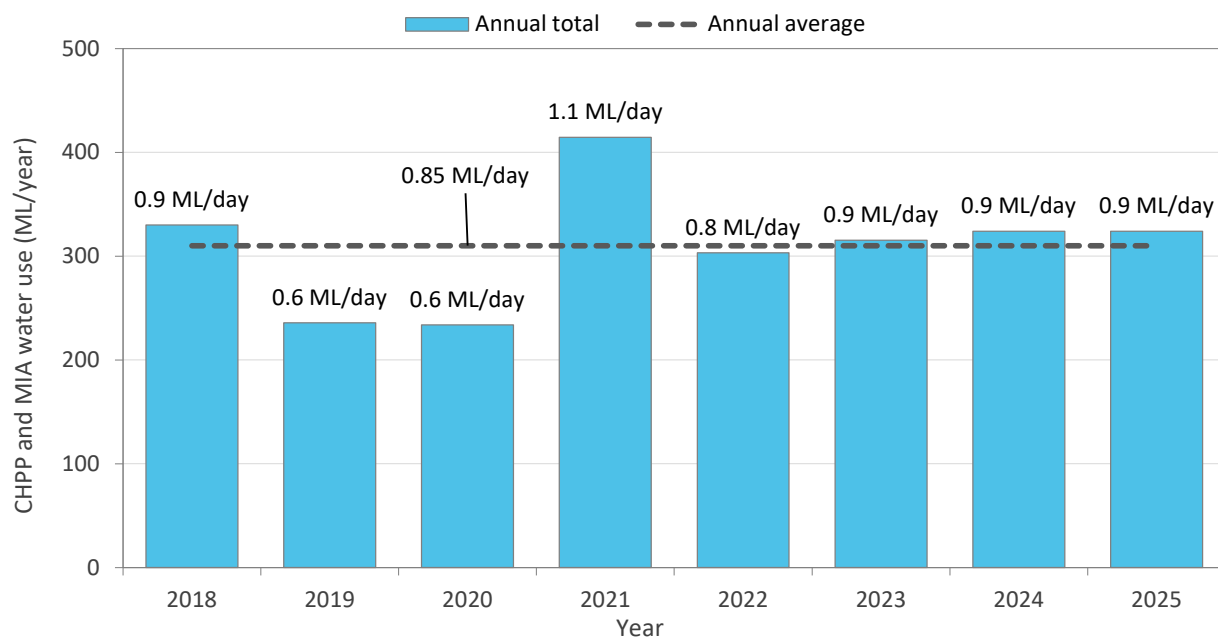
#### CHPP and MIA water demand

The CHPP requires water for coal washing, dust suppression, and as fire suppression. Water is required for vehicle washdown in the MIA. Washdown water is recycled, however, water is required to make-up evaporative losses. Make-up water for the CHPP and MIA is currently sourced from SD6 and SD10 via a filtration system.

Potable water is used in the administration building and amenities during operations. Potable water is currently sourced from groundwater entitlements (WAL 29473) assigned to the Lovton Bore. Wastewater from the administration building and amenities will be treated in an onsite treatment plant. Potable water demand and wastewater generated by the onsite treatment plant were not considered in the water balance analysis due to the relatively minor volumes involved.

A combined CHPP and MIA water demand of 0.85 ML/day was applied the water balance model based on recent historical recorded values which are shown in Figure B-4. The demand is simulated in the model as a constant flow rate that is extracted from SD10. The assumption of a constant flow rate is appropriate for the purpose of the SWB model as actual day to day variations in operations will be attenuated by the water storage on site.

**Figure B-4: Recorded CHPP and MIA water use**

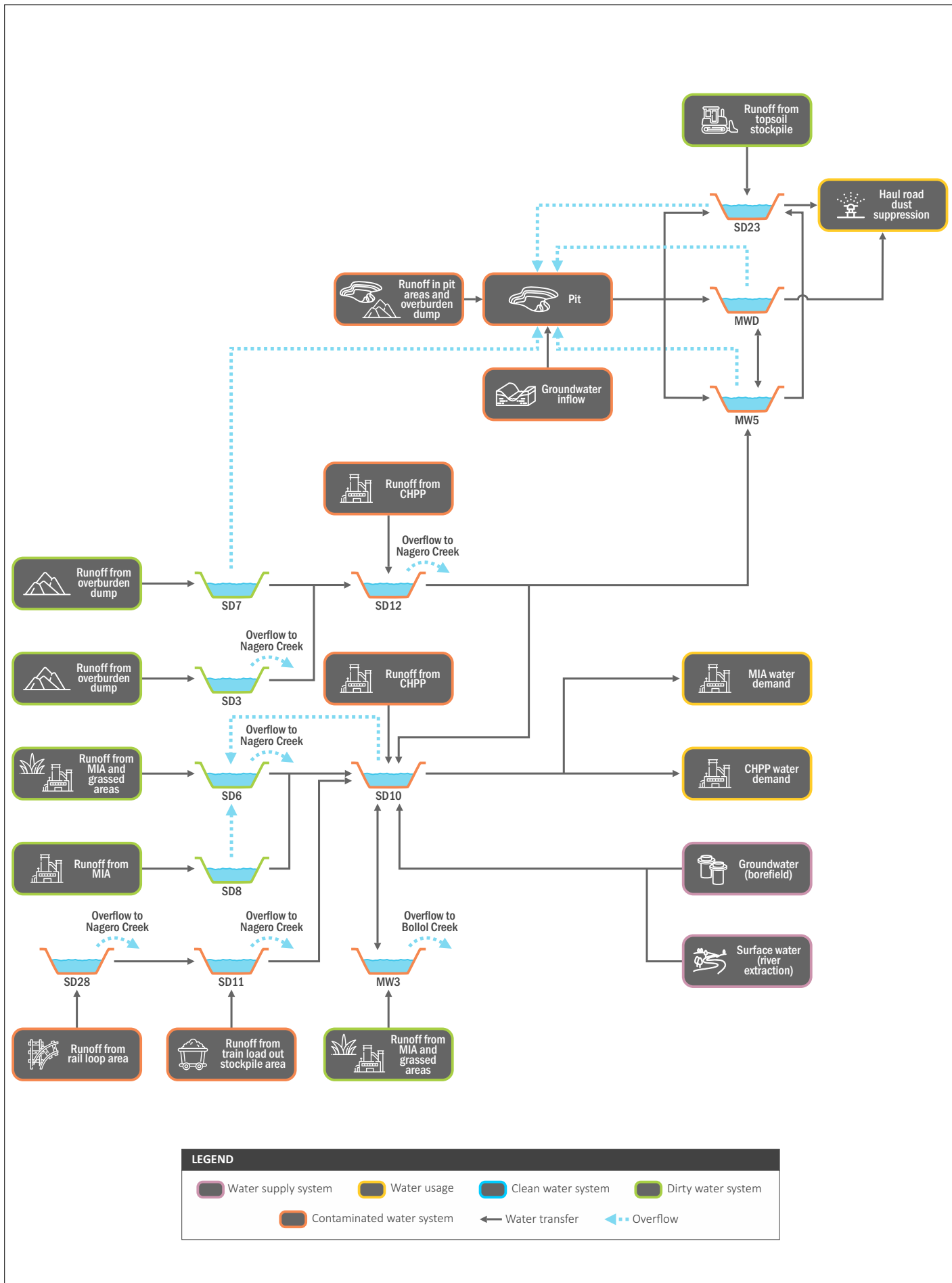


#### Seepage

Typically, losses associated with seepage from water storages are minor compared to evaporation and pumped outflows. Hence, seepage losses are assumed to be negligible for modelling purposes and are therefore set to zero in the WBM.

# Appendix C

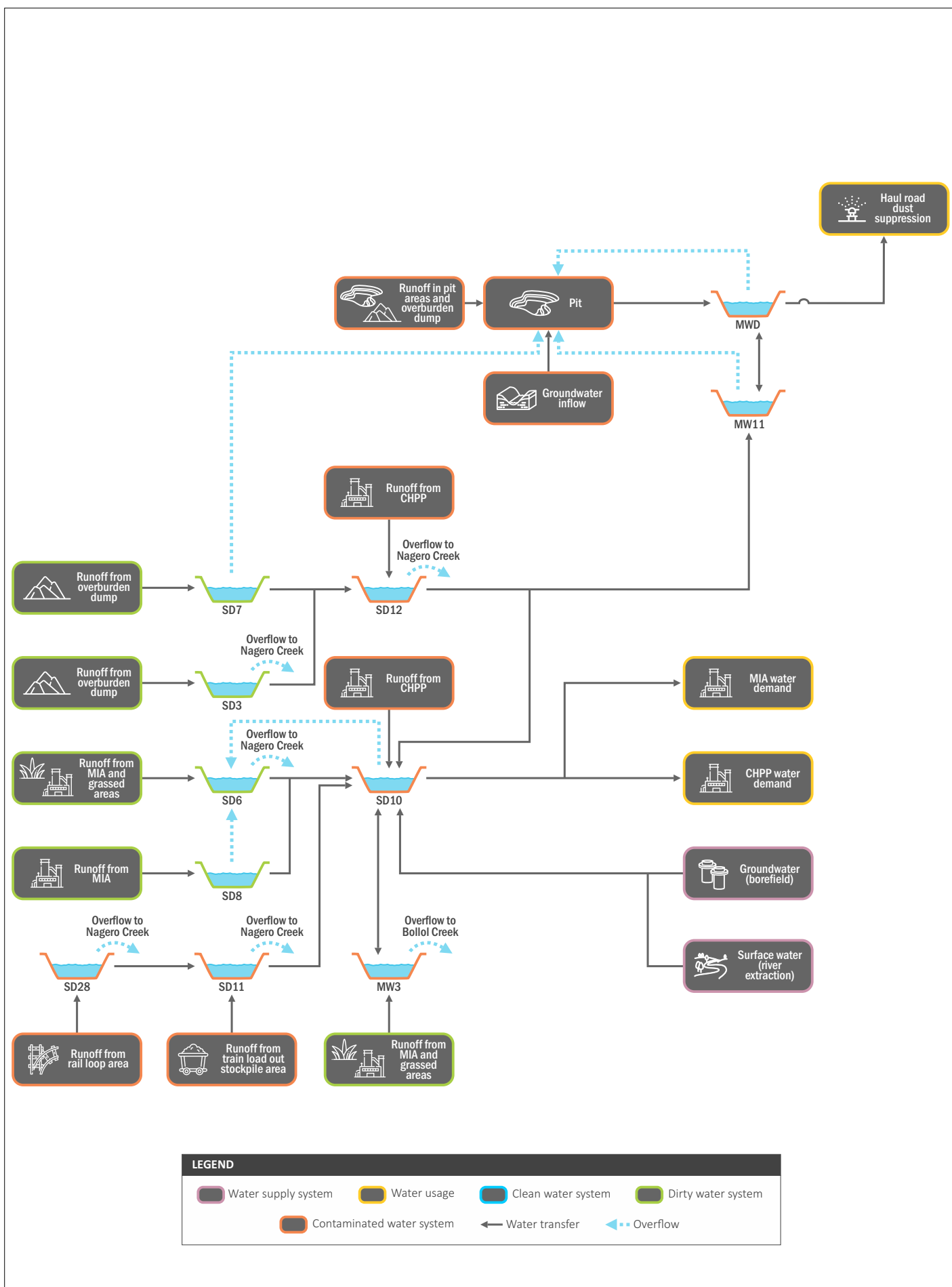
## Water management system schematics



Water balance model schematic (2025)

Boggabri Coal Operations Pty Ltd  
Site Water Balance

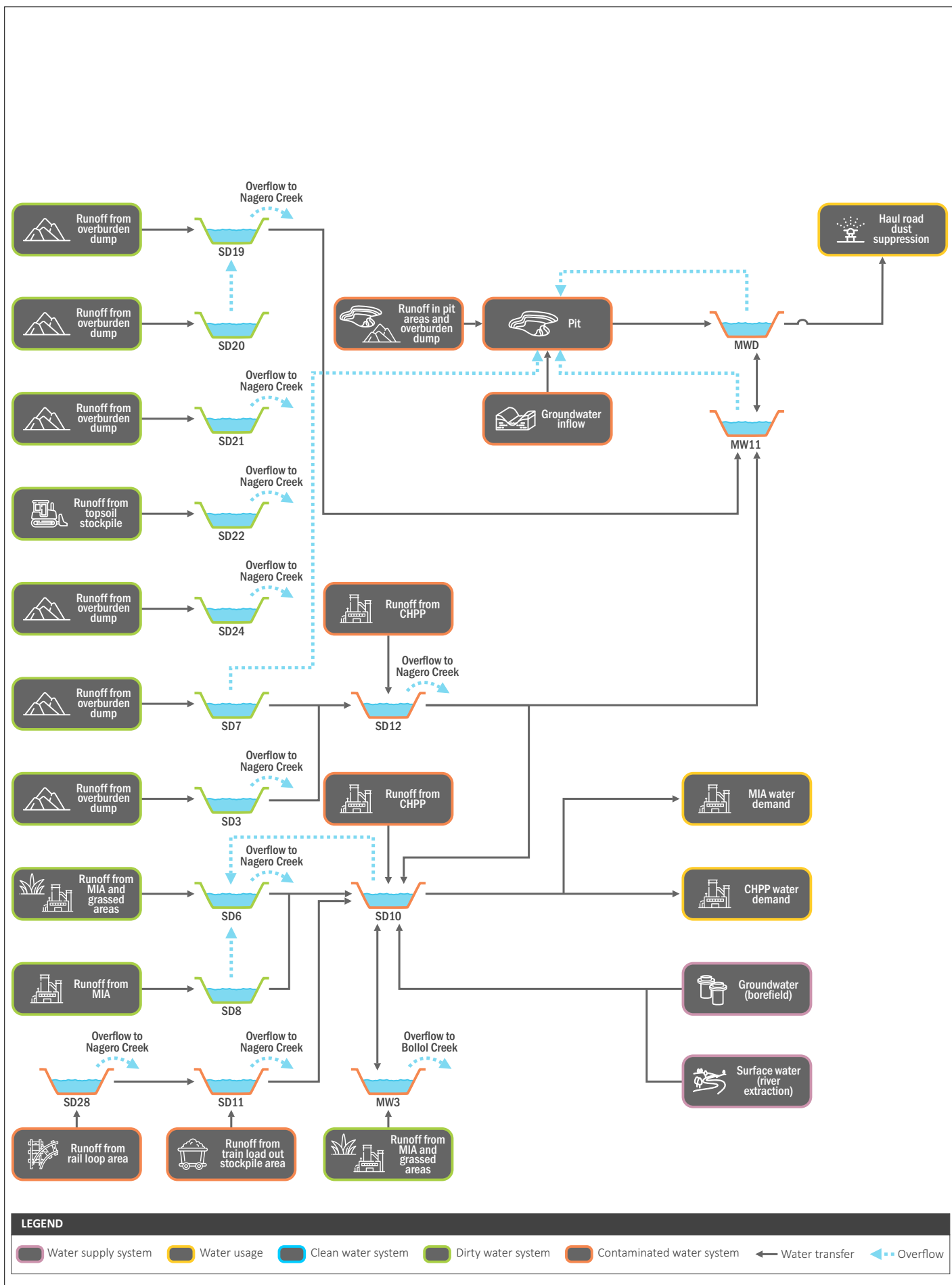
Figure C.1



Water balance model schematic – indicative conditions (2026)

Figure C.2





Water balance model schematic – indicative conditions (2033)

# **Appendix I**

## **Annual Rehabilitation Report**



**Resources  
Regulator**

ARR0001702

# **BOGGABRI COAL ANNUAL REHABILITATION REPORT**

**Wednesday 1 January 2025 to Wednesday 31 December 2025**

## Summary table

| Detail                                                                                                                                                                             |                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mine                                                                                                                                                                               | Boggabri Coal                                                                                                                                                                   |
| Reference                                                                                                                                                                          | ARR0001702                                                                                                                                                                      |
| Annual report period commencement date                                                                                                                                             | Wednesday 1 January 2025                                                                                                                                                        |
| Annual report period end date                                                                                                                                                      | Wednesday 31 December 2025                                                                                                                                                      |
| Forward program                                                                                                                                                                    | FWP0001603                                                                                                                                                                      |
| Mining leases                                                                                                                                                                      | CL 368 (1973), ML 1755 (1992), ML 1883 (1992)                                                                                                                                   |
| Lease holder(s)                                                                                                                                                                    | Ns Boggabri Pty Limited, Boggabri Coal Pty Limited                                                                                                                              |
| Contact                                                                                                                                                                            | Stewart Dunlop                                                                                                                                                                  |
| Date of submission                                                                                                                                                                 | Wednesday 25 March 2026                                                                                                                                                         |
| Document URL                                                                                                                                                                       | <a href="https://idemitsu.com.au/mining/operations/boggabri-coal/approvals-plans-reports/">https://idemitsu.com.au/mining/operations/boggabri-coal/approvals-plans-reports/</a> |
| <small>Security reminder: Please exercise caution before opening external links. If a link appears suspicious, avoid clicking it and report it to the Resources Regulator.</small> |                                                                                                                                                                                 |

## Important

The department may make the information in your program and any supporting information available for inspection by members of the public, including by publication on its website or by displaying the information at any of its offices. If you consider any part of your program to be confidential, please communicate this to the department via the message function on this submission within the Resources Regulator Portal.



## Mine Details

### Project description

Boggabri Coal Mine (BCM) is an open cut coal mine located 15 km north-east of the township of Boggabri in north-western NSW. BCM is managed by Boggabri Coal Operations Pty Ltd on behalf of Idemitsu Australia's (IA) subsidiary Boggabri Coal Pty Ltd and it's JV partner NS Boggabri Pty Limited). BCM operates in accordance with SSD09\_0182 which was granted on 18 July 2012 which enables the continuation of open cut mining until the end of 2036. Mining operations are progressing northward, extracting up to 8.6 Mtpa of ROM coal utilising truck and shovel mining methods. Progressive rehabilitation of the overburden emplacement areas is undertaken as areas achieve the final landform design. Up to 4.2 Mtpa of ROM coal can be processed at the CHPP, with the ability to bypass ROM coal to produce high quality semisoft coking, PCI and thermal coal products which is transported to the Port of Newcastle by rail for sale to the export market.

### Life of mine

11 years

### Current development consents, leases and licences

Development consents granted under the *Environmental Planning and Assessment Act 1979*



SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)  
SSD 09-0182 (MOD 7)

### **Authorisations covering the mining area granted under the *Mining Act 1992***

CL 368 (1973), ML 1755 (1992), ML 1883 (1992)

### **Any other approvals, licences, or authorities issued by government agencies that are relevant to the progress of mining operation and rehabilitation activities**

EPBC 2009/5256 (as varied) SSD 09-0182 (MOD 11) SSD 09-0182 (MOD 8) EPBC 2021/8875 SSD 09-0182 (MOD 9) EPL 12407

### **Summary of the scope and/or purpose of the new applications or modifications to existing approvals (if applicable)**

A variation to EPL 12407 was approved in June 2025 to increase the permitted quantity of end-of-life heavy vehicle (HV) tyres that may be disposed of in-pit from 300 to 400 tyres, effective until 11 January 2027.

## Changes to land ownership and land use

No changes to land ownership or land use have occurred during the reporting period. Lease holder(s) for the site changed in 2025. Current Lease holders are Boggabri Coal Pty Limited and NS Boggabri Pty Limited.

## Surface disturbance and rehabilitation activities during the reporting period

### **Surface disturbance and rehabilitation activities that were conducted and an analysis of the progress against the rehabilitation schedule**

There was an additional 11.8 ha of surface disturbance during the reporting period. The clearing was carried out north of the active mining area for pit progression, and for the extension of clearing pads and tracks for exploration. Rehabilitation activities were undertaken generally in accordance with Year 1 FWP0001603. Please note the reported disturbance area in the KPI table is slightly greater than the forecast 11.8 ha. This variance is attributable to recent refinement of spatial mapping, which captured some small, previously existing tracks that were historically disturbed and not created during the 2025 reporting period. The 2025 reporting period saw the commencement of the HV workshop and stores building expansion and the additional fuel farm and maintenance bays for the in-pit workshop. During this time, mine water dam MW11, was constructed and commissioned, which has led to the decommissioning of SD23 and MW5.

### **Rehabilitation planning activities that were conducted, including any specialist studies**

Rehabilitation planning activities undertaken during the reporting period included implementation of a tree thinning trial and specialist studies to inform rehabilitation management. The tree thinning trial initially commenced in August 2024 and recommenced in March and April 2025 following delays due to wet weather and ecological advice. The trial was designed to replicate tree densities observed at analogue reference sites within Leard State Forest to promote increased species diversity, vegetation structure and groundcover within rehabilitated areas. The trial was implemented across approximately 1.6 hectares, comprising about 1 hectare within the 2010 rehabilitation area and 0.6 hectares within the 2011 rehabilitation area. No fauna requiring capture and relocation were identified during thinning operations. Felled trees were retained in situ to provide habitat and coarse woody debris. Post-thinning monitoring is underway, with weed control scheduled for Quarter 2, 2026. Specialist studies undertaken during the reporting period also included Landscape

Function Analysis and erosion monitoring to inform rehabilitation planning and landform stability. A final landform drainage study was undertaken in September 2025. As the final report has not yet been received, the findings are not available for this reporting period and will be reported in the 2026 Annual Rehabilitation Report.

### **Overview of subsidence repair and/or remediation works undertaken**

Boggabri Coal Mine is an open cut mine, and no subsidence repair or remediation is required at the site.

### **Overview of rehabilitation management and maintenance activities**

Pest control activities targeting goats were undertaken on site, with 106 goats trapped and removed from rehabilitation areas and topsoil stockpiles. During 2025, repair works were undertaken within the 2024 Area 1 rehabilitation area following significant rainfall in March and April 2025 that resulted in the formation of rills and gullies. In June 2025, bunds were reinstated and erosion features were repaired. The affected areas were seeded with oats to establish rapid groundcover and reduce the risk of further erosion. Additional repair works were undertaken on the RL375 southern batter (as referenced in the previous ARR). The area was topsoiled in 2020 but was not seeded until 2024. Germination rates were less than 10%, and rilling had begun to develop due to insufficient groundcover during the first 6–12 months following seeding. Soil testing identified low fertility and low organic carbon levels. Agronomic advice informed an amelioration and reseeded program, which was implemented in May and June 2025. These areas will continue to be monitored as part of the ongoing rehabilitation monitoring and maintenance program.

### **Details of any rehabilitation actions taken as required by any letters, notices or directions issued by government agencies, including the Resources Regulator**

A letter dated 20 January 2025 was received from the NSW Resources Regulator outlining observations from the Revegetation - Targeted Assessment Program inspection undertaken on 30 July 2024 and providing recommendations for ongoing rehabilitation management. The letter also issued an official warning regarding the failure to prepare the Rehabilitation Management Plan (RMP) in the form approved by the Secretary. Boggabri Coal was required to update the RMP and publish the approved version on its website by 31 March 2025. This requirement was completed within the specified timeframe.

### Details of any rehabilitation areas that have achieved the final land use

No areas were relinquished during the 2025 reporting period.



## Key production milestones

| MATERIAL                                   | UNIT              | FWP0001603 YEAR1 | THIS REPORT |
|--------------------------------------------|-------------------|------------------|-------------|
| <b>Stripped topsoil</b><br>(if applicable) | (m <sup>3</sup> ) | 468,010          | 117,117     |
| <b>Rock/overburden</b>                     | (m <sup>3</sup> ) | 66,167,707       | 56,100,000  |
| <b>Ore</b>                                 | (Mt)              | 8.59             | 7.32        |
| <b>Reject material<sup>1</sup></b>         | (Mt)              | 1.55             | 1.2         |
| <b>Product</b>                             | (Mt)              | 7.3              | 6.76        |

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<sup>1</sup>This includes coarse rejects, tailings and any other wastes resulting from beneficiation.

## Disturbance and rehabilitation statistics

### Current disturbance and rehabilitation progression

| ELEMENT |                                                   | UNIT | THIS REPORT |
|---------|---------------------------------------------------|------|-------------|
| A1      | Total disturbance footprint - surface disturbance | (ha) | 1,585.93    |
| B       | Total active disturbance                          | (ha) | 1,209.36    |
| C       | Rehabilitation - land preparation                 | (ha) | 30.84       |
| D       | Ecosystem and land use establishment              | (ha) | 93.32       |
| E       | Ecosystem and land use development                | (ha) | 252.41      |
| F       | Rehabilitation completion                         | (ha) | 0           |

## Rehabilitation key performance indicators (KPIs)

| ELEMENT |                                                             | UNIT | THIS REPORT |
|---------|-------------------------------------------------------------|------|-------------|
| G       | New disturbance area                                        | (ha) | 12.48       |
| H       | New rehabilitation commenced during annual reporting period | (ha) | 14.72       |
| I       | Established rehabilitation                                  | (ha) | 252.41      |
| J       | Annual rehabilitation to disturbance ratio                  | %    | 1.18        |
| K       | Rehabilitated land to total mine footprint                  | %    | 15.92       |

## Progressive achievement of established rehabilitation

| ELEMENT |                                                                    | UNIT | THIS REPORT |
|---------|--------------------------------------------------------------------|------|-------------|
| L       | Established rehabilitation for agricultural final land uses        | %    | 0           |
| M       | Established rehabilitation for native ecosystem final land uses    | %    | 99.99       |
| N       | Established rehabilitation for other/non-vegetated final land uses | %    | 0           |

## Variation to the rehabilitation schedule

### Identify the components of the most recent forward program that were not achieved

2025 proposed rehabilitation areas in the East of the pit were not completed during the 2025 reporting period. This was largely due to the inability to move the explosives magazine area. A portion of this proposed rehabilitation area covered a road that provided access to this magazine area. Until the magazine area is moved, these areas cannot progress to rehabilitation. The magazine is planned to be moved by the end of Q1 2026. In response to this delay, BCOPL has increased the forecast total area of land proposed for rehabilitation in 2026 from 30.98 ha to 41.80 ha. Note the discrepancy between the forecast stripped topsoil volume for 2025 and the actual stripped volume. This is because the forecast included both subsoil and topsoil, whereas the actual figure includes topsoil only. From this point forward, BCOPL will report and forecast topsoil volumes only. This reporting period BCM stripped 117,117m<sup>3</sup> of topsoil and 389,089m<sup>3</sup> of subsoil.

### **Key factors that delayed progressive rehabilitation**

Some of the areas that were proposed for rehabilitation for Year 1 FWP0001603, were dependent on the moving of an explosives magazine area. This area was unable to be moved during the reporting period. In addition to this, BCM experienced a significant number of wet weather events throughout the year. In total, there were 49 days of wet weather that delayed mining. Amongst these 49 days, there were days that the site was inaccessible due to flooding of the Namoi River.

### **Outline actions that will be included in the forward program and carried out to minimise disturbance and undertake progressive rehabilitation as far as reasonably practical**

Disturbance will be limited to areas required to support ongoing mining operations during the upcoming year. Progressive rehabilitation will continue in areas where active mining has ceased and where landform shaping to the final landform design can be undertaken.



# Rehabilitation monitoring and research findings

## Rehabilitation monitoring

### The rehabilitation monitoring carried out in the annual reporting period

Rehabilitation monitoring was undertaken during the reporting period in accordance with the monitoring program detailed in the Rehabilitation Management Plan (RMP). Monitoring is conducted annually to assess ecosystem establishment, vegetation development and landform stability within rehabilitated areas and to compare rehabilitation performance with analogue reference sites representative of the target native ecosystem communities. Annual biodiversity monitoring was undertaken across established rehabilitation monitoring sites representing a range of rehabilitation age classes within the mine rehabilitation area. Monitoring included sites associated with grassy woodland and shrubby woodland/forest native ecosystem domains. Monitoring methods included vegetation transects and BioBanking plots to assess vegetation structure, species composition and groundcover, together with fauna surveys comprising diurnal bird surveys, ultrasonic insectivorous bat surveys, invertebrate sampling, diurnal herpetofauna searches and passive infra-red motion sensor camera surveys. Monitoring results were compared with analogue benchmarks derived from reference sites within Leard State Forest to assess the trajectory of ecosystem development. Additional specialist monitoring was undertaken during the reporting period to assess landform stability and rehabilitation performance. Landscape Function Analysis (LFA) and erosion monitoring were completed across rehabilitated landforms to assess landscape organisation, soil surface condition, stability, infiltration and nutrient cycling. Soil samples were collected from monitoring transects for laboratory analysis of growth media characteristics including pH, salinity and fertility. LiDAR data and field inspections were also used to identify and assess erosion features across rehabilitated landforms, including the establishment of erosion monitoring transects to characterise erosion type and severity. In accordance with the rehabilitation quality assurance process outlined in the RMP, rehabilitation areas were inspected throughout the reporting period following key rehabilitation phases including landform preparation, topsoil placement and vegetation establishment. These inspections confirm that works were implemented in accordance with approved procedures and identify areas requiring

maintenance or adaptive management. Monitoring outcomes continue to inform rehabilitation management and support progress towards the rehabilitation objectives and completion criteria.

## Status of performance against rehabilitation objectives and rehabilitation completion criteria

### The monitoring program that has been implemented

The monitoring program implemented in accordance with the Rehabilitation Management Plan (RMP) is used to assess progress of rehabilitation areas towards the approved rehabilitation objectives, completion criteria and final landform and rehabilitation plan. Monitoring includes biodiversity monitoring across established rehabilitation monitoring sites and comparison with analogue reference sites, together with specialist monitoring of landform stability through Landscape Function Analysis (LFA), erosion monitoring and soil analysis. Consistent with the findings reported in 2024, monitoring undertaken during the 2025 reporting period indicates that rehabilitation areas continue to trend towards the rehabilitation objectives and completion criteria. Vegetation monitoring shows that native species richness and vegetation structure continue to increase as rehabilitation matures, with evidence of natural recruitment of native species across rehabilitation areas. Fauna monitoring also indicates increasing utilisation of rehabilitation areas by native fauna. Landform monitoring and erosion assessments indicate that rehabilitated landforms remain generally stable and continue to function as designed, with only minor localised erosion identified in some areas. Monitoring results continue to inform adaptive management actions and ongoing rehabilitation planning to support progress towards the final land use and completion criteria.

**Are all rehabilitation areas in Landform Establishment phase or higher represented in the monitoring program to assess performance against the rehabilitation objectives and approved or, if not yet approved rehabilitation completion criteria and final landform and rehabilitation plan?**

Yes

**Year rehabilitation areas will be included as part of the monitoring program**

**An appraisal of whether rehabilitation is moving towards achieving the proposed rehabilitation objectives, approved or, if not yet approved, rehabilitation completion criteria and final landform and rehabilitation plan as soon as reasonably practicable.**

Monitoring undertaken during the reporting period indicates that rehabilitated areas are generally progressing towards achieving the approved rehabilitation objectives, completion criteria and the final landform and rehabilitation plan. Biodiversity monitoring results indicate that native species richness has generally increased as rehabilitation areas mature, with many monitoring sites meeting or exceeding relevant benchmark values. Vegetation monitoring also recorded recruitment of native groundcover and mid-storey species from the soil seed bank and the development of vegetation structure, indicating that rehabilitation areas are trending towards the establishment of a self-sustaining native ecosystem. Fauna monitoring identified a range of native fauna species utilising rehabilitated areas, demonstrating that habitat values are developing over time. Landscape Function Analysis (LFA) and erosion monitoring indicate that rehabilitated landforms are generally stable and performing as designed. Most monitored transects achieved erosion stability criteria. While some localised erosion and landform stability limitations were identified in surrounding rehabilitation areas, these are being addressed through ongoing monitoring, maintenance and adaptive management measures.

### **Appraisal description**

Rehabilitation is moving towards achieving the final land use as soon as reasonably practicable.

### **Rehabilitation monitoring program findings**

The rehabilitation monitoring program includes biodiversity monitoring and specialist assessments of landform stability and soil characteristics. Biodiversity monitoring was undertaken to assess vegetation establishment, ecosystem development and fauna utilisation of rehabilitation areas. Results indicate that native vegetation communities are continuing to establish and develop across rehabilitated areas, with increasing vegetation structure and evidence of natural recruitment of native species. Monitoring also recorded utilisation of rehabilitation areas by a range of fauna species, indicating that habitat values are developing as vegetation matures. Comparison of monitoring results with analogue benchmarks from reference sites within Leard State Forest indicates that

some older rehabilitation areas are approaching benchmark values for native species richness and vegetation structure, while younger areas continue to develop towards these targets. Specialist landform monitoring, including Landscape Function Analysis, erosion assessments and soil analysis, indicates that rehabilitated landforms are generally stable and functioning as intended. Overall, monitoring indicates rehabilitation areas are progressing towards the rehabilitation objectives and completion criteria and informs ongoing adaptive management.

### **Performance issues and their causes including identification of any knowledge gaps that must be addressed**

Monitoring undertaken during the reporting period identified some localised areas where landform stability and vegetation establishment can be further improved. Landscape Function Analysis (LFA) and erosion monitoring identified minor rill and gully erosion features in some rehabilitation areas, particularly where groundcover was limited and soils were exposed to rainfall and overland flow. Monitoring also indicated that the presence of brown waste material in some areas of the growth media may influence soil characteristics and vegetation establishment. These findings highlight opportunities to further refine rehabilitation practices and improve understanding of the interaction between growth media composition, groundcover establishment and long-term landform stability. Recommendations from the monitoring program include development of a gully remediation plan, continued assessment of erosion features using LiDAR and field inspections, optimisation of seed mixes to improve early groundcover establishment, and testing of topsoil stockpiles that have been stored for extended periods prior to use in rehabilitation. These actions will support ongoing adaptive management and continued progress towards the rehabilitation objectives and completion criteria.

## Outcomes of rehabilitation research and trials

| RRT NUMBER | PROJECT/TRIAL NAME                                | OBJECTIVE OF TRIAL/PROJECT                                                                                                                                                                              | METHODOLOGY                                                                                                                                                                                                                                                                                                                                                                                                    | EXPECTED DATE OF COMPLETION | STATUS     | ON TRACK? |
|------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------|-----------|
| RRT0001072 | <b>Growth Media Evaluation</b>                    | Analysis to confirm the adequacy of the were any limitations                                                                                                                                            | xx                                                                                                                                                                                                                                                                                                                                                                                                             | 31 Dec 2033                 | Superseded | Yes       |
| RRT0001071 | <b>Eucalypt Thinning Monitoring Program Trial</b> | To determine the baseline condition and any subsequent changes to biodiversity values within the BCM mine rehabilitation in response to the thinning trials (as per biodiversity audit recommendation). | Monitoring to evaluate the success of the thinning trials and/or identify potential failures to enable adaptive management of future thinning activities to occur within the mine rehabilitation areas.                                                                                                                                                                                                        | 31 Dec 2036                 | Ongoing    | Yes       |
| RRT0001073 | <b>Growth Media Evaluation (Full Detail)</b>      | To investigate the suitability of growth media utilised on mine rehabilitation and to determine any limitations requiring remediation.                                                                  | In early 2016, BCOP commissioned a preliminary evaluation of growth media within the 2008 to 2014 rehabilitation areas (Landloch, 2016). The assessment was conducted in accordance with the procedure detailed in the Soil Management Protocol (SMP). Samples were subject to soil surface descriptions, morphological descriptions, field tests and laboratory analysis. Recommendations from this work have | 31 Dec 2036                 | Ongoing    | Yes       |



been incorporated into the rehabilitation methodology implemented onsite.

|            |                                   |                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                            |             |         |     |
|------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------|-----|
| RRT0001069 | <b>Flora and Fauna Monitoring</b> | To collect baseline information (including from analogue sites beyond CL 368) to provide comparative data for assessment of the success of rehabilitation works. | As part of the ongoing biodiversity monitoring program for the BCM as described within the approved Biodiversity Management Plan, this monitoring of flora and fauna communities will be conducted within and beyond the surrounding Leard State Forest (including analogue sites beyond CL 368).                                                                                                          | 14 Dec 2036 | Ongoing | Yes |
| RRT0001070 | <b>Nest Box Management Plan</b>   | Installation of nest boxes in rehabilitation areas to provide suitable habitat for displaced fauna.                                                              | Further detail is described within the approved Biodiversity Management Plan. The total hollow numbers for rehabilitation areas are to match the estimated loss of hollows in the clearing area, with 50% of these to be installed within 10 years of rehabilitation age and all nest boxes are to be installed within 15 years of offset establishment. Each nest box will be monitored every five years. | 31 Dec 2036 | Ongoing | Yes |

Outcomes of completed trials and research

N/A

## Attachment 1 - Reporting Definitions

| REPORTING CATEGORY |                                                          | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A1</b>          | <b>Total disturbance footprint - surface disturbance</b> | <p>All areas within a mining lease that either have at some point in time or continue to pose a rehabilitation liability due to surface disturbance activities.</p> <p>The total disturbance footprint is the sum of the total active disturbance, decommissioning, landform establishment, growth medium development, ecosystem and land use establishment, ecosystem and land use development and rehabilitation completion (see definitions below).</p> <p>Underground mining operations should not include the footprint of underground mining areas/subsidence management areas in the total disturbance footprint.</p> |
| <b>A2</b>          | <b>Underground Mining Area</b>                           | Underground mining operations areas/subsidence management areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>B</b>           | <b>Total active disturbance</b>                          | Includes on-lease exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste rock emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped) and temporary stabilised areas (e.g. areas sown with temporary cover crops for dust mitigation and temporary rehabilitation).                                                                                                                                                      |
| <b>C</b>           | <b>Rehabilitation - land preparation</b>                 | Includes the sum of all disturbed land within a mining lease that have commenced any, or all, of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| REPORTING CATEGORY |                                             | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                             | <p>the following phases of rehabilitation - decommissioning, landform establishment and growth medium development.</p> <p>Refer to the glossary of terms in this document for the definition of these phases of rehabilitation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>D</b>           | <b>Ecosystem and land use establishment</b> | <p>Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites.</p> <p>Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.</p> |
| <b>E</b>           | <b>Ecosystem and Land Use Development</b>   | <p>Rehabilitation has matured to a level where target revegetation outcomes are on a trajectory towards meeting the final rehabilitation objectives and rehabilitation completion criteria (as verified by monitoring).</p> <p>This phase includes infrastructure areas that are to be retained for an approved post mining land use, following completion of all necessary measures to render the infrastructure fit for this purpose (for example structural integrity).</p>                                                                                                                                                                                             |

| REPORTING CATEGORY |                                                                    | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>F</b>           | <b>Rehabilitation Completion</b>                                   | The Resources Regulator has determined in writing that the mining area has achieved the approved rehabilitation objectives and approved rehabilitation completion criteria and final landform and rehabilitation plan following the submission of Form: <i>Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure</i> . |
| <b>G</b>           | <b>New active disturbance area</b>                                 | The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).                                                                                                                                                                                                                                                                    |
| <b>H</b>           | <b>New rehabilitation commenced during annual reporting period</b> | The sum of any new rehabilitation commenced in the annual reporting period. These areas may be in the rehabilitation land preparation phase or the ecosystem & land use establishment phase (definitions C and D in Table 5).                                                                                                                                                                  |
| <b>I</b>           | <b>Established rehabilitation (hectares)</b>                       | The total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5).                                                                                                                                                                                                                |
| <b>J</b>           | <b>Annual rehabilitation to disturbance ratio</b>                  | The rehabilitation to disturbance ratio (H/G) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the year. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that year are the same.                                                                                                                     |
| <b>K</b>           | <b>% Rehabilitated land to total mine footprint</b>                | The proportion of the total mine footprint (area of land that has been disturbed by past or present surface disturbance activities) that has established rehabilitation ( $I/A1 \times 100$ ). For open cut mining, the proportion of the total mine footprint verified to be "established rehabilitation" should substantially increase as an operation progresses towards mine closure.      |



| REPORTING CATEGORY |                                                                                      | DEFINITION                                                                                                                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| L                  | <b>Established rehabilitation for agricultural final land uses (hectares)</b>        | The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to an agricultural final land use.     |
| M                  | <b>Established rehabilitation for native ecosystem final land uses (hectares)</b>    | The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or rehabilitation completion phase (definitions E & F in Table 5) that have been returned to native ecosystem final land use.        |
| N                  | <b>Established rehabilitation for other/non-vegetated final land uses (hectares)</b> | The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to other/non-vegetated final land use. |

## Attachment 2 - Definitions

| WORD                                                    | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Active</b>                                           | In the context of rehabilitation, land associated with mining domains is considered 'active' for the period following disturbance until the commencement of rehabilitation.                                                                                                                                                                                                                                                                                                                   |
| <b>Active mining phase of rehabilitation</b>            | In the context of rehabilitation, the active mining phase of rehabilitation constitutes the rehabilitation activities undertaken during mining operations such as salvaging and managing soil resources, salvaging habitat resources, and native seed collection. This phase also includes management actions taken during operations to manage risks to rehabilitation and enhance rehabilitation outcomes such as selective handling of waste rock and management of tailings emplacements. |
| <b>Analogue site</b>                                    | In the context of rehabilitation, an analogue site is a 'reference site' that represents an example of the defining characteristics (such as vegetation composition and structure or agricultural productivity) of the final land use. Characteristics of analogue sites can be assessed to develop the rehabilitation objectives and completion criteria for final land use domains.                                                                                                         |
| <b>Annual rehabilitation report and forward program</b> | As described in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Annual reporting period</b>                          | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Closure</b>                                          | A whole-of-mine-life process, which typically culminates in the relinquishment of the mining lease. It includes decommissioning and rehabilitation to achieve the approved final land use(s).                                                                                                                                                                                                                                                                                                 |

| WORD                                           | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Decommissioning</b>                         | The process of removing mining infrastructure and removing contaminants and hazardous materials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Decommissioning Phase of Rehabilitation</b> | Activities associated with the removal of mining infrastructure and removal and/or remediation of contaminants and hazardous materials. In the context of the rehabilitation management plan this phase of rehabilitation may also include studies and assessments associated with decommissioning and demolition of infrastructure or works carried out to make safe or 'fit for purpose' built infrastructure to be retained for future use(s) following lease relinquishment.                                                                                            |
| <b>Department</b>                              | Department of Primary Industries and Regional Development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Disturbance</b>                             | See Surface Disturbance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Disturbance area</b>                        | <p>An area that has been disturbed and that requires rehabilitation.</p> <p>This may include areas such as on-licence exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped), and areas requiring rehabilitation that are temporarily stabilised (i.e. managed to minimise dust generation and/or erosion).</p> |
| <b>Domain</b>                                  | An area (or areas) of the land that has been disturbed by mining and has a specific operational use (mining domain) or specific final land use (final land use domain). Land within a domain typically has similar geochemical and/or geophysical characteristics and therefore requires specific rehabilitation                                                                                                                                                                                                                                                            |

| WORD                                          | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               | activities to achieve the associated final land use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Ecosystem and Land Use Development</b>     | <p>This phase of rehabilitation consists of the activities to manage maturing rehabilitation areas on a trajectory to achieving the approved rehabilitation objectives and completion criteria.</p> <p>For vegetated land uses this phase may include processes to develop characteristics of functional self-sustaining ecosystems, such as nutrient recycling, vegetation flowering and reproduction, and increasing habitat complexity, and development of a productive, self-sustaining soil profile.</p> <p>This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.</p> |
| <b>Ecosystem and Land Use Establishment</b>   | <p>This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform.</p> <p>For vegetated land uses this rehabilitation phase includes establishing the desired vegetation community and implementing land management activities such as weed control. This phase of rehabilitation may also include habitat augmentation such as installation of nest boxes.</p>                                                                                                                                                                                                                                               |
| <b>Exploration</b>                            | Has the same meaning as that term under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Final landform and rehabilitation plan</b> | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| WORD                             | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Final land use</b>            | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Form and way</b>              | Means the form and way approved by the Secretary. Approved form and way documents are available on the department's website.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Growth Medium Development</b> | <p>This phase of rehabilitation consists of activities required to establish the physical, chemical and biological components of the substrate required to establish the desired vegetation community (including short lived pioneer species).</p> <p>This phase may include spreading the prepared landform with topsoil and/or subsoil and/or soil substitutes, applying soil ameliorants to enhance the physical, chemical and biological characteristics of the growth media, and actions to minimise loss of growth media due to erosion.</p> |
| <b>Habitat</b>                   | Has the same meaning as that term under the Biodiversity Conservation Act 2016 and the Fisheries Management Act 1994 (as relevant).                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Indicator</b>                 | An attribute of the biophysical environment (e.g. pH, topsoil depth, biomass) that can be used to approximate the progression of a biophysical process. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion (i.e. defined end point). It may be aligned to an established protocol and used to evaluate changes in a system.                                                                                                                              |
| <b>Land</b>                      | As defined in the Mining Act 1992.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



| WORD                              | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landform Establishment</b>     | <p>This phase of rehabilitation consists of the processes and activities required to construct the final landform.</p> <p>In addition to profiling the surface of rehabilitation areas to the approved final landform profile this phase may include works to construct surface water drainage features, encapsulate problematic materials such as tailings, and prepare a substrate with the desired physical and chemical characteristics (e.g. rock raking or ameliorating sodic materials).</p>                                                                                                    |
| <b>Large mine</b>                 | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Lease holder</b>               | The holder of a mining lease.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Life of mine</b>               | The timeframe of how long a mine is approved to mine, from commencement to closure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Mine rehabilitation portal</b> | <p>Means the Resources Regulator's online portal that lease holders must use (via a registered account) to:</p> <ul style="list-style-type: none"> <li>▪ upload rehabilitation geographical information system (GIS) spatial data</li> <li>▪ develop rehabilitation GIS spatial data (using online tracing functions)</li> <li>▪ generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities.</li> </ul> <p>Data submitted to the mine rehabilitation portal is collated in a centralised geodatabase for use by</p> |

| WORD                            | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | the Resources Regulator to regulate rehabilitation performance of lease holders.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Mining area</b>              | As defined in the Mining Act 1992.                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Mining domain</b>            | A land management unit with a discrete operational function (e.g. overburden emplacement), and therefore similar geophysical characteristics, that will require specific rehabilitation treatments to achieve the final land use(s).                                                                                                                                                                                                      |
| <b>Mining land</b>              | As defined in the Mining Act 1992.                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Native vegetation</b>        | Has the same meaning as that term under section 60B of the Local Land Services Act 2013.                                                                                                                                                                                                                                                                                                                                                  |
| <b>Overburden</b>               | Material overlying coal or a mineral deposit.                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Performance indicator</b>    | An attribute of the biophysical environment (for example pH, slope, topsoil depth, biomass) that can be used to demonstrate achievement of a rehabilitation objective. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion, that is, a defined end point. It may be aligned to an established protocol and used to evaluate changes in a system. |
| <b>Phases of rehabilitation</b> | The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are:                                                                                                                                                                                                                                                                                              |

| WORD                                      | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           | <ul style="list-style-type: none"> <li>▪ active mining</li> <li>▪ decommissioning</li> <li>▪ landform Establishment</li> <li>▪ growth medium development</li> <li>▪ landform Establishment</li> <li>▪ ecosystem and land use establishment</li> <li>▪ ecosystem and land use development</li> </ul>                                                                                                                                                                                                          |
| <b>Progressive rehabilitation</b>         | The progress of rehabilitation towards achieving the approved rehabilitation completion criteria. This may be described in terms of domains, phases, performance indicators and rehabilitation completion criteria.                                                                                                                                                                                                                                                                                          |
| <b>Rehabilitation Completion</b>          | The final phase of rehabilitation when a rehabilitation area has achieved the approved rehabilitation objectives and rehabilitation completion criteria for the final land use. Rehabilitation areas may be classified as complete when the Resources Regulator has determined in writing that the relevant rehabilitation obligations have been fulfilled following submission of <i>Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate application</i> by the lease holder. |
| <b>Rehabilitation Completion criteria</b> | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Rehabilitation cost estimate</b>       | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| WORD                                  | DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rehabilitation management plan</b> | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Rehabilitation objectives</b>      | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Rehabilitation risk assessment</b> | As defined in the Mining Regulation 2016.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Rehabilitation schedule</b>        | The defined timeframes for progressive rehabilitation set out in the forward program.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Relevant stakeholders</b>          | <p>Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes:</p> <ul style="list-style-type: none"> <li>▪ the relevant development consent authority</li> <li>▪ the local council</li> <li>▪ the relevant landholder(s)</li> <li>▪ community consultative committee (if required under the development consent) or equivalent consultative group</li> <li>▪ affected land holder(s)</li> <li>▪ government agencies relevant to the final land use</li> <li>▪ affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities)</li> <li>▪ local Aboriginal communities, and</li> <li>▪ any other person or body determined by the Minister to be a relevant stakeholder in relation to</li> </ul> |

| WORD                       | DEFINITION                                                                                                                                                                                                                         |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | a mining lease.                                                                                                                                                                                                                    |
| <b>Risk</b>                | The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2009).                                                                                                           |
| <b>Secretary</b>           | The Secretary of the department.                                                                                                                                                                                                   |
| <b>Security deposit</b>    | An amount that a mining lease holder is required to provide and maintain under a mining lease condition, to secure funding for the fulfilment of obligations under the lease (including obligations that may arise in the future). |
| <b>Surface disturbance</b> | Includes activities that disturb the surface of the mining area, including mining operations, ancillary mining activities and exploration.                                                                                         |
| <b>Tailings</b>            | A combination of the fine-grained solid material remaining after the recoverable metals and minerals have been extracted from the mined ore, and any process water <sup>2</sup> .                                                  |
| <b>Waste</b>               | Has the same meaning as that term under the <i>Protection of the Environment Operations Act 1997</i> .                                                                                                                             |

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<sup>2</sup>Commonwealth of Australia (DITR), 2007. Tailings Management.



Attachment 3 - Rehabilitation Complaints

| DATE | COMPLAINANT | COMPLAINT DETAILS | RESPONSE DETAILS | STATUS OF RESPONSE | DATE RESPONSE COMPLETED (IF APPLICABLE) |
|------|-------------|-------------------|------------------|--------------------|-----------------------------------------|
|------|-------------|-------------------|------------------|--------------------|-----------------------------------------|

## Attachment 4 - Stakeholder consultation

| DATE        | STAKEHOLDER                            | CONSULTATION ACTIVITIES AND FORMS                          | MATTERS SUBJECT TO CONSULTATION                                                               | ACTIONS TAKEN                                                                      |
|-------------|----------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 13 Oct 2025 | Community Consultative Committee (CCC) | Email                                                      | The Rehabilitation Strategy was updated and provided to the CCC for consultation.             | Nil                                                                                |
| 14 Oct 2025 | Local Land Services                    | Email                                                      | The Rehabilitation Strategy was updated and provided to Local Land Services for consultation. | Nil                                                                                |
| 27 Oct 2022 | NSW Resources Regulator                | Phone discussions and Teams Meeting                        | Discussion in relation to the Spatial Data submission & issues with KPI data.                 | Resubmission of Spatial Data to revise KPI data for submission of Forward Program. |
| 13 Oct 2023 | NSW Resources Regulator                | Response via the NSW Resources Regulator's online portal   | Proposed rehabilitation objectives for BCM                                                    | NSW Resources Regulator provided approval of Rehabilitation Objectives             |
| 25 Nov 2022 | NSW Resources Regulators               | Submission via the NSW Resources Regulator's online portal | Spatial theme data to support the Final Landform and Rehabilitation Plan                      | NSW Resources Regulator to provide approval or feedback                            |
| 15 Mar 2023 | NSW Resources Regulator                | Submission via the NSW Resources Regulator's               | Proposed rehabilitation objectives for BCM                                                    | NSW Resources Regulator to provide approval or feedback                            |

|             |                         |                                                                                                                                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                  |
|-------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |                         | online portal                                                                                                                                                                                                                                                                 |                                                                          |                                                                                                                                                                                                                  |
| 6 Oct 2023  | NSW Resources Regulator | Submission via the NSW Resources Regulator's online portal                                                                                                                                                                                                                    | Proposed rehabilitation objectives for BCM                               | Updated in response to the comments provided 6 September 2023                                                                                                                                                    |
| 6 Sep 2023  | NSW Resources Regulator | Response via the NSW Resources Regulator's online portal                                                                                                                                                                                                                      | Proposed rehabilitation objectives for BCM                               | NSW Resources Regulator refused Objectives and provided comments                                                                                                                                                 |
| 30 Jul 2024 | NSW Resources Regulator | NSW Resources Regulator completed a Targeted Assessment Program (TAP) in relation to revegetation practices across the NSW mines. BCM was visited as part of this TAP to review the revegetation practices that are implemented and to identify areas of further improvement. | Mine revegetation practices that were implemented at BCM.                | BCOPL received written feedback following the completion of the revegetation TAP. BCOPL will report on the progress of the implementation of these recommendations during the 2025 Annual Rehabilitation Report. |
| 1 Feb 2023  | NSW Resources Regulator | Response from NSW Resources Regulator via the NSW Resources Regulator's online                                                                                                                                                                                                | Spatial theme data to support the Final Landform and Rehabilitation Plan | NSW Resources Regulator refused spatial theme data and provided comments                                                                                                                                         |

|             |                                                                                                      | portal                                                     |                                                                                                                                                                                                                             |                                                                                                                                                                               |
|-------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15 Mar 2023 | NSW Resources Regulator                                                                              | Submission via the NSW Resources Regulator's online portal | Spatial theme data to support the Final Landform and Rehabilitation Plan                                                                                                                                                    | Updated in response to the comments provided 1 February 2023                                                                                                                  |
| 29 Sep 2023 | NSW Resources Regulator                                                                              | Submission via the NSW Resources Regulator's online portal | Spatial theme data to support the Final Landform and Rehabilitation Plan                                                                                                                                                    | Updated in response to the comments provided 6 September 2023                                                                                                                 |
| 25 Sep 2025 | Community Consultative Committee (CCC)                                                               | Quarterly CCC Meeting                                      | An update was provided to the CCC on the site's latest rehabilitation activities.                                                                                                                                           | Nil                                                                                                                                                                           |
| 9 Oct 2025  | NSW DCCEEW Water Group, Resources Regulator, Forestry Corporation NSW, Narrabri Shire Council and Co | Project Portal                                             | The Rehabilitation Strategy was updated and submitted to the NSW Major Projects Portal for consultation.                                                                                                                    | Nil                                                                                                                                                                           |
| 20 Jan 2025 | NSW Resources Regulator                                                                              | Email – Post Site Inspection undertaken in 2024.           | A letter was received from the NSW RR outlining observations from the Revegetation – Targeted Assessment Program inspection undertaken on 30 July 2024 and providing recommendations for ongoing rehabilitation management. | Boggabri Coal was required to update the RMP and publish the approved version on its website by 31 March 2025. This requirement was completed within the specified timeframe. |

## Attachment 5 - Plans

Plan 1A attachment not provided.

Plan 1B attachment not provided.





## Department of Planning, Housing and Infrastructure

Reference: MP09\_0182-PA-113

Alexandra Williams  
Environment & Community Manager  
Boggabri Coal Pty Limited  
17/09/2026

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Sent via the Major Projects Portal only

Subject: Boggabri Coal Operations (**BCO**) - Annual Review 2025

Ms Williams

I refer to your Annual Review for the period 01 January 2025 to 31 December 2025, submitted as required by Schedule 5, Condition 4 of MP09\_0182 as modified (the approval) to the NSW Department of Planning, Housing and Infrastructure (**the Department**) on 27 March 2026.

The Department has reviewed the Annual Review and considers it to generally satisfy the reporting requirements of the approval and the Department's Annual Review Guideline (October 2015). Please make a copy of the 2025 Annual Review publicly available on the company's website.

However, under the provisions of Schedule 2, Condition 4 of the approval, I, as nominee of the Planning Secretary, require the following information to be included in future Annual Reviews:

1. Include a section outlining the steps BCO has undertaken to address the ongoing non-compliance with Schedule 3, Condition 40 - (the Leard Forest Mining Precinct Regional Biodiversity Strategy), including the current status of the strategy, details of consultation undertaken during the 2026 reporting period (including dates and parties consulted), and the proposed pathway and timeframe for completion.

Non-compliances identified in the Annual Review have been assessed by the Department in accordance with its Compliance Policy, with the Department on this occasion determining to record the breaches with no further enforcement action proposed. However, please note that recording the breach does not preclude the Department from taking an alternative enforcement action, should it become apparent that an alternative response is more appropriate.

Please note:

- The Department's acceptance of this Annual Review is not an endorsement of the compliance status of the project.
- Following submission of the 2025 Annual Review you are required to review and if necessary, revise the strategies, plans, and programs required under this approval, in accordance with Schedule 5, Condition 5 of the approval.

Should you wish to discuss the matter further, please contact Richard Hawker, Senior Compliance Officer on 0436 488 664 or email [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Department of Planning, Housing and Infrastructure

Yours sincerely

A handwritten signature in black ink, appearing to read "Sandria Butler".

Sandria Butler  
Team Leader - Central West  
Compliance

As nominee of the Planning Secretary