

# MT ARTHUR COAL INDEPENDENT ENVIRONMENTAL AUDIT 2017 PROPONENT'S RESPONSE

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20 April 2018



## Proponents Response to Recommendations

The Mt Arthur Coal Independent Environmental Audit 2017 ('the Audit') was completed in accordance with Schedule 5 Condition 9 of Project Approval 09\_0062.

Mt Arthur Coal accepts the Audit findings made by the audit team, led by Peter Horn from Jacobs Group Australia.

Issues resulting in non-compliances identified in the Audit and the responses provided by Mt Arthur Coal are provided in Table 1.

Recommendations resulting from the Audit and the responses provided by Mt Arthur Coal are provided in Table 2.

Recommendations from the 2014 Independent Environmental Audit that were recorded as Not Completed at the time of the 2017 audit and the responses provided by Mt Arthur Coal are provided in Table 3.

It is noted that the lead auditor's recommendations (incorporating recommendations made by the specialist auditors) were made following the site inspection component of the audit. Some of these recommendations relate to systems and practices that may have already been established (either in part or in full) that may not have been observed during the site inspection.

Note the following error in the audit report: Item 12 in Table 5 (Section 4.1) of the audit report states "Renewal of ML 1548 was not notified to landowners within 3 months of renewal". This should instead refer to ML 1358, which was renewed during the audit period and not notified to landowners within 3 months of renewal, not ML 1548. Subsequently Item 1 in Table 10 (Section 4.16) of the audit report is also incorrect. The 'Requirement', 'Issue' and 'Conditions and Commitments Found Not Compliant' wording in Table 1 below has been updated to ML 1358 accordingly.

The responses to audit issues that the site needs to address and recommendations have been categorised as:

- **Action assigned** – issue/recommendation accepted and indicative timeframe provided.
- **Action completed** – issue/recommendation has already been implemented since the audit site inspection.

- **No further action required** – 1) issue/recommendation relates to already established systems and practices that may not have been observed during the site inspection or 2) implementation of the issue/recommendation is not proposed for the reasons provided.

**Table 1: Issues (Non-compliances) and Proponent's Response**

| Audit Report Table 5 Item | Audit Report Reference   | Category | Requirement   | Issue   | Audit Finding                   | Conditions and Commitments Found Not Compliant | Mt Arthur Coal Response as at 20 April 2018  |
|---------------------------|--|----------|---|---|---------------------------------|--|--|
| 1                         | Section 4.1, Table 5 Item 1 (page 9) / Section 4.2, Table 6 Item 1 (page 12) | Noise    | The proponent shall:<br>(b) operate a comprehensive noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval. | A comprehensive system utilising meteorological monitoring and predictive forecasting for noise management was not in place at the time of the audit. | Not Compliant<br>Low Risk       | PA 09_0062<br>Sch.3 C8(b)                      | A system was under development during the audit and has since been finalised (August 2018). The Noise Management Plan is currently undergoing review. The new system will be implemented within one month of approval of the revised Noise Management Plan by DP&E.<br><br><b>Action assigned</b> (within one month of approval of NMP by DPE).                                    |
| 2                         | Section 4.1, Table 5 Item 2 (page 9) / Section 4.2, Table 6 Item 2 (page 12) | Noise    | The Proponent shall prepare and implement a Noise Management Plan for the Mt Arthur mine complex to the satisfaction of the Secretary. This plan must: ....   | Due to an administrative Non-compliance in the Noise Management Plan, DPE consider it not implemented.  | Not Compliant<br>Administrative | PA 09_0062<br>Sch. 3 C9                        | The Noise Management Plan is currently undergoing review. A revised NMP will be submitted to DP&E for approval by end of July 2018.<br><br><b>Action assigned</b> (completion by 31 July 2018).  |
| 3                         | Section 4.1, Table 5 Item 3 (page 9) / Section 4.2, Table 6 Item 2 (page 12) | Blasting | The Proponent shall prepare and implement a Blast Management Plan for the Mt Arthur mine complex to the satisfaction of the Secretary. This plan must: ....   | Due to an administrative Non-compliance in the PA and the Blast Management Plan, DPE consider it not implemented.                                     | Not compliant<br>Administrative | PA 09_0062<br>Sch. 3 C17                       | The Blast Management Plan is currently undergoing review. A revised BMP will be submitted to DP&E for approval by end of April 2018.<br><br><b>Action assigned</b> (completion by 30 April 2018).  |
| 4                         | Section 4.1, Table 5 Item 4 (page 9) / Section 4.2, Table 6 Item 4 (page 12) | Blasting | The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:<br>(d) include the requirement for Mt Arthur Coal to actively participate in Muswellbrook Council's online blasting portal.   | The Blast Management Plan does not include the requirement for active participation in Muswellbrook Council's online blasting portal.                 | Not Compliant<br>Administrative | PA 09_0062<br>Sch.3 C17(d)                     | The Blast Management Plan is currently undergoing review. This requirement will be included in the revised Plan (the practice is currently being conducted despite not being written in the Plan). It is expected that the review will be finalised and the Plan submitted to DP&E for approval by end of April 2018.<br><br><b>Action assigned</b> (completion by 30 April 2018). |

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| 5                         | Section 4.1, Table 5 Item 5 (page 9) / Section 4.2, Table 6 Item 5 (page 12)  | Air Quality  | The Proponent shall:<br>(g) co-ordinate air quality management at the Mt Arthur mine complex with air quality management at the Drayton, Mangoola and Bengalla mines to minimise cumulative air quality impacts, to the satisfaction of the Secretary  | The site was not able to demonstrate the coordination of air quality management with neighbouring mines Drayton, Mangoola and Bengalla. MAC is involved in the Upper Hunter Mining Dialogue. | Not Compliant<br>Low Risk       | PA 09_0062<br>Sch.3 C23(g)                     | Mt Arthur Coal believes its inclusion in the Upper Hunter Mining Dialogue satisfies the intent of this condition.<br><br>Data is also shared on an ad hoc basis for monitoring sites that aid in management of air quality as required.<br><br><b>No further action required.</b> |
| 6                         | Section 4.1, Table 5 Item 6 (page 10) / Section 4.2, Table 6 Item 6 (page 13) | Air Quality  | The Proponent shall prepare and implement an Air Quality Management Plan for the Mt Arthur mine complex to the Satisfaction of the Secretary. This plan must: ....   | Due to a Non-compliance in the Air Quality Management Plan, DPE consider it not implemented.   | Not Compliant<br>Low Risk       | PA 09_0062<br>Sch. 3 C24                       | Mt Arthur Coal will review and update the Air Quality and Greenhouse Gas Management Plan by the end of July 2018.<br><br><b>Action assigned</b> (AQMP to be updated by 31 July 2018).   |
| 7                         | Section 4.1, Table 5 Item 7 (page 10) / Section 4.2, Table 6 Item 7 (page 13) | Water        | The Proponent shall prepare and implement a Water Management Plan for the Mt Arthur mine complex to the satisfaction of the Secretary. This plan must: ....  | Due to a Non-compliance in the Water Management Plan, DPE consider it not implemented  | Not Compliant<br>Low Risk       | PA 09_0062<br>Sch. 3 C29                       | A system will be developed to record all required reviews of management plans listed in PA 09_0062.<br><br><b>Action assigned</b> (completion by 31 July 2018).   |
| 8                         | Section 4.1, Table 5 Item 8 (page 9) / Section 4.2, Table 6 Item 8 (page 12)  | Biodiversity | The Proponent shall make suitable arrangements to provide appropriate long term security for the:<br>(a) biodiversity offset areas by 31 March 2015, unless otherwise agreed with the Secretary; and<br>(b) re-established woodland in the Rehabilitation Area at least 2 years prior to the completion of open cut mining activities associated with the project,<br>to the satisfaction of the Secretary and, with respect to the Thomas Mitchell Drive off-site offset area identified in Table 13 above, consult with Council. | There was no evidence of consultation with Muswellbrook Council with regard to the Thomas Mitchell Drive offset area (offsite).  | Not Compliant<br>Administrative | PA 09_0062<br>Sch.3 C39                        | Mt Arthur Coal will advise Muswellbrook Shire Council in writing that the Conservation Agreement has already been registered on title.<br><br><b>Action assigned</b> (completion by 31 May 2018).   |

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| 9                         | Section 4.1, Table 5 Item 9 (page 10) / Section 4.2, Table 6 Item 9 (page 13)  | Biodiversity | The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must: ...   | Due to an administrative Non-compliance in the Biodiversity Management Plan, DP&E consider it not implemented.  | Not Compliant Administrative | PA 09_0062 Sch. 3 C40                          | Mt Arthur Coal will review and update the Biodiversity Management Plan and submit to DP&E for approval by end of July 2018.<br><br><b>Action assigned</b> (Biodiversity MP to be updated by 31 July 2018).   |
| 10                        | Section 4.1, Table 5 Item 10 (page 9) / Section 4.2, Table 6 Item 10 (page 12) | Biodiversity | The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must: (c) include:<br>...<br>(iii) a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:<br>...<br>• rehabilitating creeks and drainage lines that occur on the site, both inside and outside the disturbance areas (such as the White's Creek Diversion), to ensure no net loss of aquatic habitat;<br>...<br>• landscaping the site and along public roads (including Thomas Mitchell Drive, Denman Road, Edderton Road and Roxburgh Road) to minimise visual and lighting impacts;<br>...<br>(iv) a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;<br>(v) a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and<br>(vi) details of who would be responsible for monitoring, reviewing, and implementing the plan. | The Biodiversity Management Plan does not include:<br>1) Details for targeted rehabilitation efforts in creeks and drainage lines.<br>2) Detail on the proposed landscaping associated with public roads. | Not Compliant Administrative | PA 09_0062 Sch.3 C40(c)                        | The Biodiversity Management Plan will be updated to address all requirements from PA 09_0062 Sch.3 C40(c) iii, iv, v and vi. It is expected that the review will be finalised and the Plan submitted to DP&E for approval by 31 July 2018.<br><br><b>Action assigned</b> (completion by 31 July 2018). |

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| 11                        | Section 4.1, Table 5 Item 11 (page 10) / Section 4.2, Table 6 Item 11 (page 15) | Biodiversity        | The calculation of the Conservation Bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.<br>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.<br>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works. | There was no evidence of lodgement of the Conservation Bond.   | Not Compliant<br>Medium Risk    | PA 09_0062<br>Schedule 3<br>C41(b)             | Evidence of the lodging of the bond was submitted to the auditor after the audit (bond submitted and accepted at DP&E on 15 January 2018).<br><br><b>No further action required.</b>  |
| 12                        | Section 4.1, Table 5 Item 12 (page 10) / Section 4.2, Table 6 Item 12 (page 15) | Aboriginal heritage | The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must: ...   | Due to an administrative Non-compliance in the Aboriginal Heritage Management Plan, DPE consider it not implemented. | Not Compliant<br>Administrative | PA 09_0062<br>Schedule 3<br>Condition 45       | A system will be developed to record all required reviews of management plans listed in PA 09_0062.<br><br><b>Action assigned</b> (completion by 31 July 2018).   |
| 13                        | Section 4.1, Table 5 Item 13 (page 10) / Section 4.2, Table 6 Item 13 (page 15) | Reviews and updates | The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. The strategy must: ....   | Due to an administrative Non-compliance in the Environmental Management Strategy, DPE consider it not implemented.   | Not Compliant<br>Administrative | PA 09_0062<br>Schedule 5<br>Condition 1        | The Environmental Management Strategy will be revised within one month of approval of the revised Air Quality & GHG, Noise and Blast Management Plans by DP&E.<br><br><b>Action assigned</b> (completion within one month of approval of revised Air Quality& GHG, Noise and Blast Management Plans by DP&E). |
| 14                        | Section 4.1, Table 5 Item 14 (page 10) / Section 4.2, Table 6 Item 14           | Groundwater         | The Proponent shall immediately notify the Secretary and any other relevant agencies of any 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.   | A groundwater incident was not reported within 7 days of notifying DP&E.   | Not Compliant<br>Administrative | PA 09_0062<br>Sch.5 C7                         | The incident noted was notified on 16 February 2017 and investigation reported on 24 February 2017, so within 8 days. Mt Arthur Coal currently makes every effort to comply with this requirement and does not consider   |

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|                           | (page 14) / Section 4.37, Table 21 Item 2 (page 27)                            |             | An investigation report would be submitted to DP&E and any other relevant department (within 7 days of the incident). If the investigation report recommends further detailed investigations these would be conducted in consultation with DP&E and any other relevant department (further detailed investigation timeframe to be determined with DP&E and relevant departments).                         |   | Not Compliant Administrative | Surface Water and Groundwater Response Plan S2.1 | any further action is required to ensure this commitment is met.<br><br><b>No further action required.</b>   |
| 15                        | Section 4.1, Table 5 Item 15 (page 10) / Section 4.4, Table 7 Item 1 (page 16) | Blasting    | To determine compliance with conditions L6.2 and L6.3:<br>a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 7, 8, 9 and 10 for the parameters specified in Column 1 of the table below; and<br>b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns. | Not all blast monitoring was captured.  | Not Compliant Medium Risk    | EPL 11457 M9                                     | One blast was not captured by a single location in the monitoring network on 12 November 2014 due to the monitor being taken offline for non-routine maintenance and a miscommunication of the blasting schedule with the blast monitoring contractor.<br><br>The incident was reported to the EPA in the relevant Annual Return.<br><br>To prevent a recurrence of the non-compliance changes were made to internal protocols to ensure the blast monitoring contractor has access to the updated blast schedule and can communicate with operations via a hand held radio during calibration and maintenance work.<br><br><b>No further action required.</b> |
| 16                        | Section 4.1, Table 5 Item 16 (page 10) / Section 4.7, Table 8 Items 1          | Groundwater | The licence holder must develop and implement a methodology to estimate the annual volume of all groundwater inflow (water budget), approved by the Office of Water. Water budgets must be set and approved one month prior to the beginning of each water year to enable implementation.   | There was no evidence of the approval of flow metering devices by NSW Office of Water (or DPI Water). | Not Compliant Low Risk       | Water Licence 20BL171995 C2                      | Further investigation into this groundwater licence condition and Mt Arthur Coal's compliance with it will be undertaken. The Office of Water will be notified of the outcomes of the investigation and any specific actions/due dates that come out of it.  |



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|                           | and 5 (page 17) / Section 4.8, Table 9 Item 1 (page 18)                        |             | <p>An extraction measurement device must be installed and maintained on each extraction device (pump) used for extraction of water under this licence, and such devices must be of a type and standard, and must be maintained in a manner, which is acceptable to the Office of Water.</p> <p>The licensee shall install to the satisfaction of NSW Office of Water in respect of location, type and construction an appliance(s) to measure the quantity of water extracted from the works. The appliance(s) to consist of either a measuring weir or weirs with automatic recorder, or meter or meters of the dethridge type, or such other class of meter or means of measurement as may be approved by NSW Office of Water. The appliance(s) shall be maintained in good working order and condition. A record of all water extracted from the works shall be kept and supplied to the department upon request. The licensee when requested must supply a test certificate as to the accuracy of the appliance(s) furnished either by the manufacturer or by some person duly qualified.</p> |   | <p>Not Compliant Administrative</p> <p>Not Compliant Administrative</p> | <p>Water Licence 20BL171995 C8</p> <p>Water Licence 20BL168155 C7</p> | <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |
| 17                        | Section 4.1, Table 5 Item 17 (page 10) / Section 4.7, Table 8 Item 2 (page 17) | Groundwater | The licence holder must provide the Office of Water with a map of the licenced site showing areas of alluvial sediments interfered by the mine works. Note: (If there is no interference with alluvial sediments a map is not required to be provided).   | There was no evidence of the provision of maps or plans showing the location of works associated with water licences. | Not Compliant Administrative  | Water Licence 20BL171995 C3   | <p>Further investigation into this groundwater licence condition and Mt Arthur Coal's compliance with it will be undertaken. The Office of Water will be notified of the outcomes of the investigation and any specific actions/due dates that come out of it.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p> |

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| 18                        | Section 4.1, Table 5 Item 18 (page 10) / Section 4.7, Table 8 Item 3 (page 17)   | Groundwater | The licence holder must provide the Office of Water with a Management Plan, within six months of issuing the licence, to identify measures to be used to minimise ongoing seepage of alluvial groundwater to the mine works and for restoring the mine works above the final water level for when the pits are no longer being used, to be approved by the Office of Water.   | Not all documents developed by the site to address the requirement to minimise ongoing seepage of alluvial groundwater to the mine works were approved by the NSW Office of Water (or DPI Water), specifically the MOP. | Not Compliant Administrative | Water Licence 20BL171995 C5                    | Further investigation into this groundwater licence condition and Mt Arthur Coal's compliance with it will be undertaken. The Office of Water will be notified of the outcomes of the investigation and any specific actions/due dates that come out of it.<br><br><b>Action assigned</b> (completion by 31 July 2018).  |
| 19                        | Section 4.1, Table 5 Item 19 (page 10) / Section 4.7, Table 8 Item 4 (page 17)   | Groundwater | The licence holder must provide the Office of Water with an annual compliance report, to report on the results of the groundwater monitoring and contingency plan, within (3) three months of the end of the water year being reported on.  | Water licence compliance reports were not submitted.  | Not Compliant Medium Risk    | Water Licence 20BL171995 C7                    | Further investigation into this groundwater licence condition and Mt Arthur Coal's compliance with it will be undertaken. The Office of Water will be notified of the outcomes of the investigation and any specific actions/due dates that come out of it.<br><br><b>Action assigned</b> (completion by 31 July 2018).  |
| 20                        | Section 4.1, Table 5 Item 20 (page 10) / Section 4.16, Table 10 Item 1 (page 19) | Land Tenure | <p>Within a period of three months from the date of this authority or a period of three months from the date of service of the notice of renewal, or within such further time as the Director-General may allow the lease holder shall serve on each owner and occupier of the private land and on each occupier of the Crown land held under a pastoral lease within the subject area a notice in writing indicating that this authority has been granted or renewed and whether the authority includes the surface. The notice shall be accompanied by an adequate plan and description of the subject area.</p> <p>If there are ten or more owners or occupiers affected the lease holder may serve the notice by publication in a newspaper circulating in the region where the subject area is situated. The notice shall indicate that this authority has been granted or renewed, state whether the authority includes the surface and shall contain an adequate plan and description of the subject area.</p> | Renewal of ML 1358 was not notified to landowners within 3 months of renewal.   | Not Compliant Low Risk       | ML 1358 C46                                    | Landholder notification requirements associated with mining lease conditions are now managed and monitored within the LandAssist tenement management system. A system generated reminder is now sent to the person responsible for landholder notifications following lease renewal, to prevent reoccurrence of this non-compliance.<br><br><b>No further action required.</b> |

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| 21                        | Section 4.1, Table 5 Item 21 (page 10) / Section 4.21, Table 11 Item 1 (page 20) | Land Tenure | a) The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting.<br>b) ....<br>f) A Compliance Report must be submitted one month prior to the expiry of this mining lease, where the licence holder is not seeking to renew or cancel this mining lease. | The Annual Compliance Report for ML 263 was submitted late.   | Not Compliant Administrative | ML 263 C4                                      | Reporting requirements associated with mining lease conditions are now managed and monitored within the LandAssist tenement management system. A system generated reminder is now sent to the person responsible for preparing and submitting the Annual Compliance Report to prevent reoccurrence of this non-compliance.<br><br><b>No further action required.</b>   |
| 22                        | Section 4.1, Table 5 Item 22 (page 11) / Section 4.22, Table 12 Item 1 (page 20) | Air Quality | Maintain unsealed coal handling areas in a moist condition using water carts or alternative means to minimise wind-blown and traffic generated dust.   | The ROM pad was excessively dusty at the time of the site inspection.   | Not Compliant Medium Risk    | AQGGMP S3.1                                    | The site inspection was undertaken on 20 September 2017. There were no exceedances of air quality impact assessment criteria recorded and no evidence of dust leaving site on 20 September, hence dust management controls applied were considered adequate by Mt Arthur Coal.<br><br><b>No further action required.</b>   |
| 23                        | Section 4.1, Table 5 Item 23 (page 11) / Section 4.22, Table 12 Item 2 (page 22) | Air Quality | Minor roads used regularly for access will be watered using water carts or sprays to minimise the generation of dust and particulate.  | A minor road beside Edderton Road was being used by large (not light) vehicles and was excessively dusty at the time of the site inspection. It was not adequately watered at the time of the inspection. | Not Compliant Medium Risk    | AQGGMP S3.1                                    | The site inspection was undertaken on 20 September 2017. Seven water carts were operational across the mine site on this day. Although a water cart was not specifically observed on this minor road at the time of the site inspection by the audit team, dust controls on haul roads and minor roads across site were being applied on the day and no dust was observed leaving the site, hence dust management controls were considered adequate by Mt Arthur Coal.<br><br><b>No further action required.</b> |

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| 24                        | Section 4.1, Table 5 Item 24 (page 11) / Section 4.22, Table 12 Item 3 (page 21) | Air Quality | The Annual Return for EPL 11457 will include an air quality monitoring report covering the following items relating to air quality: <ul style="list-style-type: none"> <li>• Any exceedance of air quality performance criteria;</li> <li>• The cause of the air quality exceedance;</li> <li>• Mitigation measures implemented to minimise or prevent dust;</li> <li>• The air quality monitoring results at each air quality monitoring station; and</li> <li>• An explanation for any missing air quality monitoring results.</li> </ul> | Evidence was not provided of the submission of an air quality report with the EPL 11457 Annual return. | Not Compliant Administrative | AQGGMP S5                                      | <p>No specific air quality monitoring report is required by the EPA to be submitted with the Annual Return. Any exceedances or non-compliances are detailed in the Annual Return forms.</p> <p>The Air Quality and Greenhouse Gas Management Plan is currently undergoing review. This requirement will be removed to align with EPL 11457 requirements in the revised Plan. It is expected that the review will be finalised and the Plan submitted to DP&amp;E for approval by end of July 2018.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p> |
| 25                        | Section 4.1, Table 5 Item 25 (page 11) / Section 4.24, Table 13 Item 2 (page 21) | Blasting    | This document will be audited every 2 years by the Drill and Blast Superintendent (Production Planning), and if necessary for the following reasons: <ul style="list-style-type: none"> <li>• Following significant incidents at Mt Arthur Coal relating to blast fume;</li> <li>• Following the conduct of an independent environmental audit which requires changes to the Blast Fume Management Plan;</li> <li>• If there is a relevant change in technology or legislation.</li> </ul>  | No evidence of the audit of the Blast Management Plan (every 3 years) in the audit period.             | Not Compliant Administrative | BMP App 5 S8                                   | <p>The Blast Management Plan, including Appendix 5 Blast Fume Management Plan, is currently undergoing review. It is expected that the review will be finalised and the Plan submitted to DP&amp;E for approval by end of April 2018. The plan will be implemented within one month of approval by BP&amp;E.</p> <p><b>Action assigned</b> (Plan submitted to DP&amp;E by 30 April 2018).</p>  |

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| 26                        | Section 4.1, Table 5 Item 26 (page 11) / Section 4.24, Table 13 Item 1 (page 21) | Blasting            | All contractors engaged in undertaking any drill and blast tasks onsite are required to understand and follow this management plan. The Mt Arthur Coal representative managing the contractors must ensure that this management plan is adhered to and a copy of this plan is available to all contractor personal at all times.  | Contractors engaged in undertaking drill and blast tasks at MAC are required to understand and follow the Blast Management Plan but no evidence of this was able to be provided.      | Not Compliant<br>Low Risk       | BMP App 5 S7                                   | <p>Within one month of approval of the revised Blast Management Plan by DP&amp;E a communication will be rolled out to all relevant drill and blast contractors to make everyone aware of the Plan and requirements that need to be followed.</p> <p><b>Action assigned</b> (all drill and blast personnel/contractors to be informed of current BMP by 31 May 2018; with further communication within one month of revised BMP being approved by DP&amp;E).</p> |
| 27                        | Section 4.1, Table 5 Item 27 (page 11) / Section 4.26, Table 14 Item 1 (page 22) | Reviews and Updates | Procedures specific to the Environmental Management Strategy.   | The EMS needs to be updated as it quotes procedures that were no longer used and could not be found.  | Not Compliant<br>Administrative | EMS Table 2                                    | <p>The Environmental Management Strategy will be revised within one month of approval of the revised Air Quality, Noise and Blast Management Plans by DP&amp;E.</p> <p><b>Action assigned</b> (completion within one month of approval of revised Air Quality, Noise and Blast Management Plans by DP&amp;E).</p>  |
| 28                        | Section 4.1, Table 5 Item 28 (page 11) / Section 4.28, Table 15 Item 1 (page 22) | Aboriginal Heritage | The TMDOA is to be fenced with access procedures for the offset area to be developed by Mt Arthur Coal in consultation with Indigenous Stakeholders including opening hours and supervision of third parties.   | The Thomas Mitchell Drive offset area has been fenced in accordance with the AHMP but the access protocols were not determined through consultation with the Indigenous Stakeholders. | Not Compliant<br>Administrative | AHMP S5.1                                      | <p>Mt Arthur Coal will consult with Indigenous Stakeholders regarding opening hours and supervision of third parties accessing the TMD Offsite Offset Area and document the outcomes of the consultation process.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |
| 29                        | Section 4.1, Table 5 Item 29 (page 11) / Section 4.28, Table 15 Item 2 (page 23) | Aboriginal Heritage | Ground disturbance processes, aboriginal cultural heritage processes and the importance of complying to procedures and standards set at Mt Arthur Coal are all covered in site induction packages, and will be refreshed on an as needs basis. In particular, remaining on formed tracks, and the process to be followed in order to create new disturbance will be included in induction and training processes. | The commitments from Section 5.8 of the AHMP are not followed through in the site induction package.  | Not Compliant<br>Administrative | AHMP S5.8                                      | <p>Mt Arthur Coal will update the site induction package accordingly.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |

| Audit Report Table 5 Item | Audit Report Reference   | Category            | Requirement   | Issue   | Audit Finding                | Conditions and Commitments Found Not Compliant | Mt Arthur Coal Response as at 20 April 2018  |
|---------------------------|--|---------------------|---|---|------------------------------|--|--|
| 30                        | Section 4.1, Table 5 Item 30 (page 11) / Section 4.28, Table 15 Item 3 (page 23) | Aboriginal Heritage | <p>This AHMP will be reviewed and if necessary revised to the satisfaction of the Director-General (and relevant government authorities and Aboriginal community) in accordance with Condition 4 of Schedule 5 of the Project Approval:</p> <ul style="list-style-type: none"> <li>• within 3 months of the submission of an: <ul style="list-style-type: none"> <li>- annual review under Condition 3, Schedule 5 of the Project Approval;</li> <li>- incident report under Condition 7, Schedule 5 of the Project Approval;</li> <li>- Independent Environmental Audit report under Condition 9, Schedule 5 of the Project Approval;</li> <li>- Modification to the conditions of the Project Approval.</li> </ul> </li> <li>• Following significant incidents at Mt Arthur Coal relating to Aboriginal Cultural Heritage;</li> <li>• In response to a relevant change in technology or legislation; or</li> <li>• Where a risk assessment identifies the requirement to alter the plan.</li> </ul> | The audit team were not able to determine whether all reviews required by Section 7 of the AHMP had been completed. | Not Compliant Administrative | AHMP S7.0                                      | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>   |
| 31                        | Section 4.1, Table 5 Item 31 (page 11) / Section 4.28, Table 15 Item 4 (page 23) | Aboriginal Heritage | Draft site specific management plans for both onsite conservation areas as well as the offset area, need to be developed. These plans will cover conservation and management of both the cultural heritage as well as ecological and biodiversity values of the areas. Provision of facilities in the offset area for either teaching purposes and/or recreational purposes will also be considered as part of the offset plan.   | The offset management plans do not refer to Cultural Heritage issues.   | Not Compliant Administrative | AHMP App 4                                     | <p>The Aboriginal Heritage Management Plan will be reviewed and revised by Mt Arthur Coal, in particular to ensure compliance with PA 09_0062 Sch.3 C45. It is expected that the review will be finalised and the Plan submitted to DP&amp;E for approval by end of July 2018. If the review of the AHMP determines the Biodiversity Management Plan needs to be amended to include conservation and management of cultural heritage values then this review will occur as required.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p> |

| Audit Report Table 5 Item | Audit Report Reference   | Category          | Requirement  | Issue   | Audit Finding                | Conditions and Commitments Found Not Compliant | Mt Arthur Coal Response as at 20 April 2018   |
|---------------------------|--|-------------------|--|---|------------------------------|--|---|
| 32                        | Section 4.1, Table 5 Item 31 (page 11) / Section 4.29, Table 16 Item 1 (page 24) | European Heritage | <p>This European Heritage Management Plan will be reviewed, and if necessary revised to the satisfaction of the Director-General (in consultation with relevant government agencies) in accordance with Condition 4 of Schedule 5 of the Project Approval:</p> <ul style="list-style-type: none"> <li>• within 3 months of the submission of an: <ul style="list-style-type: none"> <li>- annual review under Condition 3, Schedule 5 of the Project Approval;</li> <li>- incident report under Condition 7, Schedule 5 of the Project Approval;</li> <li>- Independent Environmental Audit report under Condition 9, Schedule 5 of the Project Approval;</li> <li>- Modification to the conditions of the Project Approval.</li> </ul> </li> <li>• When there are changes to project approval or licence conditions relating to European heritage;</li> <li>• Following significant incidents at Mt Arthur Coal relating to European heritage;</li> <li>• Following the conduct of an independent environmental audit which requires changes to the European Heritage Management Plan; or</li> <li>• If there is a relevant change in technology or legislation.</li> </ul> | It was not able to be established if all the required reviews of the European Heritage Management plan had taken place. | Not Compliant Administrative | EHMP S6  | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |
| 33                        | Section 4.1, Table 5 Item 33 (page 11) / Section 4.31, Table 17 Item 1 (page 25) | Groundwater       | This monitoring program is reviewed annually as a minimum. Any required amendments identified during the review will be updated in a revision of the program and submitted to Department of Planning and Environment for approval.   | Evidence of an annual review of the Groundwater Monitoring Program was not able to be provided.                         | Not Compliant Administrative | GMP S1.2                                       | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p>The Interim Monitoring Program of the upgraded monitoring network concluded on 31 January 2018. An assessment and analysis of interim monitoring program data is currently in progress in order to determine if a sufficient reference dataset has been collected to revise and set new groundwater triggers. The Groundwater Management Plan will be revised and once finalised, submitted to DP&amp;E for approval.</p> <p><b>Action assigned</b> (submission of GMP by 31 May 2018).</p> |

| Audit Report Table 5 Item | Audit Report Reference   | Category | Requirement   | Issue   | Audit Finding                | Conditions and Commitments Found Not Compliant | Mt Arthur Coal Response as at 20 April 2018  |
|---------------------------|--|----------|---|---|------------------------------|--|--|
| 34                        | Section 4.1, Table 5 Item 34 (page 11) / Section 4.32, Table 18 Item 1 (page 23) / Section 4.45, Table 26 Item 2 (page 30) | Noise    | <p>This NMP and associated monitoring plan will be reviewed, and if necessary revised to the satisfaction of the Director-General (in consultation with relevant government agencies) in accordance with Condition 4 of Schedule 5 of the Project Approval:</p> <ul style="list-style-type: none"> <li>• within 3 months of the submission of an: <ul style="list-style-type: none"> <li>- annual review under Condition 3, Schedule 5 of the Project Approval;</li> <li>- incident report under Condition 7, Schedule 5 of the Project Approval;</li> <li>- Independent Environmental Audit report under Condition 9, Schedule 5 of the Project Approval;</li> <li>- Modification to the conditions of the Project Approval.</li> </ul> </li> <li>• When there are changes to project approval or licence conditions relating to noise management or monitoring;</li> <li>• Following significant incidents at Mt Arthur Coal relating to noise;</li> <li>• Following the conduct of an independent environmental audit which requires changes to the Noise Management Plan or to the Noise monitoring practices; or</li> <li>• If there is a relevant change in technology or legislation.</li> </ul> | The audit team were not able to verify that all of the required reviews of the NMP had taken place. | Not Compliant Administrative | NMP S9.2                                       | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p>The Noise Management Plan is currently undergoing review. Noise management commitments made in the EA 2013 will be assessed and included if necessary during this review. It is expected that the review will be finalised and the Plan submitted to DP&amp;E for approval by 31 July 2018.</p> <p><b>Action assigned</b> (NMP to be submitted to DP&amp;E by 31 July 2018).</p> |
|                           |  |          | HVEC would review the existing Noise Management Plan for the site to incorporate the following additional practical management measures which may be implemented as required to ensure predictions at private receivers are met: <ul style="list-style-type: none"> <li>• procurement of noise attenuated vehicles for critical haul routes;</li> <li>• modified alignment of haul routes for day and night scenarios;</li> <li>• dumping of overburden in less noise-sensitive locations during night-time, then using daytime overburden placement to increase barrier heights in the vicinity of the night-time dumping locations; and</li> <li>• use of bulldozers on overburden emplacements in less noise-sensitive locations during the night-time.</li> </ul>   |   | Not Compliant Administrative | EA 2013 S4.10.3                                |  |



| Audit Report Table 5 Item | Audit Report Reference   | Category                    | Requirement   | Issue   | Audit Finding                   | Conditions and Commitments Found Not Compliant    | Mt Arthur Coal Response as at 20 April 2018   |
|---------------------------|--|-----------------------------|---|---|---------------------------------|---|---|
| 35                        | Section 4.1, Table 5 Item 35 (page 11) / Section 4.35, Table 19 Item 1 (page 26) | Surface Water               | The model will be reviewed every two years and, if required, updated to reflect operational or water management changes.  | The site water balance requires updating and has not been updated since 2012.                                 | Not Compliant<br>Low Risk       | Site Water Balance S2.2.2                         | <p>The site water balance model was recently updated and a calibration completed in January 2018. The corresponding Site Water Balance management document will be updated accordingly. It is expected that the update will be finalised and the Plan submitted to DP&amp;E for approval by end of July 2018.</p> <p><b>Action assigned</b> (Plan submitted to DP&amp;E by 31 July 2018).</p> |
| 36                        | Section 4.1, Table 5 Item 36 (page 11) / Section 4.36, Table 20 Item 1 (page 26) | Surface Water               | <p>This WMP will be reviewed and if necessary revised to the satisfaction of the Director-General (and relevant government authorities) in accordance with Condition 4 of Schedule 5 of the Project Approval:</p> <ul style="list-style-type: none"> <li>• within 3 months of the submission of an: <ul style="list-style-type: none"> <li>- annual review under Condition 3, Schedule 5 of the Project Approval;</li> <li>- incident report under Condition 7, Schedule 5 of the Project Approval;</li> <li>- Independent Environmental Audit report under Condition 9, Schedule 5 of the Project Approval;</li> <li>- Modification to the conditions of the Project Approval.</li> </ul> </li> <li>• where there is a significant change in the Project water balance surplus/deficit;</li> <li>• where there are necessary or any unforeseen changes to water quality monitoring locations;</li> <li>• in response to a relevant change in technology or legislation; or</li> <li>• Where a risk assessment identifies the requirement to alter the plan.</li> </ul> | The audit team were not able to verify that all of the required reviews of the WMP had taken place.           | Not Compliant<br>Administrative | Site WMP S10                                      | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |
| 37                        | Section 4.1, Table 5 Item 37 (page 11) / Section 4.37, Table 21 Item 1 (page 27) | Surface Water / Groundwater | This management plan is reviewed annually as a minimum. Any required amendments identified during the review will be updated in a revision of the program and submitted to Department of Planning and Environment for approval.   | Evidence of the annual review of the Surface Water and Groundwater Response Plan was not able to be provided. | Not Compliant<br>Administrative | Surface Water and Ground Water Response Plan S1.2 | <p>A system will be developed to record all required reviews of management plans listed in PA 09_0062.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>  |

| Audit Report Table 5 Item | Audit Report Reference   | Category      | Requirement   | Issue  | Audit Finding                | Conditions and Commitments Found Not Compliant               | Mt Arthur Coal Response as at 20 April 2018   |
|---------------------------|--|---------------|---|--|------------------------------|--|---|
| 38                        | Section 4.1, Table 5 Item 38 (page 11) / Section 4.38, Table 22 Item 1 (page 27)   | Surface Water | This monitoring program is reviewed annually as a minimum. Any required amendments identified during the review will be updated in a revision of the program and submitted to Department of Planning and Environment for approval.  | Evidence of the annual review of the Surface Water Monitoring Program was not able to be provided. | Not Compliant Administrative | Surface WMP S1.2   | A system will be developed to record all required reviews of management plans listed in PA 09_0062.<br><br><b>Action assigned</b> (completion by 31 July 2018).   |
| 39                        | Section 4.1, Table 5 Item 39 (page 12) / Section 4.40, Table 23 Item 1 (page 28)   | Biodiversity  | The BMP (and associated OMP's) will be reviewed annually or as otherwise directed by DoE or the Secretary of DP&E. Reviews of the BMP will reflect any changes in the environmental procedures and requirements of the Project, advances in current technology or best practice methods, operational procedures or mine planning and regulatory requirements. This review will also take into account any relevant new threatened species listings. Updated versions of the approved plan will be made publicly available via the internet at: <a href="http://www.bhpbilliton.com/home/society/regulatory/Pages/default.aspx">http://www.bhpbilliton.com/home/society/regulatory/Pages/default.aspx</a> ;  | Evidence of the annual review of the Biodiversity MP was not able to be provided.                  | Not Compliant Administrative | Biodiversity MP S11  | A system will be developed to record all required reviews of management plans listed in PA 09_0062.<br><br>The Biodiversity MP was reviewed and submitted to Government on 29 June 2017. The Plan currently has State Government approval and is awaiting Federal Government approval.<br><br><b>Action assigned</b> (implementation of Management Plan within one month of approval of Biodiversity MP by DoEE). |
| 40                        | Section 4.1, Table 5 Item 40 (page 12) / Section 4.41, Table 24 Item 1 (page 28) / Section 4.42, Table 25 Item 1 (page 29) | Biodiversity  | As part of the adaptive management process, this OMP will be reviewed at least every three years. However, a review of the OMP may be required prior to this timing in the event of any significant changes to the implementation schedule or methodology as identified from the monitoring program. Reviews of the OMP will reflect any changes in the priority revegetation/regeneration areas that may arise due unforeseen land management issues that affect the ability of Mt Arthur Coal to implement the proposed revegetation/regeneration works. Any significant revisions that alter the scope or intent of this document will be submitted for approval by the relevant regulatory authority. The review process will be conducted in accordance with the requirements of relevant government agencies. | Evidence of review of the offset strategies was not able to be provided.                           | Not Compliant Administrative | Onsite and Near Offsite Offset Management Program S7         | During the 29 June 2017 review of the Biodiversity MP it was decided that the OMPs were not needed. The intent of the OMPs is now incorporated into the revised Biodiversity MP, which currently has State Government approval and is awaiting Federal Government approval.<br><br><b>No further action required.</b>   |
|                           |  |               |   |  | Not Compliant Administrative | Offset Management Program - Middle Deep Creek Offset Area S7 |   |

| Audit Report Table 5 Item | Audit Report Reference   | Category            | Requirement   | Issue  | Audit Finding                | Conditions and Commitments Found Not Compliant | Mt Arthur Coal Response as at 20 April 2018  |
|---------------------------|--|---------------------|---|--|------------------------------|--|--|
| 41                        | Section 4.1, Table 5 Item 41 (page 12) / Section 4.45, Table 26 Item 1 (page 30) | Aboriginal Heritage | The existing <i>Aboriginal Heritage Management Plan</i> would be updated in consultation with the Aboriginal community and the OEH to specify management and mitigation measures relevant to the Modification area. | The Aboriginal Heritage Management Plan should have been updated in consultation with the Aboriginal community and the OEH to specify management and mitigation measures relevant to the 2013 Modification area. | Not Compliant Administrative | EA 2013 S4.7.3                                 | The Aboriginal Heritage Management Plan will be reviewed and revised by Mt Arthur Coal, in consultation with OEH, the Aboriginal community, MSC and relevant landowners. It is expected that the review will be finalised and the Plan submitted to DP&E for approval by 31 July 2018.<br><br><b>Action assigned</b> (completion by 31 July 2018). |

**Table 2: Recommendations and Proponent's Response**

| Line item | Audit Report Reference        | Category    | Recommendation   | Mt Arthur Coal Response as at 20 April 2018   |
|-----------|-------------------------------|-------------|--|---|
| 1         | Section 8.1, Item 1 (page 42) | Blasting    | Update Blast Management Plan to:<br>a) Include the requirement for Mt Arthur Coal to actively participate in Muswellbrook Council's online blasting portal.<br>b) Incident reports are submitted to the EPA. The management plan should be updated to include reference to the correct department.   | See Table 1 – Line Item 4.<br>a) The Blast Management Plan is currently undergoing review. This amendment will be included in the revised Plan. It is expected that the review will be finalised and the Plan submitted to DP&E for approval by end of April 2018.<br><br><b>Action assigned</b> (completion by 30 April 2018).   |
| 2         | Section 8.2, Item 1 (page 42) | Air Quality | The Air quality and Greenhouse Gas Management Plan currently references that the six-monthly Spontaneous Combustion Reports were to be submitted to OEH. These reports are submitted to the EPA and the management plan should be updated to include reference to the correct department.  | The Air Quality and Greenhouse Gas Management Plan is currently undergoing review. This amendment will be included in the revised Plan. It is expected that the review will be finalised and the Plan submitted to DP&E for approval by end of July 2018.<br><br><b>Action assigned</b> (completion by 31 July 2018).   |
| 3         | Section 8.2, Item 2 (page 42) | Air Quality | More regular communication of the management measures in the Air Quality and Greenhouse Gas Management Plan is necessary. An annual (minimum frequency) toolbox talk or similar communication to mining operators is recommended to provide reminders to supervisors and operators of the expectations for managing air quality, as per the Air Quality and Greenhouse Gas Management Plan.  | The Air Quality and Greenhouse Gas Management Plan is included in the site induction required for entry to Mt Arthur Coal. Dust related communications are also sent out following dust events based on risk. An annual toolbox talk will be provided to mining operators as a reminder of the expectations for managing air quality, as per the Air Quality and Greenhouse Gas Management Plan.<br><br><b>Action assigned</b> (annual toolbox talk by end of December 2018). |
| 4         | Section 8.2, Item 3 (page 42) | Air Quality | Re-handling of coal at the ROM pad by front-end-loader to truck is one of the most significant sources of visible dust. Water cannons and a water cart were noted as management measures. These measures were not being used on the day of the site inspection. The visible dust was not observed to be leaving site on the day of the inspection however, on less favourable days, the emissions from this activity will likely contribute to off-site air quality. More focus should be placed on minimising emissions from this activity. | See Table 1 – Line Item 22.   |

| Line item | Audit Report Reference        | Category       | Recommendation  | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|-------------------------------|----------------|---|--|
| 5         | Section 8.2, Item 4 (page 42) | Air Quality    | Exceedances of air quality criteria, as measured by monitors, are currently reported in the AEMR\AR. All exceedances are investigated in order to quantify the site contribution to each measured result. The process for this upwind-downwind analysis could be more clearly explained in the AEMR. In addition, an exceedance of the 24-hour average PM10 concentration criteria was measured on 15 November 2014. The explanations for this exceedance were inconsistent. That is, the exceedance was reportedly due to both a "localised source" and a "regional source". The AEMR\AR would benefit from more detail on the process for determining site contributions to the measured results. | <p>Mt Arthur Coal's response to exceedances of air quality impact assessment criteria are defined within the Air Quality and Greenhouse Gas Management Plan. All exceedances will be reported in the AEMR.</p> <p><b>Action assigned</b> (all exceedances of air quality criteria to be reported in the AEMR).</p>   |
| 6         | Section 8.2, Item 5 (page 42) | Air Quality    | Air quality management needs constant attention to ensure the site applies air quality mitigating mechanisms to operations. Any identified areas of innovation or improvement should be considered.   | <p>Mt Arthur Coal are included within the Upper Hunter Mining Dialogue which has a core intent to network and share innovations in environmental management. Mt Arthur Coal considers itself at the forefront of air quality management. Mt Arthur Coal is a leader within the BHP Environment Network where air quality management strategies are shared globally. Mt Arthur Coal is always open to sharing and identification of improvement ideas. Mt Arthur Coal will review and update the Air Quality and Greenhouse Gas Management Plan by the end of July 2018 and will incorporate any identified areas of innovation or improvement.</p> <p><b>Action assigned</b> (AQMP to be updated by 31 July 2018).</p> |
| 7         | Section 8.3, Item 1 (page 42) | Rehabilitation | Undertake a current soil balance of known stockpiled material, and areas yet to be rehabilitated, keeping in mind adequate depths to ensure targeted land capability classes are achieved. If soil resources are deficient to meet rehabilitation needs, consider salvaging subsoil material for use as an intermediate layer between overburden and topsoil.   | <p>Topsoil volumes at Mt Arthur Coal are currently accounted for in the Life of Asset plan, which will be provided to DP&amp;E for information.</p> <p><b>Action assigned</b> (Life of Asset Plan to be provided to DP&amp;E by 31 July 2018).</p>   |
| 8         | Section 8.3, Item 2 (page 42) | Rehabilitation | Continue pre strip assessment ahead of mining and maintain records of results to allow soil balance calculations to be updated annually.  | <p>A pre-strip assessment of topsoil quality and depth is currently undertaken ahead of mining at Mt Arthur Coal, generally as part of the Permit to Disturb process. The Mining Operations Plan and Life of Asset plans maintain the balance year on year.</p> <p><b>No further action required.</b></p>  |
| 9         | Section 8.3, Item 3 (page 42) | Rehabilitation | Consideration of potential areas for soil stockpiling, closer to final landform rehabilitation, is required.  | <p>Locations for soil stockpiles are currently selected based on a number of factors, including proximity to upcoming rehabilitation areas as proposed in the Mining Operations Plan.</p> <p><b>No further action required.</b></p>  |
| 10        | Section 8.3, Item 4 (page 43) | Rehabilitation | Figure 4 of the Rehabilitation Strategy should be updated to reflect the modified post mining land capability to be in line with final landform contours.   | <p>This is a progressive process as the Closure Team update the contours for all of site. There is a planned update for June 2018 (business as usual), which will update most of the contours on Figure 4; this will be provided to DP&amp;E for approval.</p> <p><b>Action assigned</b> (completion by 31 June 2018).</p>   |

| Line item | Audit Report Reference        | Category       | Recommendation  | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|-------------------------------|----------------|---|--|
| 11        | Section 8.3, Item 5 (page 43) | Rehabilitation | Ensure areas designated Land Capability Class IV and V are able to be cultivated occasionally without significant impedance from rock lined drainage lines.   | <p>Only small areas within Land Capability Class IV and V land contain rock lined drainage lines. These can easily be avoided for cultivation and do not provide significant impedance to standard agricultural equipment.</p> <p><b>No further action required.</b></p>   |
| 12        | Section 8.3, Item 6 (page 43) | Rehabilitation | It is understood that majority of practices are documented and the current Environmental Manager is providing a changeover summary to the incoming personnel. It is recommended that all issues relating to rehabilitation are documented regularly even in diary form for similar change management in the future. | <p>Key information relating to rehabilitation is documented in public reports such as the Annual Environmental Management Report (AEMR) as well as internal documents such as Rehabilitation Completion monitoring forms (required by MAC-ENC-PRO-080 Rehabilitation and Ecological Monitoring Procedure), which are used to record details such as rehabilitation methodology and seed mix used for each discrete area of rehabilitation undertaken. There is currently no Environmental Manager role in the organisational structure at Mt Arthur Coal, however information is passed between the HSE Superintendent and the Specialist Environments as required when there is a change in personnel or responsibilities on site.</p> <p><b>No further action required.</b></p>  |
| 13        | Section 8.3, Item 7 (page 43) | Rehabilitation | Continue to undertake regular maintenance, repairs and enhancement of rehabilitation areas as per current practice.   | <p>Regular maintenance, repairs and enhancement of rehabilitation areas is currently being undertaken at Mt Arthur Coal.</p> <p><b>No further action required.</b></p>   |
| 14        | Section 8.3, Item 8 (page 43) | Rehabilitation | Repair the observed erosion on and re-seed.   | <p>The audit report notes that 'some areas were observed on the rehabilitation which required repair such as sheet erosion...'. The report does not specify where the erosion was observed on site. MAC will liaise with the Auditor to determine the location of the erosion and will implement actions to repair the erosion.</p> <p>The Landform Stability monitoring program, required by MAC-ENC-PRO-080 Rehabilitation and Ecological Monitoring Procedure, involves inspections of all rehabilitation areas each year by Mt Arthur Coal personnel to identify any maintenance or repair requirements, such as those noted above by the audit team. The results of this monitoring program will continue to be used to determine and schedule repair works to rehabilitation across the site as required. In addition, an inspection is required post rainfall event (&gt;25mm in 24hrs) of newly established rehab with less than 70% ground cover. An inspection of this nature occurred on 7 March 2018. Rilling on the VD5 rehab was noted. Works are currently scheduled to occur at this location in approximately July this year, to reseed the rehabilitation of VD5, at which time any erosion will be rectified.</p> <p>Refer also below in relation to Audit Report Reference Section 8.4, Item 5 (page 41): Mt Arthur Coal will discontinue the current monthly inspections of the sediment dams undertaken by the Environment Team and instead increase the frequency of the six monthly detailed inspections to quarterly. Inspections will continue to be undertaken by the Environment Team following rainfall events.</p> <p><b>Action assigned</b> (completion by 30 August 2018).</p> |

| Line item | Audit Report Reference         | Category       | Recommendation   | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|--------------------------------|----------------|--|--|
| 15        | Section 8.3, Item 9 (page 43)  | Rehabilitation | Ensure adequate budget is obtained each year to account for the annual increase in rehabilitation area.  | <p>Budget for rehabilitation each year for the operation is justified based on the new rehabilitation proposed in the Mining Operations Plan as well as results of inspections of previous rehabilitation areas during the previous financial year that identified any maintenance or repair requirements (primarily based on the Landform Stability monitoring program required by MAC-ENC-PRO-080 Rehabilitation and Ecological Monitoring Procedure).</p> <p><b>No further action required.</b></p>   |
| 16        | Section 8.3, Item 10 (page 43) | Rehabilitation | Continue training of operators in final dumping requirements to ensure efficiencies in final push are achieved. Also ensure suitable equipment is installed and operating in targeted machinery to ensure this process is continued.         | <p>All operators at Mt Arthur Coal are competent and authorised to operate the equipment they are assigned to. Landform designs are provided by the Mine Planning Team for execution by the Operational Team.</p> <p><b>No further action required.</b></p>  |
| 17        | Section 8.3, Item 11 (page 43) | Rehabilitation | Continue with trialling slight variations in seed mix to reduce the tree seeds and incorporate a higher rate of native grasses and understorey species.  | <p>Mt Arthur Coal continues to remain at the forefront of mine site rehabilitation processes by networking within the Upper Hunter Mining Dialogue. This is inclusive but not limited to seed mix trials. MAC will include a brief statement on the seed mix in the AEMR.</p> <p><b>Action assigned</b> (completion by AEMR reporting deadline).</p>   |
| 18        | Section 8.3, Item 12 (page 43) | Rehabilitation | Investigate the possibility of sourcing tags under the NSW Commercial Kangaroo Harvest Management Plan. Also continue with the current rabbit control program on site, however direct a portion of this program to new rehabilitation areas. | <p>A kangaroo harvest at Mt Arthur Coal will be investigated, including a justification for the program, a management plan, required risk assessments, etc. Pending documentation signoff by the relevant managers at the operation, a kangaroo harvest will be undertaken in 2018.</p> <p><b>Action assigned</b> (by 31 Dec 2018).</p> <p>A rabbit control program across problem areas of site, including new and old rehabilitation areas, is planned to be undertaken in May/June 2018 in conjunction with the wild dog baiting program for the financial year.</p> <p><b>Action assigned</b> (by 31 July 2018).</p> |
| 19        | Section 8.3, Item 13 (page 43) | Rehabilitation | Mid slope water storages for wildlife should be included in the Geofluv woodland design and implemented in future rehabilitation.  | <p>Mid slope water storages are currently being included in Geofluv design at Mt Arthur Coal. Figure 11 of the Rehabilitation Strategy gives an indication of water storages across planned rehabilitation.</p> <p><b>No further action required.</b></p>  |
| 20        | Section 8.3, Item 14 (page 43) | Rehabilitation | Ensure site specific walk throughs and inspections occur prior to making maintenance or supplementary planting recommendations in existing rehabilitation areas.   | <p>Site specific walk throughs and inspections are currently undertaken prior to making maintenance or supplementary planting recommendations in existing rehabilitation areas at Mt Arthur Coal.</p> <p><b>No further action required.</b></p>  |
| 21        | Section 8.3, Item 15 (page 43) | Rehabilitation | The Rehabilitation Strategy should be updated to confirm the proposed final land use.  | <p>Final land use is shown in Figure 4 (box gum woodland, native woodland and pasture) and is described in Sections 3.8 and 3.9 of the Rehabilitation Strategy. The land use is set by Project Approval 09_0062 dated 26 September 2014.</p> <p><b>No further action required.</b></p>   |

| Line item | Audit Report Reference        | Category      | Recommendation  | Mt Arthur Coal Response as at 20 April 2018   |
|-----------|-------------------------------|---------------|---|---|
| 22        | Section 8.4, Item 1 (page 43) | Surface Water | The rating curve for the stream cross-section at SWGS1 was not reviewed in the audit period or in the 2013-14 AEMR reporting year. As such it will be due in 2018.  | <p>The Surface Water Monitoring Program (MAC-ENC-PRO-061) requires that the rating curve for the stream cross-section at SWGS1 be reviewed every five years. The SWGS1 gauging station was installed in FY13, hence the rating curve is scheduled for review in FY18.</p> <p><b>Action assigned</b> (completion by 31 July 2018).</p>   |
| 23        | Section 8.4, Item 2 (page 43) | Surface Water | The Site Water Balance should be reviewed and updated every 2 years.  | See Table 1 – Line Item 35.   |
| 24        | Section 8.4, Item 3 (page 43) | Surface Water | Operational changes, increases to areas, additional water demands and the removal of some storage structures should be incorporated into the Site Water Balance.  | See Table 1 – Line Item 35.   |
| 25        | Section 8.4, Item 4 (page 43) | Surface Water | Active reclaiming supernatant from the tailings dam.  | <p>Mt Arthur Coal currently undertakes passive reclamation of supernatant from the tailings dam via seepage intercepted at Drayton Void.</p> <p>The infrastructure to enable direct active reclamation of supernatant from the tailings dam will be installed with Stage 2 of the dam, which is currently scheduled for completion by February 2019.</p> <p><b>No further action required.</b></p>  |
| 26        | Section 8.4, Item 5 (page 43) | Surface Water | Surface water inspections should be conducted to fully comply with Blue Book requirements ( <i>Managing urban stormwater: soils and construction, Volumes 1 and 2E, Landcom 2004 and 2008</i> ). A focus on the risk of failure of control structures and erosion and associated sediment build-up is required. | <p>Currently six monthly detailed inspections are undertaken of the sediment dams listed in Mt Arthur Coal's Erosion and Sediment Control Plan by the Geotechnical Team. This inspection template is in accordance with requirements in the Blue Book. Monthly inspections are also currently undertaken by the Environment Team, not in a template in accordance with requirements in the Blue Book. Mt Arthur Coal will discontinue the current monthly inspections undertaken by the Environment Team and instead increase the frequency of the six monthly detailed inspections to quarterly. Inspections will continue to be undertaken by the Environment Team following rainfall events.</p> <p><b>Action completed</b> (March 2018).</p> <p>The ESCP will be revised and submitted with the updated WMP. DP&amp;E have requested that the revised management plans for review will be submitted sequentially to avoid overloading the reviewers.</p> <p><b>Action assigned</b> (completion of WMP review DP&amp;E dependent).</p> |

| Line item | Audit Report Reference        | Category      | Recommendation   | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|-------------------------------|---------------|--|--|
| 27        | Section 8.4, Item 6 (page 44) | Surface Water | Identify areas of dispersive soils within the surface water management structures and natural waterways in catchments captured by the site and execute a strategy to stabilize with treatment and capping layers with non-dispersive soils. This could reduce the likelihood of sediment laden water entering receiving water ways by erosion and scouring within the channel. | <p>Mt Arthur Coal's Permit to Disturb approval process includes high risk surface water catchment mapping, where special consideration is made for offsite catchment areas including ground stabilisation (topsoil and seeding).</p> <p>Areas prone to erosion with exposed dispersive soils are focused in freshly established rehabilitation areas. These areas undergo annual landform stability assessments as per Rehabilitation and Ecological Monitoring Procedure (MAC-ENC-PRO-080). Plans for improvements to soil amelioration as per the response to DRG will be developed during the next reporting period, following a more detailed sampling and independent advice. Plans include the more detailed assessments of soil characteristics to target ameliorants and investigation of the use of temporary stabilisation of freshly established rehabilitation whilst ground cover establishes.</p> <p>Update of the MAC Erosion and Sediment Control Plan (MAC-ENC-PRO-060) is scheduled to be completed as part of the MAC Water Management Plan, however, this is dependent on review and approval of other management plans. This update will provide a more detailed inspection process and remedial actions for dispersive soils.</p> <p><b>Action assigned</b> (completion of WMP review DP&amp;E dependent).</p> |
| 28        | Section 8.4, Item 7 (page 44) | Surface Water | Regular review of the adequacy of erosion measures and include the evaluation of the catchment areas contributing to both erosion and sediment control measures.   | <p>Review of the adequacy of erosion measures has previously been undertaken by the operation. Regular review is triggered by review of the Erosion and Sediment Control Plan (ESCP) as per PA 09_0062 Sch.5 C4. Assessment of catchment areas is also triggered if a new area is disturbed in a high risk surface water catchment area under the Permit to Disturb process. The ESCP will be included in the system that is to be developed to record all required reviews of Management Plans listed in PA 09_0062; Refer to Line Item 25 in Table 1.</p> <p><b>Action assigned</b> (ESCP to be included in system to be developed to record all required reviews of Management Plans (by 31 July 2018)).</p>  |
| 29        | Section 8.5, Item 1 (page 44) | Groundwater   | Resolve land access agreements (or lack thereof), notably BCGW05, BCGW10, BCGW11, and BCGW15 or seek approval to remove them from the Groundwater Monitoring Program.  | <p>A final attempt to resolve land access agreement issues with the relevant landholder for groundwater sites BCGW05, BCGW10, BCGW11 and BCGW15 will be made by Mt Arthur Coal. If no agreement can be settled on then Mt Arthur Coal will seek approval to remove these from the Groundwater Monitoring Program in the next revision, following completion of the interim monitoring program. An assessment and analysis of interim monitoring program data has commenced in order to determine if a sufficient reference dataset has been collected to revise and set new groundwater triggers. The Groundwater Management Plan will be revised and once finalised, submitted to DP&amp;E for approval.</p> <p><b>Action assigned</b> (31 May 2018).</p>   |



| Line item | Audit Report Reference        | Category     | Recommendation   | Mt Arthur Coal Response as at 20 April 2018   |
|-----------|-------------------------------|--------------|--|---|
| 30        | Section 8.5, Item 2 (page 44) | Groundwater  | Improve monitoring and reporting with respect to groundwater inflows into mining operations to ensure due diligence for groundwater licencing.   | See Table 1 – Items 16 to 19.   |
| 31        | Section 8.5, Item 3 (page 44) | Groundwater  | A register of water licences relevant to the mining operation at MAC and the corresponding water take vs the licenced water take should be presented in the AEMR (Annual Review).  | A register of water licences relevant to the mining operation at Mt Arthur Coal and the corresponding water take versus the licenced water take will be summarised in the AEMR.<br><b>Action assigned</b> (by 30 September 2018).   |
| 32        | Section 8.6, Item 1 (page 44) | Biodiversity | Translocation of Tiger Orchids ( <i>Cymbidium canaliculatum</i> ) and Pine Donkey Orchids ( <i>Diuris tricolor</i> ) has not commenced at Mt Arthur. The lead auditor notes that Mangoola Mine has been trialling relocation of Tiger Orchids and translocation and propagation of Pine Donkey Orchids. It would be sensible for MAC to contact Mangoola to explore the sharing of information on the two species to allow the MAC translocation program to adopt lessons learned in trials elsewhere. | Mt Arthur Coal will contact Mangoola to share learnings with regards to successful methods for translocation of Tiger Orchids ( <i>Cymbidium canaliculatum</i> ) and Pine Donkey Orchids ( <i>Diuris tricolor</i> ).<br><b>Action assigned</b> (by 31 December 2018).   |
| 33        | Section 8.6, Item 2 (page 44) | Biodiversity | Finalise Conservation Agreements for offset areas to assist in meeting objectives of various management plans.   | All six Conservation Agreements for offset areas were registered on certificate of title by 30 December 2017, as required.<br><b>No further action required.</b>  |
| 34        | Section 8.6, Item 3 (page 44) | Biodiversity | Update Biodiversity Management Plan to include activities proposed for landscaping on local roads.   | See Table 1 – Item 10.  |
| 35        | Section 8.6, Item 4 (page 44) | Biodiversity | Update Section 6.6 of the Biodiversity Management Plan to align with Geofluc modelling for landforms on the rehabilitation areas.  | See Table 1 – Item 10.  |
| 36        | Section 8.6, Item 5 (page 44) | Biodiversity | Annual reporting of weed work should aim to provide an assessment of the effectiveness of previous control in the reporting period, in order to inform and adapt future weeds works where required.  | Mt Arthur Coal will continue to assess the effectiveness of weed control work across site on a year to year basis. This information will be included in the AEMR and will be used to inform future control works.<br><b>Action assigned</b> (by 30 September 2018).   |
| 37        | Section 8.7, Item 1 (page 44) | Visual       | Completion of the tree planting along the boundary adjacent to Denman Road to reduce the potential for motorists to view the active mining areas. Where the tree plantings have already been carried out, ongoing monitoring should be carried out to confirm that they are establishing.  | A project has been initiated to plant additional trees along the boundary adjacent to Denman Road. This is targeted for completion by the end of July 2018. The project includes irrigation and fencing to deter predation.<br><b>Action assigned</b> (by 31 July 2018).  |
| 38        | Section 8.7, Item 2 (page 44) | Visual       | As the mining operations advance south and west, views of the mining operations will be possible at residential dwellings that currently do not have views of the operations. It is recommended that early engagement with these landowners is carried out to provide them with information regarding the views of the site they are likely to experience to minimise the potential for miscommunication and uncertainty.  | Engagement with landholders to the south and west of the operation will be undertaken in the future as required, as operations advance. The timeframe for completion of this work is variable, based on expansion of the operation, so no specific action has been assigned. Business as usual engagement will be undertaken as required.<br><b>No further action required.</b> |

| Line item | Audit Report Reference        | Category            | Recommendation   | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|-------------------------------|---------------------|--|--|
| 39        | Section 8.8, Item 1 (page 44) | Community           | Clearly identify the complaints line telephone number on the BHP Billiton Mt Arthur Coal website to make it easier for the public to find.   | The Mt Arthur Coal Community Response Line (1800 882 044) will be included in the monthly Community Complaints summary, located on the Mt Arthur Coal regulatory website at: <a href="https://www.bhp.com/environment/regulatory-information">https://www.bhp.com/environment/regulatory-information</a> .<br><br><b>Action assigned</b> (by end of March 2018). |
| 40        | Section 8.9, Item 1 (page 45) | Reviews and Updates | Reviews of Management Plans and associated Monitoring Programs should be kept in a central location. Where a review is conducted but the document is not updated, a record should be kept as evidence of the review. | See Table 1 – Items 7, 12, 30, 32, 33, 34, 36, 37, 38, 39.   |
| 41        | Section 8.9, Item 2 (page 45) | Reviews and Updates | The EMS should be updated as the procedures detailed in the EMS are no longer used on site.  | See Table 1 – Item 27.   |

**Table 3: Recommendations from the 2014 Independent Environmental Audit and Proponent's Response**

| Line item | Audit Report Reference | Category               | Recommendation  | Mt Arthur Coal Response as at 20 April 2018  |
|-----------|------------------------|------------------------|---|--|
| 42        | Section 8.10, Item 1   | Previous Audit Actions | <u>Recommendation from 2014 IEA:</u> Consult with DWE regarding the geomorphological studies required to allow the reinstatement of creeks that are to be mined through then commission studies. <u>Notes from 2017 IEA:</u> The consultation with DWE has not occurred though efforts on the proponents' part was provided as evidence (6-09-16). The area has been mined through (maps in the 2014 AEMR dates 24-07-14), actions completed were discussed in the audit and found adequate. They included actions completed to attempt a meeting with DPI Water, and action plan to cover off onthedata loss and the intent to use the Geofluc modelling to ensure the area retains a natural catchment similar to the historic catchment. A <i>Fluvial Geomorphology Baseline Study</i> (Engeny Water Management, 2016) was provided as evidence of intent. | <b>No further action required.</b>   |
| 43        | Section 8.10, Item 2   | Previous Audit Actions | <u>Recommendation from 2014 IEA:</u> Consult with DWE regarding the upper reaches of Fairford Creek and establish a method for reinstating that creeks upper reaches without a geomorphological study. <u>Notes from 2017 IEA:</u> This consultation has not been conducted though evidence of attempts to consult were provided. DWE does not exist. Suggest this be completed as part of the MOP process where the catchment design for the area that was Fairford Creek upper reaches is approved by DRE, DP&E and probably DPI Water.   | The requirement to reinstate the creek in consultation with the DPI Water will be covered in the Closure Plan, the update of which is scheduled for January 2019, aligning with the planning cycle.<br><br><b>Action assigned</b> (31 January 2019). |