## DOCUMENT CONTROL

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<td>31 May 2013</td>
<td>Carly McCormack</td>
<td>Gary Mulhearn</td>
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<td></td>
<td>30 January 2015</td>
<td>Jack Potter</td>
<td>Gary Mulhearn</td>
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<td></td>
<td>27 April 2017</td>
<td>Gary Mulhearn</td>
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<td>22 June 2018</td>
<td>Carly McCormack</td>
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<td>Howard Reed</td>
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APPENDIX C  STAGE 3 PROJECT APPROVAL 08_0111 (MOD 3) CONSOLIDATED CONSENT
APPENDIX D  ENVIRONMENTAL MONITORING PROGRAM
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1 INTRODUCTION

Austar Coal Mine Pty Ltd (Austar), a subsidiary of Yancoal Australia Limited (Yancoal), operates the Austar Coal Mine, an underground coal mine located approximately 10 kilometres southwest of Cessnock in the Lower Hunter Valley in NSW (refer to Figure 1). The Austar Coal Mine incorporates the former Pelton, Ellalong, Cessnock No. 1 (Kalingo) and Bellbird South Collieries and includes coal extraction, handling, processing and rail and road transport facilities (refer to Figure 1).

The Austar Coal Mine Environmental Management Strategy (EMS) has been prepared in accordance with the requirements of Project Approval PA08_0111 and Development Consent DA29/95.

PA08_0111 was granted under section 75J of the Environmental Planning and Assessment Act 1979 (EP&A Act) on 6 September 2009, and was most recently modified under section 75W of the EP&A Act in December 2013. PA08_0111 relates primarily to the Stage 3 mining area. DA29/95 was granted under section 91 of the Environmental Planning and Assessment Act (EP&A Act) on 14 February 1996, and was most recently modified under section 75W of the EP&A Act on 25 August 2017. DA29/95 relates primarily to the Bellbird South mining area and operations.

The EMS takes into consideration the commitments stated in the Environmental Assessment, Environmental Impact Statement, Statement of Environmental Effects, various development consent conditions and license conditions. In addition, commitments outlined in Austar Coal Mine’s environmental policy are also taken into account.
2 PURPOSE OF THE EMS

The purpose of the EMS is to:

- satisfy the relevant conditions under NSW Development Consent DA29/95 (as modified) and NSW Project Approval (08_0111) (as modified);
- provide an overall framework for environmental management;
- identify key environmental aspects to be addressed in the strategy and supporting plans and procedures;
- establish procedures for reviewing progress and implementing corrective actions; and
- provide a framework for review and continual improvement.

The EMS establishes an environmental management framework for all mining and surface activities. It includes the development and management of environmental management plans, procedures and reporting requirements.
3 ENVIRONMENTAL MANAGEMENT STRATEGY OUTLINE

This document outlines the Environmental Management Strategy for Austar including organisational responsibilities, planning activities, procedures, processes, implementation and review. It is an integral component of the overall environmental management system for the Austar Mine Complex.

The subordinate plans and policies have been developed in consultation with relevant government agencies and departments, and are updated as required. Where relevant, some plans may address the requirements of both DA29/95 and PA08_0111, and the approval of the Secretary is sought under both DA29/95 and PA08_0111 for those plans. The general relationship of the EMS with other plans is shown in Figure 1.

Copies of the various strategies, plans and programs required under the conditions of DA29/95 and PA08_0111 have been included within this EMS as follows:

- Appendix D – Consolidated Environmental Monitoring Program;
- Appendix E – Landscape Management Plan;
- Appendix F – Site Water Management Plan;
- Appendix G – Noise and Vibration Management Plan;
- Appendix H – Air Quality and Greenhouse Gas Management Plan;
- Appendix I – Aboriginal Cultural Heritage Management Plan; and

Extraction Plans, while part of the EMS structure, are provided as separate volumes of this EMS, rather than as Appendices as follows:

- Volume 2 of the EMS - The Austar Coal Mine Longwalls A7-A10 Extraction Plan;
- Volume 3 of the EMS - The Austar Coal Mine Longwalls B1-B3 Extraction Plan;
- Volume 4 of the EMS - The Austar Coal Mine Longwalls B4-B7 Extraction Plan.

A Shaft Construction Environmental Management Plan was prepared to manage impacts from construction activities at the Kitchener SIS under PA08_0111 (as required by Condition 1, Schedule 4 of PA08_0111). Shaft construction activities referred to in that plan were completed in 2013 and as such the Shaft Construction Environmental Management Plan is no longer applicable. Management of environmental aspects at the Kitchener SIS have been incorporated into the relevant management plans listed above.
Figure 1  Environmental Management Strategy and Relationship with Other Plans
4 ENVIRONMENTAL POLICY

Austar is committed to sustainable development throughout all components of the mining process including exploration, mining and processing of coal. The company’s environmental policy states the intentions and principles for environmental performance across the operation and is reproduced in full in Appendix A.

Austar’s environmental policy is one of the key drivers for the implementation and improvement of the environmental management system so that the mining operation’s environmental performance is enhanced over time. The policy incorporates regular review and improvement to ensure the Environmental Management Strategy remains relevant to the operation and the various environmental requirements as they change over time.
5 PROJECT DESCRIPTION

5.1 OVERVIEW

Austar is an underground coal mine located approximately 10km south west of Cessnock in the Newcastle Coalfields of New South Wales (see Figure 2). The mine has worked the same leases under various names since 1916 including Pelton, Ellalong, Bellbird South, and Southland Collieries.

Yancoal Australia Pty Limited purchased the mine in December 2004 and renamed it Austar Coal Mine. Austar commenced mining operations in the Bellbird South mining area in April 2005 and introduced the Longwall Top Coal Caving (LTCC) technology in the Bellbird South mining area in September 2006. Conventional longwall mining in the Bellbird South mining area is undertaken in the Longwall B1 to B7 area.

In September 2009, PA08_0111 was granted by the Minister for Planning which approved longwall mining using LTCC technology in the Stage 3 area. A modification to PA08_0111 was granted in March 2012 to reorient the Stage 3 longwall panels. A further modification to PA08_0111 was granted in December 2013 to extend longwalls A7 to A10 to the west by approximately 100m to 300m. The Stage 3 Project (as modified) includes longwall panels A7 to A19, and construction of a Surface Infrastructure Site with associated services to the south of Kitchener.

The Pelton CHPP is used for coal processing, coal transportation loading and mine water treatment. Coarse reject from the coal washing process is emplaced in approved emplacement areas at the CHPP site, or at the Aberdare Extended Emplacement Area.

Figure 2 presents the location of the underground mining areas and surface infrastructure areas of the Austar Coal Mine Complex.
Figure 2  
Austar Mine Complex
5.2 THE APPROVED DEVELOPMENT

5.2.1 Bellbird South Mining Area and Operations

The Minister for Urban Affairs and Planning granted development approval in 1996 subject to certain conditions. The 1996 consent (DA29/95) permits mining in Consolidated Mining Lease 2 (CML2) with a production rate of up to three million tonnes of run of mine (ROM) coal per annum by conventional retreat longwall mining of the Greta seam with extraction height ranging from 3.5 to 4.5 metres.

The key activities approved under the 1996 consent include:

- mining of up to 3 million tonnes of coal per annum;
- transfer of the coal by underground conveyor to the surface;
- washing and preparation of coal;
- stockpiling of raw and washed coal;
- reject emplacement; and
- transport of product coal by rail (98%) and road (up to 60,000 tonnes) to the Port of Newcastle.

To allow for the introduction of LTCC technology, DA29/95 was modified under Section 96 (2) of the Environmental Planning and Assessment Act 1979 by the Minister of Planning dated 27 September 2006, and 5 June 2008. A minor modification under Section 96 (1A) for slightly longer and wider longwall panels in the Bellbird South Stage 2 mining area was approved on 28 May 2009. Stage 2 Extension Longwall A5a was approved by modifications to DA29/95 in December 2010 and April 2012. Bellbird South Longwalls B1 to B3 were approved by modification to DA29/95 in January 2016. Bellbird South Longwalls B4 to B7 were approved by modification to DA29/95 in August 2017.

Environmental impacts from the Bellbird South Mining Area and Operations are managed in accordance with the conditions of consent in the most recent Notice of Modification of DA29/95. A copy of the consolidated consent after DA29/95 MOD7 granted in August 2017 is provided in Appendix B.

5.2.2 Stage 3 Mining Area and Operations

The Austar Stage 3 PA08_0111, was granted under section 75J of the EP&A Act on 6 September 2009. A modification to PA08_0111 was granted under section 75W of the EP&A Act in March 2012. This modification approved reorientation of the Stage 3 longwall panels. A further modification to PA08_0111 was granted in December 2013 to extend longwalls A7 to A10 to the west by approximately 100m to 300m. The Stage 3 Project (as modified) consists broadly of two components:

1. The longwall extraction of up to 6.5 metres of coal from longwall panels A7 to A19 within the Greta Coal Seam using LTCC technology. Up to 3.6 million tonnes per year of ROM are approved for extraction from Stage 3. Coal from the Stage 3 Project is approved to be handled and processed utilising existing infrastructure and facilities.
2. The construction and operation of a new Surface Infrastructure Site (SIS) and access road off Quorrobolong Road, south west of Kitchener. The approved SIS will include upcast and downcast ventilation shafts, main ventilation fan, bath house, workshop, electricity substation and distribution line, service boreholes, pipelines, telecommunications, offices and store. Access to longwalls in the Stage 3 area for men and materials will be via the proposed new SIS.

Relevant environmental impacts from the Stage 3 Mining Area and Operations are managed in accordance with PA08_0111. A copy of the consolidated consent after PA08_0111 MOD3 granted in December 2013 is provided in Appendix C.
6 STATUTORY OBLIGATIONS

6.1 KEY LEGISLATION

There are a range of legislative requirements and approvals needed in addition to those required to comply with the development consent and project approval granted under the Environmental Planning and Assessment Act 1979. These include requirements of Mining Leases, and of the Environment Protection Licence (EPL) that must be satisfied.

The NSW Acts that may be applicable to Austar Coal Mine include, but are not limited to, the:

- Crown Lands Act 1989;
- Fisheries Management Act 1994;
- Heritage Act 1977;
- Mine Subsidence Compensation Act 1961;
- Mining Act 1992;
- National Parks and Wildlife Act 1974;
- Native Vegetation Act 2003;
- Protection of the Environment Operations Act 1997;
- Roads Act 1993;
- Threatened Species Conservation Act 1995;
- Water Act 1912;
- Water Management Act 2000;
- Work Health and Safety Act 2011; and

The individual Environmental Management Plans reference the relevant legislation and approvals where appropriate.

6.2 CONSENTS, LEASES AND LICENCES

The operation at Austar is regulated through various leases, licences, permits and approvals as set out below.

6.2.1 Development Approval

The following development approvals apply to the Austar Coal Mine.
# Table 6-1  Development Approvals and Consents

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<tr>
<td>DA 74/75/79</td>
<td>4 December 1975</td>
<td>Cessnock City Council (CCC)</td>
<td>Development Consent for a coal mine at Ellalong.</td>
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<td></td>
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<td>• Approval for underground coal mining.</td>
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<td>• Construction of a new access drift, upcast shaft and ventilation shaft.</td>
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<td>• Expansion of the Pelton CHPP.</td>
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<td>• Conveyance of coal from the Ellalong pit top to the Pelton CHPP. Operation of the Pelton CHPP for the washing and handling of coal.</td>
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<td></td>
<td>• Water management systems.</td>
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<td>• Upgrade of the Pelton rail loading facility and railway spur.</td>
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<td>• Reject emplacement underground, company owned land, open cut areas adjoining Pelton and other abandoned mine sites.</td>
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<td>• Approval of an open cut coal mine adjoining Pelton Colliery up to 300,000 t of coal and underground mining of approximately 27,000 t of coal from a section of prior workings south of the proposed open cut.</td>
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<td>(modification)</td>
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<td>• Extension of open cut mining area.</td>
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<td>• Infrastructure and water management modifications.</td>
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<td>• Upgrade and replacement of coal handling infrastructure such as surge bin, automatic stacking system, reclaim facilities and skyline conveyor.</td>
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<td>• Increase in stockpile capacity.</td>
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<td>• Upgrade to water management system.</td>
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<td>• Extension of the reclaim tunnel.</td>
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<td>• Construction of a mine water transfer pipeline from Ellalong Colliery to Pelton.</td>
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<td>• Provision of underground workings for emergency mine water disposal.</td>
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<td>• Upgrade of lime treatment plant.</td>
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<td>Approved Development</td>
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  • Extension of open cut mining area including emplacement of overburden in previously mined blocks and extension of the mine’s water management system. |
| DA 118/694/120     | 27 June 1994  | CCC               | Approves the extraction of longwall panels LW13 and LW14 as a minor extension to the Ellalong Colliery within CML2.                                                                                                 |
| DA 118/694/152     | 7 July 1994   | CCC               | Relocatable Office and Temporary Bathhouse at Pelton Colliery.                                                                                                                                                        |
  • Establishment of an overburden stockpile for the Pelton Open Cut Operations.                                                                                                                                       |
| DA 118/695/81      | 12 July 1995  | CCC               | Additions for Bathhouse, Office and Car park at Ellalong Colliery.  
  • Extension to the bathhouse at the Ellalong drift site.  
  • Extension of existing offices or construction of portable offices.  
  • Construction of a 4000 square metre car park. |
  • Installation of a ventilation shaft and fan house.  
  • Upgrading of the existing access track to the site from the Pelton-Ellalong Road.                                                                                                                               |
| DA 29/95           | 14 February 1996 | Minister for Urban Affairs and Planning | Ellalong Colliery Extension into Bellbird South.  
  • Extension of underground mining activities into Bellbird South area (CML 2).  
  • Mine life of 21 years with a production of 3 Mtpa.  
  • Reject emplacement.  
  • Construction and operation of a new infrastructure site including new ventilation shaft and fan(s) (No. 2 Shaft) adjacent to Sandy Creek Road.  
  • Use of Pelton CHPP for washing and handling of coal.  
  • Provision of a maximum raw coal stockpile of 100,000 t.  
  • Reopening of disused Cessnock No. 1 |
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<th>Approval Authority</th>
<th>Approved Development</th>
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<tr>
<td>DA 29/95 (modifications)</td>
<td>27 Sep 2006 (MOD 1)</td>
<td>Minister for Planning (or delegate)</td>
<td>Extension of Underground Mining Activities into Bellbird South (Ellalong Colliery) – Modifications.</td>
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<td>8 Jun 2008 (MOD 2)</td>
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<td>Use of longwall top coal caving (LTCC) mining methods in longwall panels (A1 to A5).</td>
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<td>28 May 2009 (MOD 3)</td>
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<td>Installation of a larger capacity fan at the site approved for DA 8/1999/1658.</td>
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<td>7 Dec 2010 (MOD 4)</td>
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<td>Installation of a new downcast ventilation shaft.</td>
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<td>27 April 2012 (MOD 5)</td>
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<td>Installation of a new 10 MVA substation.</td>
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<td>29 Jan 2016 (MOD 6)</td>
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<td>Installation of a nitrogen inertisation plant with a 2,000 m³ capacity.</td>
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<td>25 August 2017 (MOD 7)</td>
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<td>Provision of a diesel and emulsion fluid storage area and dispatch system.</td>
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<td>Installation of a tube bundle shed to house electronic monitoring equipment.</td>
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<td>Upgrade of the existing water treatment plant.</td>
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<td>Upgrade of water reticulation and pumps.</td>
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<td>Minor embankment stabilisation works at Kalingo Dam.</td>
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<td>Longer and wider panels A4 and A5.</td>
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<td>Extract one additional Longwall Panel A5a (LW A5a) using LTCC</td>
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<td>Extension of LTCC Longwall Panel A5a</td>
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<td>Extension to Bellbird South development consent area to include Longwall Panels LWB1 to LWB7</td>
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<td>Extension of consented activities to 14 Feb 2022.</td>
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<td>Project Approval 08_0111</td>
<td>6 Sep 2009</td>
<td>Minister for Planning</td>
<td>Stage 3 Expansion Project - extension to longwall mining to an area east of existing operations. Key features:</td>
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<td>Longwall production from the Greta coal seam from panels A6 to A17 using longwall Top Coal Caving (LTCC) technology</td>
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<td></td>
<td></td>
<td>Construction of a new surface infrastructure site south west of Kitchener including ventilation shafts and fans, winders, bath house facilities, a workshop, electricity substation, store and offices. Construction of a new road and intersection at</td>
</tr>
</tbody>
</table>
Coal will continue to be brought to the surface at Austar’s existing surface facilities at Paxton. These facilities will continue to be used to take large mining equipment into and out of the mine.

- Continued use of Austar’s existing water management, coal transport systems, coal preparation plant and rejects emplacement areas.

### Project Approval 08_0111 (Modifications)

<table>
<thead>
<tr>
<th>Consent Description</th>
<th>Date</th>
<th>Approval Authority</th>
<th>Approved Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Approval 08_0111 (Modifications)</td>
<td>4 May 2010 (MOD 1)</td>
<td>Delegate for Minister for Planning</td>
<td>Quorrobolong Road.</td>
</tr>
<tr>
<td></td>
<td>13 March 2012 (MOD 2)</td>
<td>Delegate for Minister for Planning</td>
<td>Coal will continue to be brought to the surface at Austar’s existing surface facilities at Paxton. These facilities will continue to be used to take large mining equipment into and out of the mine.</td>
</tr>
<tr>
<td></td>
<td>17 Dec 2013 (MOD 3)</td>
<td>Delegate for Minister for Planning</td>
<td>Continued use of Austar’s existing water management, coal transport systems, coal preparation plant and rejects emplacement areas.</td>
</tr>
<tr>
<td>DA 8/2012/503/1</td>
<td>19 Dec 2012</td>
<td>CCC</td>
<td>• Minor change to wording regarding subsidence impact performance measures to built features in Table 1 of approval. The key performance indicator requires the project does not cause built features to go beyond safe, serviceable and repairable criteria, unless the landowner agrees in writing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Reorientation of the Stage 3 longwalls. Removal of longwall A6, and extraction of coal in longwalls A7 to A19, which are a reorientation of previously approved longwalls A7 to A17 to more closely align with the direction of principal stress. In addition, the chain pillar widths are increased from 45m to 55m to reduce roadway failure risks which in turn further minimises subsidence. The modification will enable more efficient and safer extraction of coal from the Stage 3 area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Extension of longwalls A7 to A10 to the west by approximately 100m and 300m</td>
</tr>
</tbody>
</table>

**6.2.2 Mining Authorities**

Details of the relevant mining authorities are summarised in Table 6-2.

### Table 6-2 Mining Leases

<table>
<thead>
<tr>
<th>Mining (Act)</th>
<th>Title</th>
<th>Date Granted</th>
<th>Expiry Date</th>
<th>Area (Ha)</th>
<th>Surface</th>
<th>Depth Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 6598 (1992)</td>
<td>Dam Site Lease 89 (1901)</td>
<td>13/07/2006</td>
<td>13/06/2021</td>
<td>7,370</td>
<td>Yes</td>
<td>Various</td>
</tr>
<tr>
<td></td>
<td>Mineral Lease No. 1157 (1906)</td>
<td>04/04/1908</td>
<td>04/04/2030</td>
<td>3.961</td>
<td>Yes</td>
<td>Surface to 15.24 metres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>08/07/1949</td>
<td>08/07/2028</td>
<td>10.24</td>
<td>Yes</td>
<td>Surface to 15.24 metres</td>
</tr>
<tr>
<td>Mining (Act)</td>
<td>Title</td>
<td>Date Granted</td>
<td>Expiry Date</td>
<td>Area (Ha)</td>
<td>Surface</td>
<td>Depth Restriction</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>--------------</td>
<td>-------------</td>
<td>-----------</td>
<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td>Mineral Lease No. 1283 (1906)</td>
<td></td>
<td>13/07/1961</td>
<td>13/07/2022</td>
<td>1.973</td>
<td>No (subsurface)</td>
<td>7.62 to 15.24 metres</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 23 (1906)</td>
<td></td>
<td>17/05/1909</td>
<td>17/05/2030</td>
<td>2.421</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 204 (1906)</td>
<td></td>
<td>03/02/1916</td>
<td>03/02/2039</td>
<td>1.2</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 217 (1906)</td>
<td></td>
<td>12/04/1916</td>
<td>12/04/2039</td>
<td>0.6298</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 233 (1906)</td>
<td></td>
<td>01/08/1916</td>
<td>01/08/2036</td>
<td>1.973</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 269 (1906)</td>
<td></td>
<td>07/12/1917</td>
<td>07/12/2018</td>
<td>2.79</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Purposes Lease No. 1364 (1906)</td>
<td></td>
<td>28/10/1968</td>
<td>28/10/2029</td>
<td>0.4527</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Consolidated Coal Lease No. 728 (1973)</td>
<td></td>
<td>10/10/1989</td>
<td>30/12/2023</td>
<td>3296.8</td>
<td>Various</td>
</tr>
<tr>
<td></td>
<td>Consolidated Coal Lease No. 752 (1973)</td>
<td></td>
<td>23/05/1990</td>
<td>30/12/2023</td>
<td>3802</td>
<td>No (subsurface)</td>
</tr>
<tr>
<td></td>
<td>Consolidated Mining Lease No. 2 (1992)</td>
<td></td>
<td>24/03/1993</td>
<td>15/05/2025</td>
<td>3388</td>
<td>Various</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1345 (1992)</td>
<td></td>
<td>23/03/1995</td>
<td>30/12/2023</td>
<td>41.895</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1388 (1992)</td>
<td></td>
<td>02/04/1996</td>
<td>02/04/2038</td>
<td>15.12</td>
<td>No (subsurface)</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1550 (1992)</td>
<td></td>
<td>24/06/2004</td>
<td>23/06/2025</td>
<td>14.11</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1661 (1992)</td>
<td></td>
<td>22/11/2011</td>
<td>22/11/2032</td>
<td>469.32</td>
<td>No (subsurface)</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1666 (1992)</td>
<td></td>
<td>25/01/2012</td>
<td>25/01/2033</td>
<td>34.13</td>
<td>No (subsurface)</td>
</tr>
<tr>
<td></td>
<td>Mining Lease No. 1677 (1992)</td>
<td></td>
<td>23/08/2012</td>
<td>23/08/2033</td>
<td>9.16</td>
<td>Yes</td>
</tr>
</tbody>
</table>
6.2.3 Environment Protection Licence

Austar operates in accordance with Environmental Protection Licence 416 (EPL 416), issued on 5 April 2000 by the NSW Environment Protection Authority (EPA), under the authority of the Protection of the Environment Operations Act 1997.

6.2.4 Water Licences

Austar currently holds water licences for a number of monitoring and dewatering bores across the operation. Austar’s current water licences issued under Part 5 of the Water Act 1912 are provided in Table 6-3. Note all Part 5 Water Act licences are being transitioned to Water Management Act 2000 licences and approvals.

Table 6-3 Water Licences

<table>
<thead>
<tr>
<th>Licence Held</th>
<th>Licence Number</th>
<th>Validity of Licence</th>
<th>Purpose of Licence</th>
<th>Water Source and Extraction Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL171361</td>
<td>17 May 2007 - Perpetuity</td>
<td>Monitoring Bore (AQS1077)</td>
<td>N/A</td>
</tr>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL172524</td>
<td>20 Jul 2010 - Perpetuity</td>
<td>Monitoring Bore (NER1010)</td>
<td>N/A</td>
</tr>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL172852</td>
<td>7 Jun 2011 - Perpetuity</td>
<td>Monitoring Bore (WBH1, WBH2, WBH3)</td>
<td>N/A</td>
</tr>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL173843</td>
<td>1 Oct 2014 - Perpetuity</td>
<td>Monitoring Bore (BB1, BB2, BB3)</td>
<td>N/A</td>
</tr>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL173878</td>
<td>8 Dec 2014 - Perpetuity</td>
<td>Monitoring Bore (MB01)</td>
<td>N/A</td>
</tr>
<tr>
<td>Bore Licence Certificate</td>
<td>20BL173891</td>
<td>19 Mar 2015 - Perpetuity</td>
<td>Monitoring Bore (MB02)</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Access Licence</td>
<td>20AL210298 / WAL19181</td>
<td>Continuing</td>
<td>Unregulated River Water Licence</td>
<td>Hunter Unregulated and Alluvial Water Sources - Upper Wollombi Water Source - Congewai Creek Management Zone. 10 shares</td>
</tr>
</tbody>
</table>
### 6.3 DEVELOPMENT CONSENT (DA29/95) – EMS REQUIREMENTS

The relevant conditions from the most recent Notice of Modification to DA29/95 that relate directly to the preparation and implementation of the EMS for the site are reproduced in Table 6-4. A copy of the consolidated consent after the August 2017 modification is provided in Appendix B.

#### Table 6-4 Relevant Consent Conditions from Development Consent DA 29/95 (after MOD7)

<table>
<thead>
<tr>
<th>No</th>
<th>Condition</th>
<th>Relevant Section(s)</th>
</tr>
</thead>
</table>
| Schedule 5 Condition 1 | The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This Strategy must:  
(a) provide the strategic context for environmental management of the development;  
(b) identify the statutory requirements that apply to the development;  
(c) describe in general how the environmental performance of the development would be monitored and managed during the development;  
(d) describe the procedures that would be implemented to:  
   - keep the local community and relevant agencies informed about the operation and environmental performance of the development;  
   - receive, handle, respond to, and record complaints;  
   - resolve any disputes that may arise during the course of the development;  
   - respond to any non-compliance;  
   - manage any cumulative impacts;  
   - respond to emergencies;  
(e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; and  
(f) include:  
   - references to any strategies, plans and programs approved under the conditions of this consent; and  
   - a clear plan depicting all the monitoring to be carried out under the conditions of this consent. | Whole document  
Section 6  
Sections 2, 3, 4  
Sections 10, 12  
Section 10  
Sections 10, 12  
Section 12  
Section 9  
Section 11  
Section 7  
Section 3, Appendices E-L, EMS Volumes 3 & 4  
Section 12, Appendix D |
6.4 PROJECT APPROVAL 08_0111 – EMS REQUIREMENTS

The relevant conditions of PA08_0111 that relate directly to the preparation and implementation of the EMS are reproduced in Table 6-5. A full copy of PA08_0111 is provided in Appendix C.

Table 6-5 Relevant Consent Conditions from Stage 3 PA08_0111 (after MOD3)

<table>
<thead>
<tr>
<th>No</th>
<th>Condition</th>
<th>Relevant Section(s)</th>
</tr>
</thead>
</table>
| Schedule 7 Condition 1 | The Proponent shall prepare and implement an Environmental Management Strategy for the Austar Mine Complex, to the satisfaction of the Director-General. The strategy must:  
   (a) be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than the shaft construction referred to in condition 1 of schedule 4);  
   (b) provide the strategic framework for environmental management of the mine complex;  
   (c) identify the statutory approvals that apply to the mine complex;  
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the mine complex;  
   (e) describe the procedures that would be implemented to:  
      • keep the local community and relevant agencies informed about the operation and environmental performance of the mine complex;  
      • receive, handle, respond to, and record complaints;  
      • resolve any disputes that may arise during the course of the project;  
      • respond to any non-compliance; and  
      • respond to emergencies;  
   (f) include:  
      • copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and  
      • a clear plan depicting all the monitoring to be carried out in relation to the mine complex. | Whole document  
Section 6  
Section 7  
Sections 10, 12  
Section 10  
Sections 10, 12  
Section 12  
Section 11  
Section 3, Appendices, EMS Volume 2  
Section 12, Appendix D |
7 IMPLEMENTATION AND OPERATION

7.1 ROLES AND RESPONSIBILITIES

7.1.1 Operations Manager

The Austar Coal Mine Operations Manager is responsible for the overall environmental performance of the Austar Coal Mine. The Operations Manager will ensure that adequate resources are available to implement the Environmental Management Strategy at Austar Coal Mine.

7.1.2 Environmental & Community Manager

The Austar Coal Mine Environment & Community Manager is responsible for overseeing the environmental performance of the operation and compliance with the conditions of consent. This includes managing (including under delegation) aspects of the EMS including environmental monitoring, complaints handling, environmental training, environmental incident management and reporting, and regulatory reporting. The Environment & Community Manager reports directly to the Operations Manager.

7.1.3 Staff and Employees

All employees have a responsibility to manage operations in an environmentally responsible manner and report any incidents or take action to minimise the impacts from site operations. All employees are provided with environmental awareness training through a site induction process.

7.1.4 Contractors

All contractors have a responsibility to manage operations in an environmentally responsible manner and report any incidents or take action to minimise the impacts from site operations. All contractors are provided with environmental awareness training through a site induction process.

7.2 ENVIRONMENTAL AWARENESS TRAINING

The EMS requires all employees receive an appropriate level of environmental awareness training. This training is designed to suit the various needs and levels. Training covers environmental legislation, due diligence, performance criteria, reporting requirements and emergency response procedures. All employees are made aware of the Company’s Environmental Policy and the need to meet its obligations.
8 IDENTIFICATION AND MANAGEMENT OF ENVIRONMENTAL ASPECTS

As outlined in Section 5.1, mining at the site commenced in the early 1900s and has continued over time. Figure 2 shows the locations of the key surface facilities and infrastructure. The site has developed over time and includes a range of surface facilities with varying levels of environmental impact. The key areas are identified and discussed in the following sections.

8.1 PIT TOP SURFACE FACILITIES

The Pit Top is situated at Paxton and includes the drift used for materials and man transport for the underground mining operation, offices, workshop, equipment storage and bathhouse. Coal clearance from the underground is performed by conveyors up to a surface bin at the Pit Top prior to being conveyed by overland conveyors to the CHPP. Austar Dam receives mine dewatering and dirty surface water by over land flow, and also mine dewatering by pipeline from Kalingo Dam. Water from Austar Dam is conveyed by pipeline to the CHPP for treatment.

The Pit Top is primarily associated with underground activities which are undertaken on a 24 hours per day basis. The main environment issues that require management are fuel and oil containment and treatment systems, noise emissions, and surface water management.

8.2 COAL HANDLING AND PREPARATION PLANT

The coal handling and preparation plant (CHPP) includes the washery and associated conveyor system, raw and product coal stockpiles, water treatment, train loading facilities, tailings dams, and coarse reject emplacement areas. The washery operates 24 hours per day and generates air, noise and water emissions.

Rehabilitation works are ongoing and have concentrated on the filling, shaping and vegetation of the open cut voids, and the removal of tailings and coarse reject from the site. The CHPP manages Austar’s surface reject emplacement procedures and spontaneous combustion management.

One of the principal long term issues at the washery site is water management from the potential for acid mine drainage, surface water management and water treatment and disposal from mine dewatering, dirty water streams and tailings. Noise is the other issue at the CHPP, with neighbouring residences potentially affected by noise generated at the site. These issues are being managed effectively and results are reported in the Annual Review Report and MOP approved by the DRG. A noise pollution reduction program (PRP) is in progress in consultation with the EPA.
8.3 REJECT EMBLACEMENT AREAS

Austar has several approved reject emplacement areas (refer Figure 2). The Aberdare Reject Emplacement Area, East Open Cut void, and the West Open Cut void are the primary areas used for the emplacement of coarse reject produced at the washery. The main environmental factors relevant to the emplacement areas include the potential for acid mine drainage and associated water management, spontaneous combustion management, site security, and impacts on the surrounding neighbours which include dust, noise and visual amenity. The rehabilitation plan for the reject emplacement area and washery site are included in the MOP.

8.4 NO 1 SHAFT

No 1 shaft is located to the south of the Pit Top within the township of Ellalong. The site was originally used for exhaust air and there was a history of noise complaints regarding the fans. With the completion of the No 3 Shaft, the No 1 Shaft is used for air intake and secondary egress from the mine. There are few environmental issues other than minor noise emissions when operating the man riding system.

8.5 NO 2 SHAFT

Previously used as part of the Ellalong Mine for ventilation and mine access, this site currently is used for pumping water from the underground to the surface. A pipeline from the number 2 shaft facility conveys mine water to Kalingo Dam at the Kalingo Infrastructure Area. There are few environmental issues associated with the Number 2 shaft area.

8.6 KALINGO INFRASTRUCTURE AREA (NO 3 AND 4 SHAFTS, KALINGO DAM)

The No 3 and 4 shafts provide ventilation and services (electricity, water, compressed air, and solcenic fluid), to the mining operation. Kalingo Dam receives mine dewatering from No. 2 shaft and from the Kitchener SIS by pipeline. A pipeline conveys water from Kalingo Dam to Austar Dam at the Pit Top surface facilities.

The main environmental issues associated with these shafts are potential noise impacts on surrounding neighbours and air quality. Significant work has been undertaken to address noise issues and noise monitoring is undertaken on a regular basis. Other potential issues include bulk solcenic fluid storage areas which are fully bunded and fenced, and water management at Kalingo Dam.

8.7 LONGWALL MINING AND SUBSIDENCE

Subsidence assessments have been prepared for each of the Bellbird South and Stage 3 areas of the Austar Mine. Potential impacts assessed include impact to public or private property, flora and fauna, surface hydrology, and ground water.

All mining is conducted in accordance with the Extraction Plan / Subsidence Management Plan (SMP) approvals. Subsidence monitoring is undertaken in accordance with the relevant Subsidence
Monitoring Program. Reporting of subsidence monitoring against predictions is included in the Annual Review Report.

8.8  KITCHENER SURFACE INFRASTRUCTURE SITE

The Kitchener SIS is located within Austar owned land surrounded by Werakata State Conservation Area, and is the site of the Stage 3 No. 5 upcast ventilation shaft, No. 6 downcast shaft and approved man-winder shafts, and new pit top facilities. The main environmental issues associated with the SIS are noise, air quality and erosion and sediment control.
9 CUMULATIVE IMPACTS

The coal handling and preparation plant (CHPP), Pit Top facilities and remote infrastructure sites are relatively remote from other industrial activities. The potential for cumulative impacts in regards to noise, air quality, visual amenity and traffic movements from other industries is therefore minor.

Land use surrounding the Pit Top, CHPP, and remote infrastructure sites include bushland, grazing, vineyards, residential, rural residential and small scale tourist accommodation. None of these land uses are considered to contribute significantly to cumulative impacts. There is an approved small quarry located immediately to the south of the washery. This operation could contribute to the noise and air quality environment.

In terms of underground operations, Austar Coal Mine is an extension of the former Ellalong mine and is surrounded by a number of historic inactive underground mine workings. Groundwater from these old workings flows into Austar Coal Mine and is handled by the water management system servicing the mine. As a result, potential cumulative groundwater impacts are managed as part of the Austar water management system. As the surrounding old underground mines are no longer operational, there are no other potential cumulative impacts from other underground mining operations in the area.

The area above the current Bellbird South and Stage 3 mining areas are mainly small rural holdings, and therefore have low potential to generate impacts that would be cumulative to underground mining operations.
10 COMMUNITY ISSUES

10.1 COMMUNITY INVOLVEMENT

Austar is aware of its community obligations and the need to engage with various stakeholders. Austar endeavours to keep the local community informed of its operations, plans and environmental performance.

This will be achieved by one or more of the following activities:

- distribution of newsletters and updates;
- 24 hour telephone complaints line (1800 701 986);
- informal discussions with local residents as required;
- provision of relevant plans, reports and monitoring results on the Austar Coal Mine website; and
- effective operation of a Community Consultative Committee.

10.2 COMPLAINT PROTOCOL

Austar records all complaints made by the community in a complaints register. The Environment & Community Manager (or delegate) is responsible for handling, recording and investigating complaints, and initiating remedial actions as required. The flowchart below details the procedure for complaints handling.

Complaint records are kept for at least four years after the complaint was made and will be available to any authorised officer of the Environment Protection Authority (EPA) who may require details. Complaint records are also provided in the relevant Annual Review Report and are available on the Austar Coal Mine website.
11 INCIDENT RESPONSE

11.1 INCIDENTS

An incident is defined as a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in Austar’s approvals.

In the event that an incident which causes or threatens to cause material harm to the environment occurs, the incident will be managed in accordance with the Pollution Incident Response Management Plan (PIRMP) and in accordance with the protocol for industry notification of pollution incidents under Part 5.7 of the Protection of the Environment Operations Act 1997.

The reporting of incidents and/or breaches and/or exceedances of limits or performance measures/criteria will be conducted in accordance with Schedule 7 Condition 6 of PA08_0111 and Schedule 5 Condition 4 of DA29/95. Austar will notify the Secretary of the DP&E and any other relevant agencies of any incident associated with the mine complex as soon as practicable after becoming aware of the incident.

Within seven days of the date of the incident, Austar will provide the Secretary of the DP&E and any relevant agencies with a detailed report on the incident. The report will:

- describe the date, time, and nature of the exceedance/incident;
- identify the cause (or likely cause) of the exceedance/incident;
- describe what action has been taken to date; and
- describes the proposed measures to address the exceedance/incident.

11.1.1 Notification to Surrounding Property Owners

In the event there is an incident which poses a potential threat to surrounding property owners and occupiers, Austar will notify those likely to be affected as soon as practicable. Depending on the nature of the incident, this may be in conjunction with or undertaken by emergency services.

Where the property owner notification procedure is initiated by Austar Coal Mine, the Environment & Community Manager (or the person designated as fulfilling the responsibilities of the Environment & Community Manager) will endeavour to maintain a record of all property owners and occupiers contacted.

11.1.2 Austar Coal Incident Report

The Austar Coal Incident Reporting procedure will be undertaken for all environmental incidents.
12 MONITORING, REVIEW AND IMPROVEMENT

12.1 MONITORING

Environmental monitoring is used to check the performance of the operation against regulatory standards and planning initiatives. Records of all environmental monitoring and results are kept on site and made readily available.

In accordance with Section 66(6) of the POEO Act and Condition 9, Schedule 7 of PA08_0111 the results from Austar’s various monitoring programs are published on the Austar website: www.austarcoalmine.com.au.

The type, location and frequency of monitoring take two separate forms. The first is statutory monitoring as required by EPA licences and approvals and the second is additional monitoring undertaken as part of specific projects or as part of compliance auditing.

Regular environmental monitoring is integral to the successful implementation of the environmental management strategy. The measurement and evaluation of criteria allows for the assessment of performance against quantitative and qualitative standards and assists in the identification of any non-conformances or areas that may require additional attention.

The Environmental Monitoring Program (Appendix D) has been prepared in accordance with Schedule 7, Condition 1 (f) of PA08_0111 and Schedule 5, Condition 2 of DA29/95 to provide a clear plan depicting the monitoring to be carried out in relation to the mine complex. This Program consolidates the monitoring requirements of the Environmental Management Plans in a central location.

12.2 ANALYSIS AND REPORTING PROCEDURES

The Environment & Community Manager (or delegate) will review all environmental monitoring results on a regular basis to ensure compliance with all statutory, legislative and approval requirements (project approval, development consents, EPL, mining approvals), and to identify where results or trends indicate a risk of future non-compliance to the development consent criteria or other approval conditions.

The results of environmental monitoring compared to approval requirements will be included in the Annual Review Report.

The Annual Review Report will also identify any trends and identify any non-conformance over the year as well as describing any actions currently implemented or planned to ensure compliance with the appropriate criteria. The Annual Review Report will be provided to the relevant authorities including the DPE, the DRG, the EPA and the Community Consultative Committee. It will also be placed on the Austar website along with a summary of environmental monitoring results.
The Annual Review Report is prepared in accordance with Schedule 5, Condition 5 of the Bellbird South DA29/95 development consent (as modified) and Schedule 7, Condition 3 of the Stage 3 PA08_0111 (as modified).

The EPA will be provided with an annual licence return including statement of compliance, monitoring and summary of complaints.

Austar’s compliance with development consent and licence conditions is assessed by a 3 yearly independent environmental audit, as required by both the Bellbird South and Stage 3 approvals. The most recent audit was completed in November 2017 and involved a review of all plans, including the EMS. The next Independent Environmental Audit is scheduled to be undertaken by 31 December 2020.

12.3 PROCEDURE FOR EXCEEDANCE OF CRITERIA OR THRESHOLD

Should environmental monitoring show that the relevant criteria or threshold has been exceeded, the company will conduct an investigation into the potential sources and/or causes. The investigation will consider any plant operation or other factors that may have resulted in the exceedance. If the company is responsible for the exceedance further actions will be taken to address the matter.

Reporting on any exceedance of criteria or threshold is to be undertaken in accordance with Section 11.1.

12.3.1 Additional Notification Requirements of Stage 3 PA08_0111

If the results of environmental monitoring required by PA08_0111 identify that impacts generated by the project are greater than the relevant impact assessment criteria, except where a negotiated agreement has been entered into in relation to that impact, then Austar shall, within 2 weeks of obtaining the monitoring results, notify the Secretary of DPE, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria.

If the results of environmental monitoring required by PA08_0111 identify that impacts generated by the project are greater than the relevant air quality impact assessment criteria, then Austar shall send the relevant landowners and tenants (including tenants of mine owned properties) a copy of the NSW Health fact sheet entitled “Mine Dust and You” (and associated updates) in conjunction with the notification required above.

12.4 IMPLEMENTING CORRECTIVE ACTIONS

Corrective and preventative actions will be implemented through the development of an action plan. The plan will provide details on the action required, time frame and responsibilities for completing the action. The implementation of the corrective and preventative actions will be reviewed internally and specific procedures developed for addressing non-conformances with the EMS or subordinate plans and strategies.
13 DOCUMENT CONTROL

Austar will ensure that EMS documentation is maintained, up to date and readily available to all authorised personnel. The following procedures ensure document control:

- Copies of the EMS document will be kept on-site with Austar’s electronic Document Control System, once printed the document will be considered “uncontrolled”;
- The document will be reviewed, and if necessary revised, when major changes occur or at milestones established in PA08_0111 or DA29/95 (see Section 14) to ensure that it remains accurate and in accordance with all relevant standards;
- Austar personnel will be notified of the revision to the EMS; and
- The EMS will be clearly dated.
14 REVIEW AND CONTINUAL IMPROVEMENT

Operational activities will be subject to regular review to ensure conformance with commitments made in the EMS and subordinate plans and strategies.

In accordance with Schedule 5, Condition 8 of DA29/95 and Schedule 7, Condition 4 of PA08_0111, the Environmental Management Strategy will be reviewed, and if necessary revised, within 3 months of:

(a) the submission of an Annual Review Report under DA29/95 or PA08_0111;
(b) the submission of an incident report under PA08_0111 condition 6 of schedule 7, or DA29/95 condition 4 of schedule 5;
(c) the submission of an audit report under PA08_0111 condition 7 of schedule 7 or DA29/95 condition 6 of schedule 5; or
(d) any modification to the conditions of PA08_0111 or DA29/95, (unless the conditions require otherwise).

Schedule 5, Condition 8A of DA29/95 also provides a mechanism for the updating of strategies, plans and programs at any time and on a staged basis.

New activities or changes to the operation that may result in environmental issues will be assessed to determine if changes are required to manage the impacts, and so if any revision to a particular subordinate plan is required.

The review process will include formalised procedures including independent audits, or consultation with relevant specialists where required.

Austar’s compliance with the project approval, development consent and licence conditions is assessed by a 3 yearly independent environmental audit, as required by both the Bellbird South consent and Stage 3 project approval. The most recent audit was completed in November 2017 and involved a review of all plans, including the EMS. The next Independent Environmental Audit is scheduled to be undertaken by 31 December 2020.

Any revision of the EMS will be undertaken to the satisfaction of the Secretary of NSW Department of Planning and Environment.
Appendix A

Austar Coal Mine
Environment & Community Relations Policy
ENVIRONMENT & COMMUNITY RELATIONS POLICY

OBJECTIVE

Austar Coal Mine Pty Ltd is committed to operating as an environmentally and socially responsible business. We strive to be a valued and respected member of the community in which we operate.

STATEMENT

Austar accepts its responsibility to conduct its operations in a lawful and environmentally sound manner and to work in consultation with the community and other stakeholders.

To deliver on our objective, Austar Coal Mine Pty Ltd will endeavor to:

- Identify, assess and manage potential environmental aspects, impacts and community risks.
- Implement and validate an effective documented environment and community relations management system.
- Comply with applicable legislation and regulations, and deliver outcomes that meet or exceed our licenses and approvals.
- Foster positive relationships with regulatory agencies and community representatives.
- Strive for continual improvement in environmental management and performance and in the establishment of effective and sustainable community relationships.
- Periodically review our environmental policies and procedures to maintain their relevance.

Brian Wesley | OPERATIONS MANAGER
Appendix B

Bellbird South DA29/95 (MOD7) Consolidated Consent
INSTRUMENT OF CONSENT

SCHEDULE 1

DETERMINATION OF DEVELOPMENT APPLICATION NO 29/95
BY THE MINISTER, PURSUANT TO SECTION 91 OF
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT

I, the Minister for Urban Affairs and Planning, pursuant to Section 91 of the Environmental Planning and Assessment Act 1979 ("the Act") and clause 8 of the State Environmental Planning Policy No.34 – Major Employment Generating Industrial Development, determine the development application ("the application") referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedules 2 to 5.

The reason for the imposition of conditions generally is to minimise any adverse effects from the development, consistent with the objectives of the Act.

Craig Knowles
Minister for Urban Affairs and Planning

Sydney, 1996 File No. N91/00241/004

Application made by: Newcastle Wallsend Coal Company Pty Limited ("the Applicant").

To: The Minister for Urban Affairs and Planning ("the Minister").

In respect of: The mining leases and land parcels listed in Appendix 3.

For the following: Construction and operation of underground coal mine extensions, associated facilities and reject disposal areas ("the development").

Development Application: DA 29/95 lodged with Department of Urban Affairs and Planning (DUAP) on 17 August, 1995 accompanied by an Environmental Impact Statement ("EIS") prepared by HLA-Envirosciences Pty Ltd dated August 1995.

1) To ascertain the date upon which the consent becomes effective, refer to section 93 of the Act.
2) To ascertain the date upon which the consent is liable to lapse, refer to section 99 of the Act.
3) Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.
DEFINITIONS

Active mining areas: Approved mining areas of the development where underground mining is active or proposed, including Longwalls B1 – B3 as defined in EA (MOD 6) and Longwalls B4 – B7 as defined in EA (MOD 7).

Applicant: Austar Coal Mine Pty Ltd, or its successors.

Austar Mine Complex: The combined operations of the Austar Coal Mine, including Austar Stages 1 to 3 and the former Ellalong, Pelton, Cessnock No.1 and Bellbird South collieries.

Built Features: Includes any building or work erected or constructed on land, and includes dwellings, structures and infrastructure (such as any pipeline or dam; formed road, street, path, walk, or driveway; or water, sewer, electricity, telephone, gas or other service main).

CCC: Community Consultative Committee.

Completed mining areas: Approved mining areas of the development where underground mining is completed, including Southland mining area (Longwalls SL2 – SL4), Stage 1 mining area (Longwalls A1 – A2), and Stage 2 mining area (Longwalls A3 – A5a).

Conditions of this consent: Conditions contained in Schedules 2 to 5 inclusive.

Council: Cessnock City Council.

DA: Development Application.

Day: Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays.

Department: Department of Planning and Environment.

Development: The development as described in the documents listed in condition 2 of Schedule 2.

DPI-Water: Department of Primary Industries – Water.

DRG: Division of Resources and Geoscience within the Department.

EA (MOD 5): The Environmental Assessment for DA29/95 MOD 5, including:
- the letter from Austar Coal Mine Pty Limited dated 13 January 2012;
- Austar Coal Mine Stage 2 – Longwall A5a Variation to Commencing End prepared by Mine Subsidence Engineering Consultants and dated December 2011;
- the Response to Submissions document from Austar Coal Mine Pty Limited dated 9 March 2012; and
- Longwall A5a Extension Flood and Drainage Assessment by Umwelt (Australia) Pty Ltd and dated March 2012.


Environmental consequences: The environmental consequences of subsidence impacts, including: damage to built features; loss of surface flows to the subsurface; loss of standing pools; adverse water quality.
impacts; development of iron bacterial mats; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts to aquatic ecology; ponding

EIS  Environmental Impact Statement
EPA  Environment Protection Authority
EP&A Act  Environmental Planning and Assessment Act 1979
Evening  Evening is defined as the period from 6pm to 10pm
Feasible  Feasible relates to engineering considerations and what is practical to build
First workings  Development of main headings, longwall gate roads, related cut throughs and the like
Incident  A set of circumstances that:
  • causes or threatens to cause material harm to the environment; and/or
  • breaches or exceeds the limits or performance measures/criteria in this consent
Land  As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this consent, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment  Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister  Minister for Planning, or delegate
Mitigation  Activities associated with reducing the impacts of the development
MOP  Mining Operations Plan
Negligible  Small and unimportant, such as to be not worth considering
Night  Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH  Office of Environment and Heritage
Privately-owned land  Land that is not owned by a public agency, or a mining company (or its subsidiary)
Reasonable  Means applying judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation  The restoration of land disturbed by the development to a good condition and for the purpose of establishing a safe, stable and non-polluting environment
Residence  For the purposes of this instrument, a residence includes existing or approved dwellings or buildings at the date of this consent, including those offering overnight accommodation
RMS  Roads and Maritime Services
SA NSW  Subsidence Advisory NSW
Safe, Serviceable and Repairable  Safe – no danger to uses; Serviceable – available for its intended use; Repairable – damaged components repaired economically
Second workings  Extraction of coal from longwall panels, mini-wall panels or pillar extraction
Secretary  Secretary of the Department, or nominee
SEE  Statement of Environmental Effects
Site  The land described in Appendix 3
Stage 2 mining area  The area of the site which includes longwalls A3 – A5a, as shown in Appendix 2
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 3 mining area</td>
<td>The area of the site which includes longwalls A7 – A19, as shown in Appendix 2 of Project Approval 08_0111</td>
</tr>
<tr>
<td>Subsidence</td>
<td>The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts</td>
</tr>
<tr>
<td>Subsidence effects</td>
<td>Deformation of the ground mass due to mining, including all mining-induced ground movements, including both vertical and horizontal displacement, tilt, strain and curvature</td>
</tr>
<tr>
<td>Subsidence impacts</td>
<td>Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs</td>
</tr>
</tbody>
</table>
Obligation to Minimise Harm to the Environment

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

Terms of Consent

2. The Applicant must carry out the development generally in accordance with the:
   (a) DA 29/95 and accompanying Environmental Impact Statement prepared by HLA Envirosiences Pty Limited, dated August 1995 (August 1995 EIS);
   (b) modification application MOD-49-4-2006 and accompanying Statement of Environmental Effects, titled Austar Coal Mine Section 96 Modification, prepared by Environmental Resources Management Australia Pty Ltd (ERM) and dated April 2006 (April 2006 SEE), and information from ERM clarifying the modification application MOD-49-4-2006, dated 13 July 2006;
   (c) modification application DA29/95 – Mod 2 and accompanying Statement of Environmental Effects, titled Austar Coal Mine Statement of Environmental Effects Section 96 Modification Stage 2 Longwall Panels A3-A5, prepared by Austar Coal Mine and dated September 2007 (September 2007 SEE); and
   (d) modification application DA 29/95 – MOD 3 and the accompanying Statement of Environmental Effects prepared by Austar Coal Mine Pty Ltd and dated April 2009;
   (e) modification application DA 29/95 – MOD 4 and the accompanying Environmental Assessment prepared by Umwelt (Australia) Pty Ltd and dated July 2010;
   (f) modification application DA 29/95 – MOD 5 and EA (MOD 5);
   (g) EA (MOD 6); and
   (h) EA (MOD 7).

   Note: The underground mining layout for the development is shown in Figure 1 of Appendix 2, which depicts the active mining areas and the completed mining areas.

2A. The Applicant must carry out the development in accordance with the conditions of this consent.

   Note: With the approval of the Secretary, longwall panels may be shortened or narrowed, providing that the proposed variations do not result in increased subsidence impacts or environmental consequences.

If there is any inconsistency between the documents in condition 2, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.

3. The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department’s assessment of:
   (a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent;
   (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and
   (c) the implementation of any actions or measures contained in these documents.
Operation of Plant and Equipment

4. The Applicant must ensure that all plant and equipment used at the site is:
   (a) maintained in a proper and efficient condition; and
   (b) operated in a proper and efficient manner.

Limits on Approval

5. This consent lapses on 14 February 2022.

   Note: This condition does not affect the operation of section 95 of the EP&A Act. Under this consent, the Applicant is required to rehabilitate the site and carry out additional requirements. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations, until the rehabilitation of the site and those requirements and undertakings have been carried out to the required standard.

6. Deleted

7. Deleted

Protection of Public Infrastructure

8. Unless the Applicant and the applicable authority agree otherwise the Applicant must:
   (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
   (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

   Note: This condition does not apply to any damage to public infrastructure subject to compensation payable under the Mine Subsidence Compensation Act 1961.

Compliance

9. The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.
SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS

ACQUISITION UPON REQUEST

1. Upon receiving a written request for acquisition from the landowner of land listed in Table 1, the Applicant must acquire the land in accordance with the procedures in conditions 3 to 5 of Schedule 4:

   Table 1: Land subject to acquisition upon request
   
<table>
<thead>
<tr>
<th>Property A03a - Duff</th>
<th>Property A04a – Bukanmain Pty Limited</th>
</tr>
</thead>
</table>

However, the Applicant is not required to acquire the land listed in Table 1 if:
(a) the Applicant has a current written negotiated agreement with the landowner in regard to the management of subsidence-related impacts, and a copy of this agreement has been forwarded to the Department by the Applicant; or
(b) the landowner has agreed to the SA NSW purchasing the land under the Mine Subsidence Compensation Act 1961; or
(c) a request for acquisition has not been made following completion of mining in longwalls A3 to A5, and the SA NSW determines that the residence/s on the land listed in Table 1 remains safe, serviceable and repairable.

Notes:
- To avoid any uncertainty in regard to condition 1(c), the Applicant is required to act on any request for acquisition by a landowner listed in Table 1 unless the residence/s on the land has been declared to be safe, serviceable and repairable by the SA NSW after mining has been completed in longwalls A3 to A5.
- For more information on the references to land used in this condition see Figure 9 of Appendix C to the September 2007 SEE prepared for longwalls A3 to A5.

SUBSIDENCE

Subsidence Impact Assessment Criteria

2. If the subsidence generated by the development results in damage to any residence on privately-owned land (excluding the land listed in Table 1) that in the opinion of the SA NSW exceeds safe, serviceable and repairable criteria, the Applicant must, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 3 to 5 of Schedule 4.

However, the Applicant does not have to act on any such request if:
(a) the Applicant has a current written negotiated agreement with the landowner in regard to the management of subsidence-related impacts, and a copy of this agreement has been forwarded to the Department by the Applicant; or
(b) the landowner has agreed to the SA NSW purchasing the land under the Mine Subsidence Compensation Act 1961.

Subsidence Management Plan

3. The Applicant must revise the approved Subsidence Management Plan for the Stage 2 mining area to include longwall A5a, to the satisfaction of DRG. The revised plan must:
(a) include a mine plan for the relevant area;
(b) integrate ongoing management of previously mined areas;
(c) include management, monitoring and contingency plans for all man-made and natural features which may experience subsidence effects, subsidence impacts or environmental consequences, including:
• built structures;
• farm dams;
• watercourses;
• groundwater;
• terrestrial flora and fauna and ecology (including any threatened species and their habitats); and
• Aboriginal cultural heritage;
  (d) be approved by the Director-General of DRG prior to the commencement of extraction of longwall A5a; and
  (e) be implemented, following approval, to the satisfaction of the Executive Director, Mineral Resources.

Extraction Plan

3A. The Applicant must prepare an Extraction Plan for all second workings in the active mining areas to the satisfaction of the Secretary. This plan must:
  (a) be prepared by a team of suitably qualified and experienced experts whose appointment has been endorsed by the Secretary, and be approved by the Secretary prior to the commencement of any second workings covered by the Extraction Plan;
  (b) include a detailed plan for the second workings, which has been prepared to the satisfaction of DRG, and provides for adaptive management;
  (c) include detailed plans of any associated surface construction works;
  (d) include the following to the satisfaction of DRG:
      • a coal resource recovery plan that demonstrates effective recovery of the available resource;
      • predictions of the subsidence effects and subsidence impacts of the proposed second workings, incorporating any relevant information that has been obtained since preparation of EA (MOD 6); and
      • a Subsidence Monitoring Program to:
          o monitor subsidence effects and subsidence impacts on land;
          o validate the subsidence predictions; and
          o analyse the relationship between the subsidence effects and subsidence impacts of the proposed second workings and any ensuing environmental consequences.
  (e) include a:
      • Water Management Plan, which has been prepared in consultation with OEH and DPI-Water, to monitor and manage the environmental consequences of second workings on water resources (including drainage, flooding, ponding and alluvial aquifers);
      • Biodiversity Management Plan, which has been prepared in consultation with OEH, to monitor and manage the potential environmental consequences of second workings on aquatic and terrestrial flora and fauna, with a specific focus on threatened species and endangered ecological communities;
      • Land Management Plan, to monitor and manage the potential environmental consequences of second workings on steep slopes and land in general;
      • Built Features Management Plan, which has been prepared in consultation with the owner of the relevant feature, to monitor and manage the potential environmental consequences of second workings, including flooding related impacts, on any built features or access to any built features;
  (f) include a Public Safety Management Plan, which has been prepared in consultation with DRG, to ensure public safety in the mining area; and
  (g) the above plans must include a:
      • detailed description of baseline data;
      • impact assessment criteria, including trigger levels for investigating any potentially adverse impacts;
      • program to undertake monitoring prior to, during and after undermining;
- program to validate predicted levels of impacts;
- detailed description of remediation and rehabilitation measures to be implemented, should adverse impacts occur, and
- contingency plan to manage any unpredicted adverse impacts and their environmental consequences and to provide for adaptive management.

The Applicant must implement the approved plan as approved from time to time by the Secretary.

Note: The Water Management Plan must be integrated with all relevant aspects of the Site Water Management Plan required under condition 6 of Schedule 3.

Payment of Reasonable Costs

3B. The Applicant must pay all reasonable costs incurred by the Department to engage independent experts to review the adequacy of any aspect of the Extraction Plan.

First Workings

3C. Subject to condition 3A above, the Applicant may carry out first workings within the underground mining area, other than in accordance with an approved Extraction Plan, provided that DRG is satisfied that the first working are designed to remain stable and non-subsiding in the long-term, except insofar as they may be impacted by approved second workings.

Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with negligible resulting direct subsidence impacts.

Provision of Biodiversity Offsets

3D. If subsidence impacts associated with the active mining areas cause significant adverse impacts to threatened species, populations, habitats and/or endangered ecological communities and the Secretary determines that:
(a) it is not reasonable or feasible to remediate the impact or environmental consequences; or
(b) remediation measures implemented by the Applicant have failed to satisfactorily remediate the impact or environmental consequence, then the Applicant must provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Secretary.

Note: An offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

Public Safety Management Plans

4. The Applicant must:
(a) before carrying out any underground mining that will potentially lead to subsidence within the Werakata State Conservation Area, the Applicant must prepare (and following approval implement) a Public Safety Management Plan for the Werakata State Conservation Area;
(b) before carrying out any underground mining that will potentially lead to subsidence at Nash Lane, the Applicant must prepare (and following approval implement) a Public Safety Management Plan for Nash Lane; and
(c) before carrying out any underground mining that will potentially lead to subsidence impacts to Sandy Creek Road, the Applicant must prepare, in consultation with
Council, (and following approval implement) a Public Safety Management Plan for Sandy Creek Road, to the satisfaction of the DRG.

WATER QUALITY

Discharge Limits

5. Except as may be expressly provided by a EPA Environmental Protection Licence, or in accordance with section 120 of the Protection of the Environment Operations Act 1997, the Applicant must not discharge any water from the site.

Water Supply

5A. The Applicant must ensure that it has sufficient water supply for the development, and if necessary, adjust the scale of the development to match its available water supply.

Note: Under the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development. If monitoring indicates that existing licence entitlements are likely to be exceeded, the Applicant must adjust the scale of the development to match its existing entitlements until additional licences are procured.

Site Water Management Plan

6. Prior to mining commencing in panel A3, or other date agreed by the Secretary, the Applicant must revise its Site Water Management Plan for the mine, in consultation with the DPI-Water and the EPA, and to the satisfaction of the Secretary. This plan must be implemented to the satisfaction of the Secretary, and must include:
   (a) a Site Water Balance;
   (b) an Erosion and Sediment Control Plan;
   (c) a Surface Water Monitoring Program;
   (d) a Ground Water Monitoring Program; and
   (e) a Surface and Ground Water Response Plan.

Site Water Balance

7. The Site Water Balance must:
   (a) include details of:
       • sources of water and water licences;
       • water use on site;
       • water management on site;
       • off-site water transfers or discharges;
       • reporting procedures; and
   (b) describe measures to minimise water use by the development.

Erosion and Sediment Control

8. The Erosion and Sediment Control Plan must:
   (a) be consistent with the requirements of Landcom’s Managing Urban Stormwater: Soils and Construction manual;
   (b) identify activities that could cause soil erosion and generate sediment;
   (c) describe measures to minimise soil erosion and the potential for transport of sediment downstream;
   (d) describe the location, function and capacity of erosion and sediment control structures; and
   (e) describe what measures would be implemented to maintain the structures over time.
Surface Water Monitoring

9. The Surface Water Monitoring Program must include:
   (a) surface water assessment criteria;
   (b) a program to monitor surface water flows and quality (particularly in Black, Cony and Quorrobolong Creeks) and stream health;
   (c) a program to monitor water levels in farm dams within the subsidence zone and impacts on other water users;
   (d) a program to monitor channel stability in Quorrobolong and Cony Creeks;
   (e) reporting procedures; and
   (f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water criteria that are related to the development (particularly in respect of acid mine drainage and acid leachate).

Groundwater Monitoring

10. The Groundwater Monitoring Program must include:
    (a) ground water impact assessment criteria;
    (b) a program to monitor the volume and quality of ground water seeping into the underground mine workings;
    (b1) a program to monitor impacts to groundwater dependent ecosystems and riparian vegetation;
    (c) a program to monitor ground water levels and quality; and
    (d) a protocol for the investigation, notification and mitigation of identified exceedances of the ground water impact assessment criteria.

Surface and Ground Water Response Plan

11. The Surface and Ground Water Response Plan must include:
    (a) the procedures that would be followed in the event of any exceedance of the surface or groundwater impact assessment criteria, or other identified impact on surface or groundwater;
    (b) measures to mitigate, remediate and/or compensate any identified impacts (including measures to mitigate and/or compensate potentially affected landowners for any loss of surface water flows in local creeks or farm dams); and
    (c) disposal/neutralisation contingencies in the event that acid leachate problems emerge after the mine closes.

Groundwater Study

12. The Applicant must, in the event it selects the Cessnock No. 1 Shaft at Kalingo as the ventilation shaft site for the mine, submit a report to the Secretary and the DRG which includes a groundwater study and mine water disposal plan prepared in accordance with the requirements of the DRG and EPA.

12A. By the end of February 2018, the Applicant must review the groundwater impacts of the development. This review must:
    (a) validate the impact predictions in EA (MOD 6) and EA (MOD 7) against measured groundwater impacts, including a comparison of:
        • groundwater levels and quality in both alluvial and non-alluvial aquifers; and
        • mine water inflow sources and volumes; and
    (b) evaluate the effectiveness of the existing groundwater model for use in current and future mining operations; and
    (c) evaluate the continued effectiveness of any approved Extraction Plan or Water Management Plan for the development and provide recommendations for any appropriate amendments to these plans.
The review must be undertaken in consultation with DPI-Water and reported and implemented to the satisfaction of the Secretary. If the review identifies a material departure from the predictions in EA (MOD 6) and EA (MOD 7), the Applicant must prepare a revised groundwater assessment for the development, in consultation with DPI-Water, to the satisfaction of the Secretary. The assessment must include updated predictions of potential groundwater impacts from the development, based on quantitative surface and groundwater modelling, incorporating all available groundwater data.

NOISE AND VIBRATION

Impact Assessment Criteria

13. The Applicant must ensure that the noise generated by the Infrastructure Upgrade Area identified in Figure 1.3 of the April 2006 SEE does not exceed the noise impact assessment criteria in Table 2.

Table 2: Noise impact assessment criteria dB(A)

<table>
<thead>
<tr>
<th>Day/Evening/Night</th>
<th>Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>$L_{Aeq(15\text{ minute})}$</td>
<td>All privately owned land</td>
</tr>
</tbody>
</table>

| 35 | |

Notes:

a) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the $L_{Aeq(15\text{ minute})}$ noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the Department and the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable.

b) The noise emission limits identified in the above table apply under meteorological conditions of:

- wind speeds of up to 3 m/s at 10 metres above ground level; or
- temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.

However, if the Applicant has a written negotiated noise agreement with any landowner of the land listed in Table 2, and a copy of this agreement has been forwarded to the Department and the EPA, then the Applicant may exceed the noise limits in Table 2 in accordance with the negotiated noise agreement.

Continuous Improvement

14. The Applicant must:

(a) implement all reasonable and feasible noise mitigation measures;
(b) investigate ways to reduce the noise generated by the development; and
(c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review (see condition 5 of Schedule 5), to the satisfaction of the Secretary.

Noise Monitoring

15. The Applicant must prepare a Noise Monitoring Program for the development to the satisfaction of the Secretary. This program must include quarterly attended noise
monitoring and a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent.

The Applicant must implement the approved program as approved from time to time by the Secretary.

Vibration Monitoring

16. The Applicant must prepare a Vibration Monitoring Program for the development to the satisfaction of the Secretary. This program must be capable of recording ground vibrations on the surface emanating from underground mining activities.

The Applicant must implement the approved program as approved from time to time by the Secretary.

AIR QUALITY

Impact Assessment Criteria

17. The Applicant must ensure that the dust emissions generated by the Infrastructure Upgrade Area identified in Figure 1.3 of the April 2006 SEE do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 3, 4 and 5 at any residence on, or on more than 25 percent of, any privately-owned land.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total suspended particulate (TSP) matter</td>
<td>Annual</td>
<td>90 µg/m³</td>
</tr>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>Annual</td>
<td>30 µg/m³</td>
</tr>
</tbody>
</table>

Table 4: Short term impact assessment criterion for particulate matter

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>24 hour</td>
<td>50 µg/m³</td>
</tr>
</tbody>
</table>

Table 5: Long term impact assessment criteria for deposited dust

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Maximum increase in deposited dust level</th>
<th>Maximum total deposited dust level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposited dust</td>
<td>Annual</td>
<td>2 g/m²/month</td>
<td>4 g/m²/month</td>
</tr>
</tbody>
</table>

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 2003, AS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Operating Conditions

18. The Applicant must:
(a) ensure any visible air pollution generated by the development is assessed regularly, and measures taken to minimise air quality impacts on privately-owned land; and
(b) implement all reasonable measures to minimise the off-site odour, greenhouse gas and fume emissions generated by the mine’s ventilation system or any spontaneous combustion at the development, to the satisfaction of the Secretary.

Monitoring

19. The Applicant must prepare an Air Quality Monitoring Program for the development to the satisfaction of the Secretary. This program must include an air quality monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent.

The Applicant must implement the approved program as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

20. The Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the development in accordance with the requirements in Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales and to the satisfaction of the Secretary.

REJECT EMLACEMENT

21. The Applicant must undertake reject emplacement in accordance with the current Mining Operations Plan as updated and approved by DRG from time to time. If reject emplacement in Areas 1, 3 and 4 as described in the August 1995 EIS is proposed, the Applicant must:

(a) investigate and report to the DRG on the possibility of disposing all reject into one emplacement area, at least 12 months before reject emplacement into the disturbed mining areas is complete;
(b) provide a report on the geotechnical investigations and engineering specifications for emplacement areas 1, 3 and 4 to the DRG, and the Secretary at least 6 months prior to commencement of reject emplacement in these areas; and
(c) commence use of emplacement areas 1, 3 and 4 only after consultation with the Council and approval by the DRG.

FLORA AND FAUNA

22. The Applicant must:

(a) take all reasonable measures to protect native vegetation from damage during construction except where trees, shrubs and other vegetation are removed for approved works; and
(b) salvage all useable soil and vegetative materials for reuse in controlling erosion and/or site rehabilitation.

23. The Applicant must:

(a) undertake fauna surveys for bat species at undisturbed sites proposed for reject emplacement as required by the OEH;
(b) report results of any fauna surveys to the OEH;
(c) undertake a monitoring program of riparian vegetation along Quorrobolong and Cony Creeks in the area of longwalls A3 to A5a with particular reference to River Flat Eucalypt Forest EEC; and
(d) carry out any necessary ameliorative measures requested by the OEH in relation to the findings of the fauna surveys and riparian vegetation monitoring program, to the satisfaction of the OEH.
HERITAGE

Aboriginal Heritage

24. Six months prior to commencing activities in undisturbed reject emplacement areas to use Cessnock No. 1 Colliery surface facilities, the Applicant must undertake additional Aboriginal heritage surveys to the satisfaction of the OEH.

24A. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Secretary. The plan must:
(a) be prepared by a suitably qualified archaeologist in consultation with OEH and Registered Aboriginal Parties, and be submitted to the Secretary for approval prior to the commencement of extraction of longwall A5a; and
(b) include a program/procedures for:
• salvage and management of Aboriginal sites within the active mining areas;
• monitoring and management of Aboriginal sites within the active mining areas;
• managing the discovery of any new Aboriginal objects or skeletal remains discovered during the project;
• undertaking additional archaeological surveys on any areas subject to extensive remediation activities;
• ongoing consultation with and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site;
• training personnel on Aboriginal cultural heritage awareness; and
• undertaking recording of Aboriginal site impacts.

The Applicant must implement the approved plan as approved from time to time by the Secretary.

European Heritage

25. The Applicant must:
(a) undertake a Heritage Impact Assessment of the site and prepare a Heritage Management Plan, in consultation with the Council, for the approval of the Heritage Council of NSW prior to re-commencing any mining activities at the Cessnock No 1 Colliery surface facilities at Kalingo;
(b) make application under section 132 of the Heritage Act 1977 for any works proposed to be undertaken on or under Lot 1, DP 87087 and Part Lot 1, DP 69968 County Northumberland, Parish Heddon; and
(c) take all reasonable measures to protect the ring-barked tree referenced in the April 2006 SEE, to the satisfaction of the Secretary.

Note: The land referred to in condition 25(b) is currently subject to a section 130 order under the Heritage Act 1977 to prevent harm to buildings, works, relics etc of the South Maitland Railway, gazetted 16 September, 1983.

TRAFFIC AND TRANSPORT

26. The Applicant must:
(a) prior to the commencement of operations in reject emplacement areas 3 and 4 (as described in the August 1995 EIS), provide to the satisfaction of the Council and the RMS and at its own cost, a crossing over Wollombi Road (Main Road 218) in the vicinity of these coal waste emplacement areas with respect to type and sight distance in accordance with AS2890-1. Such crossing must consist of pavement and bitumen seal extending at least 30 metres either side of Main Road 218; and
(b) provide a Type BA intersection at the nominated entry to the Cessnock No 1 Colliery site. The intersection type and location must be determined in conjunction with Council and constructed prior to commencement of operations at the Cessnock No 1 Colliery site.

27. The Applicant must:
(a) prior to 31 December 2008, or as otherwise agreed with the Secretary, undertake upgrade works to the road level crossing at Vincent Street, Kitchener, as recommended in Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit (GHD March 2007); and
(b) prior to 30 June 2009, use its best endeavours to undertake upgrade works at the following road level crossings as recommended in Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit (GHD March 2007):
- Cessnock Road, Kearsley;
- Neath Road, Neath; and
- Mitchell Avenue, Weston,
in consultation with the South Maitland Railway, and to the satisfaction of the Council and the RMS.

REHABILITATION

Rehabilitation Objectives

28. The Applicant must rehabilitate the site to the satisfaction of DRG. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the documents listed in condition 2 of Schedule 2, and comply with the objectives in Table 6.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>All areas affected by the development</td>
<td>Safe</td>
</tr>
<tr>
<td></td>
<td>Hydraulically and geotechnically stable</td>
</tr>
<tr>
<td></td>
<td>Non-polluting</td>
</tr>
<tr>
<td></td>
<td>Fit for the intended post-mining land use(s)</td>
</tr>
<tr>
<td>Areas proposed for native ecosystem re-establishment</td>
<td>Establish self-sustaining ecosystems comprising flora species selected to re-establish and complement local and regional biodiversity</td>
</tr>
<tr>
<td>Areas proposed for agricultural or pastoral use</td>
<td>Nominated land capability classification is achieved and is self-sustaining</td>
</tr>
<tr>
<td>Other areas affected by the development</td>
<td>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species appropriate for the intended post mining land use(s) (unless DRG agrees otherwise)</td>
</tr>
<tr>
<td>Surface infrastructure of the development</td>
<td>To be decommissioned and removed, unless DRG agree otherwise or development consent is obtained from the relevant consent authority for their retention and post-mining use</td>
</tr>
<tr>
<td>Portals and vent shafts of the development</td>
<td>To be decommissioned and made safe and stable</td>
</tr>
<tr>
<td>Built features damaged by mining operations</td>
<td>Repair/restore/replace to pre-mining condition or equivalent unless the:</td>
</tr>
<tr>
<td></td>
<td>o owner agrees otherwise; or</td>
</tr>
<tr>
<td></td>
<td>o damage is fully restored, repaired or compensated for under the Mine Subsidence Compensation Act 1961</td>
</tr>
</tbody>
</table>
Note: These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by the development and to all surface infrastructure components of the development. Where remediation of watercourses is likely to cause environmental consequences greater than those that require rehabilitation, alternative equivalent works may be undertaken within the affected watercourse.

**Progressive Rehabilitation**

29. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance, to the satisfaction of DRG. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

*Note:* It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.

| Final landforms | • Consistent with surrounding topography to minimise visual impacts  
|                 | • Incorporate relief patterns and design principles consistent with natural drainage |
| All watercourses subject to mine-water discharges and/or subsidence impacts from the development | • Hydraulically and geomorphologically stable  
| | • Aquatic ecology and riparian vegetation that is the same or better than prior to mining |
| Water quality | • Surface water retained on site is fit for the intended post mining land use(s) |
| Cliffs, minor cliffs and steep slopes | • No additional risk to public safety compared to prior to mining |
| Community | • Ensure public safety  
| | • Minimise adverse socio-economic effects associated with mine closure |
NOTIFICATION OF LANDOWNERS

1. Prior to 31 June 2008, the Applicant must notify the landowners of land listed in Table 1 in writing that they have the right to require the Applicant to acquire their land in accordance with condition 1 of Schedule 3 and conditions 3 to 5 below.

2. The Applicant must notify all landowners whose land may be subject to subsidence as a result of the development about the procedures for rectification and compensation for subsidence effects on residences, farm buildings, agricultural land and other infrastructure under the Mining Act 1992 and the Mine Subsidence Compensation Act 1961.

LAND ACQUISITION

3. Within 3 months of receiving a written request from a landowner with acquisition rights as specified in Condition 1 or Condition 2 of Schedule 3, the Applicant must make a binding written offer to the landowner based on:
   (a) the current market value of the landowner’s interest in the property at the date of this written request, as if the property was unaffected by the development the subject of the development application, having regard to the:
      • existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
      • presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner’s written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of measures implemented by the SA NSW;
   (b) the reasonable costs associated with:
      • relocating within the Cessnock local government area, or to any other local government area determined by the Secretary;
      • obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and
   (c) reasonable compensation for any disturbance caused by the land acquisition process.

   However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.

   Upon receiving such a request, the Secretary must request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

   Within 14 days of receiving the independent valuer’s determination, the Applicant must make a written offer to purchase the land at a price not less than the independent valuer’s determination.

   If the landowner refuses to accept this offer within 6 months of the date of the Applicant’s offer, the Applicant’s obligations to acquire the land must cease, unless otherwise agreed by the Secretary.

4. The Applicant must bear the costs of any valuation or survey assessment requested by the independent valuer, or the Secretary and the costs of determination referred above.
5. If the Applicant and landowner agree that only part of the land must be acquired, then the Applicant must pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

Environmental Management Strategy

1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This Strategy must:
   (a) provide the strategic context for environmental management of the development;
   (b) identify the statutory requirements that apply to the development;
   (c) describe in general how the environmental performance of the development would be monitored and managed during the development;
   (d) describe the procedures that would be implemented to:
      - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
      - receive, handle, respond to, and record complaints;
      - resolve any disputes that may arise during the course of the development;
      - respond to any non-compliance;
      - manage any cumulative impacts;
      - respond to emergencies;
   (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; and
   (f) include:
      - references to any strategies, plans and programs approved under the conditions of this consent; and
      - a clear plan depicting all the monitoring to be carried out under the conditions of this consent.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

Environmental Monitoring Program

2. The Applicant may consolidate the various monitoring requirements of this consent into a single Environmental Monitoring Program for the development.

3. Deleted

Incident Reporting

4. Within 7 days of detecting an exceedance of the limits/performance criteria in this consent, the Applicant must report the exceedance/incident to the Department (and any relevant agency). The report must:
   (a) describe the date, time, and nature of the exceedance/incident;
   (b) identify the cause (or likely cause) of the exceedance/incident;
   (c) describe what action has been taken to date; and
   (d) describe the proposed measures to address the exceedance/incident.

Regular Reporting

4A. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.
Annual Review

5. By the end of September each year, unless the Secretary agrees otherwise, the Applicant must submit a review to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:
   (a) describe the development (including any rehabilitation) that was carried out in the previous year to 30 June, and the development that is proposed to be carried out over the current year to 30 June;
   (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous year to 30 June, which includes a comparison of these results against the:
      • relevant statutory requirements, limits or performance measures/criteria;
      • requirements of any plan or program required under this consent;
      • monitoring results of previous years; and
      • relevant predictions in the documents listed in condition 2 of Schedule 2;
   (c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
   (d) identify any trends in the monitoring data over the life of the development;
   (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
   (f) describe what measures will be implemented over the next year to improve the environmental performance of the development.

Independent Environmental Audit

6. Prior to 31 December 2008, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
   (a) be conducted by suitably qualified, experienced, and independent expert/s whose appointment has been endorsed by the Secretary;
   (b) include consultation with the relevant agencies and the CCC;
   (c) assess, in respect of the requirements of this consent and any relevant mining lease or environment protection licence, the environmental performance of the development and its effects on the surrounding environment;
   (d) assess whether the development is complying with relevant standards and performance measures specified in these approvals (including under any strategy, plan or program required under this consent) and with other statutory requirements;
   (e) review the adequacy of strategies, plans or programs required under this consent; and, if necessary,
   (f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under this consent; and
   (g) be conducted and reported to the satisfaction of the Secretary.

Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of subsidence, surface water, groundwater, noise and air quality.

7. Within 6 weeks of completing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary with a response to any recommendations contained in the audit report.

Revision of Strategies, Plans and Programs

8. Within 3 months of:
   (a) the submission of an incident report under condition 4 above;
   (b) the submission of an Annual Review under condition 5 above;
   (c) the submission of an audit report under condition 6 above; and
(d) the approval of a modification to the conditions of this consent, the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. The applicant must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.

Updating and Staging of Strategies, Plans or Programs

8A. To ensure that strategies, plans or programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.

While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times.

If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.

Relationship with other consents

8B. With the agreement of the Secretary, the Applicant may combine any strategy, plan, program, review, audit or committee required by this consent with any similar requirement under another development consent or approval relating to the Austar Mine Complex, including Project Approval 08_0111 for the Stage 3 mining area.

Evidence of Consultation

8C. Where consultation with any public authority is required by the conditions of this consent, the Applicant must:
(a) consult with the relevant public authority prior to submitting the required document to the Secretary for approval;
(b) submit evidence of this consultation as part of the relevant document;
(c) describe how matters raised by the authority have been addressed and any matters not resolved; and
(d) include details of any outstanding issues raised by the authority and an explanation of disagreement between any public authority and the Applicant.

Community Consultative Committee

9. The Applicant must operate a CCC for the development to the satisfaction of the Secretary. This CCC must be operated in accordance with the Department’s Community Consultative Committee Guidelines, November 2016 (or later version).
Notes:
- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent; and
- In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council and the local community.

10. Deleted
11. Deleted

Access to Information

12. The Applicant must:
   (a) make copies of the following publicly available on its website:
       • the documents listed in condition 2 of Schedule 2;
       • all current statutory approvals for the development;
       • approved strategies, plans and programs required under the conditions of this consent;
       • a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
       • a summary of the progress of the development;
       • contact details to enquire about the development or to make a complaint;
       • a complaints register, which is to be updated on a monthly basis;
       • minutes of CCC meetings;
       • the last five annual reviews;
       • any independent environmental audit of the development, and the Applicant’s response to the recommendations in any audit;
       • any other matter required by the Secretary; and
   (b) keep this information up-to-date,
   to the satisfaction of the Secretary.
APPENDIX 1

Deleted
APPENDIX 2
AUSTAR MINE COMPLEX

Figure 1: Underground mining layout
<table>
<thead>
<tr>
<th>Lot</th>
<th>DP</th>
<th>Lot</th>
<th>DP</th>
</tr>
</thead>
<tbody>
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<td>6</td>
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<tr>
<td>31</td>
<td>849031</td>
<td>121</td>
<td>1126842</td>
</tr>
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Various Crown land, road and rail reserves

**Mining Leases**
- CCL728
- CML2
- DSL89
- ML1157
- ML1283
- ML1345
- ML1388
- ML1550
- MPL23
- MPL204
- MPL217
- MPL233
- MPL269
- MPL1364
Appendix C

Stage 3 Project Approval
08_08111 (MOD3)
Consolidated Consent
I approve the project application referred to in schedule 1, subject to the conditions in schedules 2 to 7.

These conditions are required to:
• prevent, minimise, and/or offset adverse environmental impacts;
• set standards and performance measures for acceptable environmental performance;
• require regular monitoring and reporting; and
• provide for the ongoing environmental management of the project.

SIGNED 6 SEPTEMBER 2009

The Hon Kristina Keneally MP
Minister for Planning

SCHEDULE 1

Application Number: 08_0111
Proponent: Austar Coal Mine Pty Ltd
Approval Authority: Minister for Planning
Land: See Appendix 1
Project: Austar Coal Mine Project – Stage 3

May 2010 modification in red type
March 2012 modification in blue type
December 2013 modification in green type
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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved mine plan</td>
<td>The mine plan for Stage 3 shown in the figures in Appendix 2</td>
</tr>
<tr>
<td>Adaptive management</td>
<td>Adaptive management includes monitoring subsidence impacts and subsidence effects and, based on the results, modifying the mining plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and designated ranges</td>
</tr>
<tr>
<td>Annual Review</td>
<td>Annual Review of operations, as required under condition 3 of Schedule 7</td>
</tr>
<tr>
<td>Austar Mine Complex</td>
<td>The combined operations of the Austar Coal Mine, including Austar Stages 1 to 3 and the former Ellalong, Pelton, Cessnock No.1 and Bellbird South collieries</td>
</tr>
<tr>
<td>BCA</td>
<td>Building Code of Australia</td>
</tr>
<tr>
<td>Built features</td>
<td>Includes any building or work erected or constructed on land, including dwellings, structures and infrastructure (such as any pipeline or dam; formed road, street, path, walk or driveway; or water, sewer, electricity, telephone, gas or other service main)</td>
</tr>
<tr>
<td>CCC</td>
<td>Community Consultative Committee</td>
</tr>
<tr>
<td>Conditions of this approval</td>
<td>Conditions contained in schedules 2 to 7 inclusive</td>
</tr>
<tr>
<td>Construction</td>
<td>The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval</td>
</tr>
<tr>
<td>Council</td>
<td>Cessnock City Council</td>
</tr>
<tr>
<td>Day</td>
<td>The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Planning and Infrastructure</td>
</tr>
<tr>
<td>Director-General</td>
<td>Director-General of the Department, or nominee</td>
</tr>
<tr>
<td>Dispute resolution process</td>
<td>The independent dispute resolution process as described in Appendix 6</td>
</tr>
<tr>
<td>DRE</td>
<td>Division of Resources and Energy, within the Department of Trade and Industry, Regional Infrastructure and Services</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment titled Austar Coal Mine Environmental Assessment – Proposed Stage 3 Extension to Underground Mining and Associated Infrastructure (Volumes 1 to 3), prepared by Umwelt (Australia) Pty Limited and dated October 2008, including the response to submissions dated February 2009</td>
</tr>
<tr>
<td>EA (MOD 1)</td>
<td>Modification application 08_0111 MOD 1 and supporting documentation dated 9 March 2011</td>
</tr>
<tr>
<td>EA (MOD 2)</td>
<td>Environmental Assessment titled Austar Coal Mine Environmental Assessment – Stage 3 Modification (Volumes 1 and 2), prepared by Umwelt (Australia) Pty Limited, and dated September 2011, including the response to submissions dated November 2011</td>
</tr>
<tr>
<td>EA (MOD 3)</td>
<td>Environmental Assessment titled Austar Coal Mine LWA7-A10 Modification Stage 3 Area - Environmental Assessment, prepared by Umwelt (Australia) Pty Limited and dated October 2013</td>
</tr>
<tr>
<td>EEC</td>
<td>Endangered ecological community</td>
</tr>
<tr>
<td>Environmental consequences</td>
<td>The environmental consequences of subsidence impacts, including: damage to infrastructure, buildings and residential dwellings; loss of surface flows to the subsurface; loss of standing pools; adverse water quality impacts; erosion; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; ponding, etc.</td>
</tr>
<tr>
<td>EP&amp;A Act</td>
<td>Environmental Planning and Assessment Act 1979</td>
</tr>
<tr>
<td>EP&amp;A Regulation</td>
<td>Environmental Planning and Assessment Regulation 2000</td>
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<td>EPA</td>
<td>Environment Protection Authority</td>
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<tr>
<td>EPL</td>
<td>Environment Protection Licence issued under the POEO Act</td>
</tr>
<tr>
<td>Evening</td>
<td>The period from 6pm to 10pm</td>
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<td>Executive Director, Mineral Resources</td>
<td>Executive Director Mineral Resources within DRE, or the equivalent role</td>
</tr>
<tr>
<td>Feasible</td>
<td>Feasible relates to engineering considerations and what is practical to build</td>
</tr>
<tr>
<td>First workings</td>
<td>Development of main headings and gate roads to establish access to the coal in the mining area</td>
</tr>
<tr>
<td>Heritage Branch</td>
<td>Heritage Branch of OEH</td>
</tr>
<tr>
<td>Incident</td>
<td>A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval</td>
</tr>
</tbody>
</table>
| Land | In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in schedules 4 and 5 it means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles
Office at the date of this approval

Material harm to the environment
Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial

Mine complex
Austar Mine Complex

Mining area
The area depicted as longwall panels LW A7 to LW A19 and the surrounding area, bounded by the 20mm subsidence contour, shown in the figures in Appendix 2

Mining operations
Coal extraction activities carried out in Stage 3

Minister
Minister for Planning and Infrastructure, or delegate

Mitigation
Activities associated with reducing the environmental impacts

MSB
Mine Subsidence Board

Negligible
Small and unimportant, such as to be not worth considering

Night
The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays

NOW
NSW Office of Water, within the Department of Primary Industries

OEH
Office of Environment and Heritage

Offset strategy
The conservation and enhancement program described in the EA

POEO Act

Privately-owned land
Land that is not owned by a public agency, or a mining company (or its subsidiary)

Project
The development described in the EA, EA (MOD 1), EA (MOD 2) and EA (MOD 3)

Proponent
Austar Coal Mine Pty Ltd, or its successors in title

Reasonable
Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements

Reasonable Costs
The costs agreed between the Department and the Proponent for obtaining independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by the Dispute Resolution Process

Rehabilitation
The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment

Remediation
The treatment or management of land subject to subsidence effects to partially or fully repair or remediate subsidence impacts or environmental consequences

Response to submissions
The Proponent’s response to issues raised in submissions, dated February 2009

RMS
Roads and Maritime Services

ROM coal
Run-of-mine coal

Safe, serviceable and repairable
Safe means no danger to users, serviceable means available for its intended use, and repairable means damaged components can be repaired economically

Second workings
Extraction of coal from longwall panels, mini-wall panels or pillar extraction

Site
All land to which the project application applies, comprising the mining area and the surface facilities area, as listed in Appendix 1 and shown in the figures in Appendix 2

Stage 3
Mining operations in longwall panels A7 – A19

Statement of commitments
The Proponent’s commitments in Appendix 3

Steep slope
An area of land having a natural gradient of between 33° and 66°

Subsidence
The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts

Subsidence effects
Deformation of the ground mass due to mining, including all mining-induced ground movements, including both vertical and horizontal displacement, tilt, strain and curvature

Subsidence impacts
Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs

Surface Infrastructure Site
The surface infrastructure site shown in the figures in Appendix 2
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the project.

TERMS OF APPROVAL

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (b) EA (MOD 1);
   (c) EA (MOD 2);
   (d) EA (MOD 3);
   (e) statement of commitments; and
   (f) conditions of this approval.

   Notes:
   • The general layout of the project is shown in Appendix 2;
   • The statement of commitments is reproduced in Appendix 3.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department’s assessment of:
   (a) any strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with this approval; and
   (b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

5. Mining operations in Stage 3 may take place until 31 December 2030.

   Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Director-General and the Executive Director, Mineral Resources. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been properly rehabilitated.

6. The Proponent shall not extract more than 3.6 million tonnes of ROM coal a year from the Austar Mine Complex.

7. The Proponent may transport a maximum of 60,000 tonnes of coal (including coal reject) per calendar year from the mine complex by road. All other coal shall be transported from the site by rail.

STRUCTURAL ADEQUACY

8. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structure, are constructed in accordance with:
   (a) the relevant requirements of the BCA; and
   (b) any additional requirements of the MSB in areas where subsidence effects are likely to occur.

   Notes:
   • Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works;
   • Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

DEMOLITION

9. The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.
PROTECTION OF PUBLIC INFRASTRUCTURE

10. Unless a claim under the *Mine Subsidence Compensation Act 1961* can be made, or where the Proponent and the applicable authority agree otherwise, the Proponent shall:
   (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; or
   (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

OPERATION OF PLANT AND EQUIPMENT

11. The Proponent shall ensure that all plant and equipment used at the site is:
   (a) maintained in a proper and efficient condition; and
   (b) operated in a proper and efficient manner.

STRATEGIES, PLANS AND PROGRAMS

12. With the approval of the Director-General, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.

13. With the approval of the Director-General, the Proponent may integrate any strategies, plans, programs, reviews, audits or committees required by this approval with any similar requirement under another development consent or approval relating to the Auster Mine Complex.
SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS – MINING

KEY PERFORMANCE MEASURES

1. The Proponent shall ensure that the project does not cause any exceedance of the key performance measures in Table 1.

<table>
<thead>
<tr>
<th>Water Resources and Flooding</th>
<th>No significant increased risk on built features, unless the landowner agrees otherwise in writing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built Features</td>
<td>Safe, serviceable and repairable, unless the owner agrees otherwise in writing.</td>
</tr>
</tbody>
</table>

Note: The Proponent will be required to define more detailed performance indicators for these performance measures in the various management plans that are required under this approval (see condition 4 below).

ACQUISITION OF AFFECTED RESIDENCES

2. If the subsidence generated by the project results in damage to any residence on privately-owned land that in the opinion of the MSB exceeds its safe, serviceable and repairable criteria, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 5 to 7 of schedule 5.

However, the Proponent does not have to act on any such request if:
(a) the Proponent has a current, written negotiated agreement with the landowner in regard to the management of subsidence-related impacts beyond safe, serviceable and repairable criteria, and a copy of this agreement has been forwarded to the Department by the Proponent; or
(b) the landowner has agreed to the MSB purchasing the land or otherwise compensating the impacts under the Mine Subsidence Compensation Act 1961.

If the landowner has not made a written request for acquisition within 12 months of the date of being notified of the criteria exceedance and his/her acquisition rights by the Proponent, then the Proponent’s obligations to acquire the land shall cease, unless the Director-General determines otherwise.

FIRST WORKINGS

3. The Proponent shall not carry out first workings in the mining area that are not consistent with the approved mine plan without the written approval of the Director-General.

SECOND WORKINGS

Extraction Plan

4. The Proponent shall prepare and implement an Extraction Plan for all second workings in the mining area to the satisfaction of the Director-General. This plan must:
(a) be prepared by a team of suitably qualified and experienced experts whose appointment has been endorsed by the Director-General, and be approved by the Director-General prior to the commencement of any second workings covered by the Extraction Plan;
(b) include a detailed plan for the second workings, which has been prepared to the satisfaction of DRE, and provides for adaptive management;
(c) include detailed plans of any associated surface construction works;
(d) include the following to the satisfaction of DRE:
   • a coal resource recovery plan that demonstrates effective recovery of the available resource;
   • revised predictions of the subsidence effects and subsidence impacts of the extraction plan, incorporating any relevant information that has been obtained since this approval; and
   • a Subsidence Monitoring Program to:
     o validate the subsidence predictions; and
     o analyse the relationship between the subsidence effects and subsidence impacts of the Extraction Plan and any ensuing environmental consequences;
(e) include a:
  • Watercourse Management Plan, which has been prepared in consultation with OEH and NOW, to manage the environmental consequences of second workings on watercourses (including flooding and ponding) and alluvial aquifers;
  • Biodiversity Management Plan, which has been prepared in consultation with OEH, to manage the potential environmental consequences of second workings on aquatic and terrestrial flora and fauna, with a specific focus on threatened species;
  • Land Management Plan, to manage the potential environmental consequences of second workings on steep slopes and land in general;
  • Heritage Management Plan, which has been prepared in consultation with OEH and the relevant Aboriginal groups, to manage the potential environmental consequences of second workings on heritage sites or values;
  • Built Features Management Plan, which has been prepared in consultation with the owner of the relevant feature, to manage the potential environmental consequences of second workings on any built features; and

(f) include a Public Safety Management Plan, which has been prepared in consultation with DRE, to ensure public safety in the mining area.

Notes:
  • In accordance with condition 12 of schedule 2, the preparation and implementation of Extraction Plans for second workings may be staged, with each plan covering a defined area of second workings. In addition, these plans are only required to contain management plans that are relevant to the specific second workings that are being carried out.
  • The Watercourse Management Plan must be integrated with all relevant aspects of the Site Water Management Plan required under condition 8 of schedule 4.

5. In addition to the standard requirements for management plans (see condition 2 of schedule 7), the Proponent shall ensure that the management plans required under condition 4(e) above include:
   (a) a program to collect sufficient baseline data for future Extraction Plans;
   (b) a revised assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this approval;
   (c) a detailed description of the measures that would be implemented to remediate predicted impacts; and
   (d) a contingency plan that expressly provides for adaptive management.

Payment of Reasonable Costs

6. The Proponent shall pay all reasonable costs incurred by the Department to engage independent experts to review the adequacy of any aspect of the Extraction Plan.
SCHEDULE 4
SPECIFIC ENVIRONMENTAL CONDITIONS – GENERAL

CONSTRUCTION

Surface Infrastructure Site – Shaft Construction Management

1. The Proponent shall prepare and implement a Shaft Construction Management Plan for the Surface Infrastructure Site, to the satisfaction of the Director-General. This plan must:
   (a) be submitted to the Director-General for approval prior to commencement of shaft construction activities on the Surface Infrastructure Site; and
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7), a description of the measures/procedures to be implemented for:
       • minimising and managing the disturbance area;
       • protecting vegetation and soil outside the disturbance area;
       • controlling erosion and sedimentation, and managing water use;
       • undertaking pre-clearance surveys and managing impacts on fauna;
       • managing any Aboriginal objects or skeletal remains discovered during the project;
       • traffic management; and
       • noise, vibration and dust management.

   Note: Shaft construction activities are limited to the construction of the access road to the shafts, erection of security fencing, vegetation clearing (approximately 1.8 hectares), construction of the shafts and minor ancillary works.

NOISE

Noise Impact Assessment Criteria

2. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in:
   (a) Table 2, for noise generated by the Surface Infrastructure Site; and
   (b) any relevant EPL, for noise generated by all other components of the project.

Table 2: Noise impact assessment criteria – Surface Infrastructure Site, dB(A)

<table>
<thead>
<tr>
<th>Day/Evening/Night L_{Aeq} (15 minute)</th>
<th>Night L_{A1} (1 minute)</th>
<th>Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>45</td>
<td>All privately owned land</td>
</tr>
</tbody>
</table>

Notes:
- The location of the Surface Infrastructure Site is shown in the figures in Appendix 2.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.
- The noise limits in Table 2 do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.
- The noise limits in Table 2 do not apply to construction of the Surface Infrastructure Site. Noise generated during construction activities is to comply with the requirements of the Interim Construction Noise Guideline (DECCW 2009).

Noise and Vibration Management

3. The Proponent shall prepare and implement a Noise Management Plan for the mine complex, to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with EPA, and be submitted to the Director-General for approval prior to the commencement of construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above);
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7):
       • a noise monitoring program providing for a combination of continuous and supplementary attended monitoring measures;
       • a vibration monitoring program that is capable of recording ground vibrations on the surface emanating from underground mining activities; and
       • a detailed continual improvement program for investigating, implementing and reporting on all reasonable and feasible measures to reduce noise levels and vibration impacts generated by the mine complex.
AIR QUALITY AND GREENHOUSE GAS

Impact Assessment Criteria

4. The Proponent shall ensure that the dust emissions generated by the project do not cause additional exceedances of the air quality impact assessment criteria in:
   (a) Tables 3, 4 and 5 for dust generated by the Surface Infrastructure Site; and
   (b) any relevant EPL, for dust generated by all other components of the project, at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 3: Long term impact assessment criteria for particulate matter – Surface Infrastructure Site

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total suspended particulate (TSP) matter</td>
<td>Annual</td>
<td>90 µg/m³</td>
</tr>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>Annual</td>
<td>30 µg/m³</td>
</tr>
</tbody>
</table>

Table 4: Short term impact assessment criterion for particulate matter – Surface Infrastructure Site

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate matter &lt; 10 µm (PM₁₀)</td>
<td>24 hour</td>
<td>50 µg/m³</td>
</tr>
</tbody>
</table>

Table 5: Long term impact assessment criteria for deposited dust – Surface Infrastructure Site

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Maximum increase in deposited dust level</th>
<th>Maximum total deposited dust level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposited dust</td>
<td>Annual</td>
<td>2 g/m²/month</td>
<td>4 g/m²/month</td>
</tr>
</tbody>
</table>

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 2003, AS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Operating Conditions

5. The Proponent shall:
   (a) ensure that any visible air pollution generated by the project is assessed regularly and measures are taken to minimise air quality impacts on privately-owned land; and
   (b) implement all reasonable and feasible measures to minimise the off-site odour and fume emissions generated by the mine complex’s ventilation system or any spontaneous combustion on the site, to the satisfaction of the Director-General.

Air Quality and Greenhouse Gas Management

6. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the mine complex, to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with EPA, and be submitted to the Director-General for approval prior to the commencement of construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above); and
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7):
      • an air quality monitoring program providing for a combination of continuous monitors, high volume samplers and dust deposition gauges;
      • an energy savings action plan, including a feasibility study into the capture and beneficial utilisation of methane gas emissions from the project; and
      • a detailed continual improvement program for investigating, implementing and reporting on all reasonable and feasible measures to reduce dust generated by the mine complex.
METEOROLOGICAL

7. The Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the project in accordance with the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales and to the satisfaction of the Director-General.

SURFACE AND GROUND WATER

Discharge Limits

8. The Proponent shall not discharge any water from the site except as may be expressly provided by an EPL, or in accordance with section 120 of the Protection of the Environment Operations Act 1997.

Site Water Management Plan

9. The Proponent shall prepare and implement a Site Water Management Plan for the mine complex to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with EPA, NOW and DRE, and be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above); and
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7):
      (i) a Site Water Balance, which details:
          • sources and security of water supply;
          • water use and management on site;
          • any off-site water transfers or discharges; and
          • measures to minimise water use by the project;
      (ii) an Erosion and Sediment Control Plan;
      (iii) a Surface Water Monitoring Program, including programs to monitor:
          • surface water flows and quality, stream health and channel stability in Black Creek, Cony Creek, Sandy Creek and Quorrobolong Creek; and
          • impacts on water users and water levels in farm dams;
      (iv) a Ground Water Monitoring Program, including programs to monitor:
          • groundwater volumes and quality seeping into the underground mine workings;
          • impacts on regional aquifers;
          • impacts on the groundwater supply of potentially affected landowners;
          • impacts on the alluvial aquifers in Black Creek, Cony Creek, Sandy Creek and Quorrobolong Creek; and
          • impacts on groundwater dependent ecosystems and riparian vegetation (including the River-flat Eucalypt Forest EEC); and
      (v) a Surface and Ground Water Response Plan, which describes the measures and/or procedures that would be implemented to:
          • respond to any exceedances of the relevant performance measures/criteria;
          • compensate landowners of privately-owned land whose water supply is adversely affected by the project; and
          • mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

   Note: The Department acknowledges that certain monitoring requirements under this plan may be subject to the granting of access on privately-owned land.

HERITAGE

Aboriginal Cultural Heritage

10. The Proponent shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Director-General. The plan must:
   (a) be prepared by a suitably qualified archaeologist in consultation with OEH and the relevant Aboriginal groups, and be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above); and
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7), a program/procedures for:
       • salvage and management of Aboriginal sites within the Surface Infrastructure Site disturbance area;
• monitoring and management of Aboriginal sites within the mining area;
• managing the discovery of any new Aboriginal objects or skeletal remains discovered during the project;
• undertaking additional archaeological surveys on any areas subject to extensive remediation activities;
• undertaking additional archaeological surveys to the satisfaction of the Director-General, prior to commencing activities in undisturbed reject emplacement areas (as shown on the figure in Appendix 4); and
• ongoing consultation with and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

Note: The Proponent has committed to a $100,000 contribution to Aboriginal projects to offset the potential impact on an axe grinding groove (see Appendix 3).

Historic Heritage

11. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. The plan must:
   (a) be prepared by a suitably qualified heritage consultant in consultation with Council and the Heritage Branch, and be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above); and
   (b) include, in addition to the standard requirements for management plans (see condition 2 of schedule 7), a program/procedures for:
       • monitoring and management of identified heritage sites within the mining area and other disturbance areas;
       • undertaking a Heritage Impact Assessment to the satisfaction of the Director-General, prior to re-commencing any mining activities at the Cessnock No.1 Colliery surface facilities at Kalingo;
       • obtaining relevant approvals under the Heritage Act 1977 for any works proposed to be undertaken on or under Lot 1 DP 87087 and Part Lot 1 DP 69968 County of Northumberland, Parish of Heddon; and
       • managing the discovery of any new heritage items during the project.

Note: Lot 1 DP 87087 and Part Lot 1 DP 69968 County of Northumberland, Parish of Heddon is currently subject to a section 130 order under the Heritage Act 1977 to prevent harm to buildings, works, relics etc of the South Maitland Railway, gazetted 16 September, 1983.

TRANSPORT

Road Upgrades

12. The Proponent shall undertake the following road upgrade works generally in accordance with the recommendations in the EA, and to the satisfaction of Council and/or the RMS:
   (a) provide crossings over Wollombi Road and Middle Road, prior to the commencement of any reject emplacement south of those roads other than to the Aberdare emplacement areas;
   (b) construct the Surface Infrastructure Site access intersection on Quorrobolong Road (including lighting and signage) and upgrade the Wollombi Road / West Avenue intersection to provide a designated right turn into West Avenue, prior to the commencement of construction of buildings on the Surface Infrastructure Site;
   (c) upgrade the road level crossing at Vincent Street, Kitchener, as recommended in Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit (GHD March 2007), prior to the commencement of construction of the Surface Infrastructure Site; and
   (d) use its best endeavours to upgrade the following road level crossings, as recommended in Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit (GHD March 2007), in consultation with South Maitland Railway, prior to the commencement of construction of buildings on the Surface Infrastructure Site:
       • Cessnock Road, Kearsley;
       • Neath Road, Neath; and
       • Mitchell Avenue, Weston.

Note: The relevant reject emplacement areas referred to in (a) are shown on the figure in Appendix 4.
Road Maintenance Contributions

13. From the end of 2009, the Proponent shall make an appropriate annual contribution to Council for the maintenance of local roads that are used as haulage routes by the project. If there is any dispute over the amount of the contribution, the matter shall be referred to the Director-General for resolution.

VISUAL

14. The Proponent shall:
(a) take all reasonable and feasible measures to mitigate visual and off-site lighting impacts of the project; and
(b) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, to the satisfaction of the Director-General.

WASTE

Waste Minimisation

15. The Proponent shall:
(a) minimise the waste (including coal reject) generated by the project;
(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and
(c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Director-General.

Reject Emplacement

16. If reject emplacement outside the existing operational West Open Cut, East Open Cut and Aberdare emplacement areas is proposed, the Proponent shall:
(a) at least 12 months before reject emplacement into existing operational emplacement areas is complete, after consultation with the Executive Director, Mineral Resources and to the satisfaction of the Director-General:
• justify the need for the use of additional emplacement area/s;
• provide reports on geotechnical investigations and engineering specifications for the proposed emplacement area/s; and
• investigate and report on the possibility of disposal of all reject into a single additional emplacement area; and
(b) emplace coal reject in the additional emplacement area/s subject to such conditions as the Director-General may impose.

Note: The existing operational reject emplacement areas are shown on the Austar mine complex figure in Appendix 2. Both the existing operational and additional (formerly-approved) reject emplacement areas are shown on the figure in Appendix 4.
SCHEDULE 5
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of the monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant impact assessment criteria, except where a negotiated agreement has been entered into in relation to that impact, then the Proponent shall, within 2 weeks of obtaining the monitoring results, notify the Director-General, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 4.

2. If the results of monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant air quality impact assessment criteria in schedule 4, then the Proponent shall send the relevant landowners and tenants (including tenants of mine owned properties) a copy of the NSW Health fact sheet entitled “Mine Dust and You” (and associated updates) in conjunction with the notification required in condition 1.

INDEPENDENT REVIEW

3. If a landowner of privately-owned land considers the project to be exceeding the impact assessment criteria in schedule 4, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

   If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 2 months of the Director-General’s decision:
   (a) consult with the landowner to determine his/her concerns;
   (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to:
       • determine whether the project is complying with the relevant impact assessment criteria in schedule 4; and
       • identify the source(s) and scale of any impact on the land, and the project’s contribution to this impact; and
   (c) give the Director-General and landowner a copy of the independent review.

4. If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 4, then the Proponent may discontinue the independent review with the approval of the Director-General.

   If the independent review determines that the project is not complying with the relevant impact assessment criteria in schedule 4, then the Proponent shall:
   (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or
   (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Director-General.

   If the further monitoring referred to under paragraph (a) above determines that the project is complying with the relevant impact assessment criteria, then the Proponent may discontinue the independent review with the approval of the Director-General.

LAND ACQUISITION

5. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:
   (a) the current market value of the landowner’s interest in the property at the date of this written request, as if the property was unaffected by the project the subject of the project application, having regard to the:
       • existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
       • presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner’s written request, and is due to be completed subsequent to that date;
   (b) the reasonable costs associated with:
• relocating within the Cessnock local government area, or to any other local government area determined by the Director-General;
• obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
(c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if following this period, the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to:
(a) consider submissions from both parties;
(b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
(c) prepare a detailed report setting out the reasons for any determination; and
(d) provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer’s report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer’s determination.

However, if either party disputes the independent valuer’s determination, then within 14 days of receiving the independent valuer’s report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer’s determination. Following consultation with the independent valuer and both parties, the Director-General shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above and the independent valuer’s report. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General’s determination.

If the landowner refuses to accept the Proponent’s binding written offer under this condition within 6 months of the offer being made, then the Proponent’s obligations to acquire the land shall cease, unless the Director-General determines otherwise.

6. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 5 above.

7. If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall also pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
SCHEDULE 6
REHABILITATION AND OFFSETS

REHABILITATION AND BIODIVERSITY OFFSETS

Rehabilitation Objectives

1. The Proponent shall achieve the rehabilitation objectives in Table 6 to the satisfaction of the Executive Director, Mineral Resources.

<table>
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<tr>
<th>Domain</th>
<th>Rehabilitation objective</th>
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<tr>
<td>Surface Infrastructure Site</td>
<td>Revegetate the cleared portion of the site with a structured native vegetation community similar to that existing pre-mining, or other landuse approved by the Director-General. Additional objectives/criteria to be set through condition 4 below</td>
</tr>
<tr>
<td>Biodiversity offset area</td>
<td>Implement the offset strategy described in the EA and shown conceptually in Appendix 5. Additional objectives/criteria to be set through condition 4 below</td>
</tr>
<tr>
<td>Land affected by the project (including watercourses and steep slopes)</td>
<td>Rehabilitate landform, landuse and ecosystem function to that existing pre-mining and consistent with the surrounding landform. Reduce safety hazards to no more than those existing pre-mining. Minimise erosion risk.</td>
</tr>
<tr>
<td>Built features</td>
<td>Repair/restore/replace to pre-mining condition or better, unless a claim under the Mine Subsidence Compensation Act 1961 is made for the repairs, restoration or replacement.</td>
</tr>
<tr>
<td>Community</td>
<td>Minimise the adverse socio-economic effects associated with mine closure.</td>
</tr>
</tbody>
</table>

Progressive Rehabilitation

2. To the extent that mining operations permit, the Proponent shall carry out rehabilitation progressively, that is, as soon as reasonably practicable following the disturbance.

Long Term Security of Offset Area

3. Within 2 years of the date of this approval, the Proponent shall make suitable arrangements to provide appropriate long term conservation security for the offset area to the satisfaction of the Director-General.

Note: The offset area is described in the EA and shown conceptually in Appendix 5.

Landscape Management Plan

4. The Proponent shall prepare and implement a Landscape Management Plan for the project to the satisfaction of the Director-General and the Executive Director, Mineral Resources. This plan must:
   (a) be prepared in consultation with the relevant stakeholders by suitably qualified expert/s whose appointment/s have been endorsed by the Director-General, and be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 of schedule 4);
   (b) in addition to the standard requirements for management plans (see condition 2 of schedule 7), include:
      (i) the rehabilitation objectives for the site and offset area;
      (ii) a description of the short, medium, and long term measures that would be implemented to:
        • rehabilitate the site;
        • implement the offset strategy; and
        • manage the remnant vegetation and habitat on the site and in the offset area;
      (i) performance and completion criteria for the rehabilitation of the site and implementation of the offset strategy;
      (ii) a detailed description of the measures would be implemented over the next 3 years, including the procedures to be implemented for:
• minimising and rehabilitating disturbed areas;
• implementing the offset strategy;
• protecting vegetation and soil outside the disturbance areas;
• undertaking pre-clearance surveys;
• managing impacts on fauna;
• landscaping the site to minimise visual impacts;
• conserving and reusing topsoil;
• collecting and propagating seed for rehabilitation works;
• salvaging and reusing material from the site for habitat enhancement;
• controlling weeds and feral pests;
• controlling access; and
• bushfire management.
ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the Austar Mine Complex, to the satisfaction of the Director-General. The strategy must:
   (a) be submitted to the Director-General for approval prior to the commencement of second workings in Stage 3 and construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 of schedule 4);
   (b) provide the strategic framework for environmental management of the mine complex;
   (c) identify the statutory approvals that apply to the mine complex;
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the mine complex;
   (e) describe the procedures that would be implemented to:
      • keep the local community and relevant agencies informed about the operation and environmental performance of the mine complex;
      • receive, handle, respond to, and record complaints;
      • resolve any disputes that may arise during the course of the project;
      • respond to any non-compliance; and
      • respond to emergencies;
   (f) include:
      • copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
      • a clear plan depicting all the monitoring to be carried out in relation to the mine complex.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
   (a) detailed baseline data;
   (b) a description of:
      • the relevant statutory requirements (including any relevant approval, licence or lease conditions);
      • any relevant limits or performance measures/criteria;
      • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
   (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
   (d) a program to monitor and report on the:
      • impacts and environmental performance of the project;
      • effectiveness of any management measures (see (c) above);
   (e) a contingency plan to manage any unpredicted impacts and their consequences;
   (f) a program to investigate and implement ways to continually improve the environmental performance of the project over time;
   (g) a protocol for managing and reporting any:
      • incidents;
      • complaints;
      • non-compliances with statutory requirements; and
      • exceedances of the impact assessment criteria and/or performance criteria; and
   (h) a protocol for periodic review of the plan.

Annual Review

3. Each year, the Proponent shall review the environmental performance of the mine complex to the satisfaction of the Director-General. This review must:
   (a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;
   (b) include a comprehensive review of the monitoring results and complaints records of the mine complex over the past year, which includes a comparison of these results against the
      • the relevant statutory requirements, limits or performance measures/criteria;
      • the monitoring results of previous years; and
      • the relevant predictions in the EA and Extraction Plan;
(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
(d) identify any trends in the monitoring data over the life of the mine complex;
(e) identify any discrepancies between the predicted and actual impacts of the mine complex, and analyse the potential cause of any significant discrepancies; and
(f) describe what measure will be implemented over the next year to improve the environmental performance of the mine complex.

Revision of Strategies, Plans and Programs

4. Within 3 months of:
   (a) the submission of an annual review under Condition 3 above;
   (b) the submission of an incident report under Condition 6 below;
   (c) the submission of an audit report under Condition 7 below; or
   (d) any modification to the conditions of this approval, (unless the conditions require otherwise), the Proponent shall review the strategies, plans, and programs required under this approval, to the satisfaction of the Director-General. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Director-General.

Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.

Community Consultative Committee

5. The Proponent shall maintain a Community Consultative Committee (CCC) for the mine complex to the satisfaction of the Director-General. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version).

Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval. In accordance with the Guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent, affected councils, recognised environmental groups and the general community.

INCIDENT REPORTING

6. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the mine complex 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 Director-General and any relevant agencies with a detailed report on the incident.

INDEPENDENT ENVIRONMENTAL AUDIT

7. By end of December 2011, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the mine complex. This audit must:
   (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
   (b) include consultation with the relevant agencies;
   (c) assess the environmental performance of the mine complex and assess whether it is complying with the requirements in relevant project approvals and development consents and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
   (d) review the adequacy of strategies, plans or programs required under these approvals; and
   (e) recommend appropriate measures or actions to improve the environmental performance of the mine complex, and/or any assessment, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.

8. Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

9. From the end of 2009, the Proponent shall make the following information publicly available on its website:
   (a) a copy of all current statutory approvals for the mine complex;
(b) a copy of the current environmental management strategy and associated plans and programs;
(c) a summary of the monitoring results of the mine complex, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
(d) a complaints register, which is to be updated on a monthly basis;
(e) a copy of the minutes of CCC meetings;
(f) a copy of any Annual Reviews (over the last 5 years);
(g) a copy of any Independent Environmental Audit, and the Proponent’s response to the recommendations in any audit; and
(h) any other matter required by the Director-General.
## APPENDIX 1
### SCHEDULE OF LAND

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Various Crown land, road and rail reserves
APPENDIX 3
STATEMENT OF COMMITMENTS

[Note: References to sections, figures and appendices are references to the EA]

Statement of Commitments – Austar Coal Mine Stage 3 EA

As part of approval under Part 3A of the EP&A Act for the proposed Stage 3 Project, Austar Coal Mine will commit to the following controls:

1.1 Compliance with the EA

Operation of the Stage 3 development will be undertaken in accordance with the environmental controls and commitments as described in the EA or as specified in this Statement of Commitments.

1.2 Life of Stage 3 Concept Mine Plan

Project Life

1.2.1 The project approval life will be until 31 December 2030. Closure and rehabilitation activities may continue beyond this period and will be undertaken in accordance with an approved Mining Operations Plan.

Production Limits

1.2.2 Underground mining in Stage 3 will produce up to 3.6 Mtpa ROM coal by LTCC methods. This coal will be conveyed, handled, processed and transported using Austar Mine Complex infrastructure.

Hours of Operation

1.2.3 Mining and associated activities for the Stage 3 Project may be undertaken 24 hours a day, seven days a week.

Refinement of Mine Plan

1.2.4 Any material changes to the concept mine plan outlined in this EA report will be detailed and assessed as part of Extraction Plans (EPs) and Mining Operations Plan (MOP) prepared by Austar Coal Mine.

1.2.5 Mining parameters for the proposed mine plan as detailed in the EP will be designed to ensure that predicted systemic subsidence in terms of subsidence, tilt, tensile strain and compressive strain will comply with or be less than the Upper Bound predictions detailed in the EA. Those being:

- 3000 mm subsidence;
- 11 mm/m tilt;
- 0.09km$^{-1}$ total conventional hogging curvature; and
- 0.15km$^{-1}$ total conventional sagging curvature.

1.2.6 The locations of any minor surface infrastructure that may be required to implement the project will be detailed and assessed as part of MOP’s prepared by Austar Coal Mine.

1.3 Subsidence

1.3.1 Austar Coal Mine will manage the impacts of mining subsidence as required by the conditions of the consent, conditions of the ML and other DII conditions.

1.3.2 The Mine Plan submitted as part of the EP for longwall extraction will take into consideration monitoring results from previous Austar Mine Complex operations and will be designed to ensure that subsidence as a result of mining does not exceed Upper Bound predictions as set out in the EA for subsidence, tilt, tensile strain and compressive strain. Those being:

- **Maximum Upper Bound** subsidence ranges from approximately 825 mm for LWA7 to approximately 3000 mm for LWA19.
- **Maximum Upper Bound** tilt ranges from approximately 4.0 mm/m for LWA7 to approximately 11 mm/m for LWA19.
• **Maximum Upper Bound** conventional hogging curvature ranges from approximately 0.2 mm/m for LWA7 to approximately 0.09 km^{-1} for LWA19.

• **Maximum Upper Bound** conventional sagging curvature ranges from approximately 0.06 km^{-1} for LWA7 to approximately 0.15 km^{-1} for LWA19.

1.3.3 Where a potential subsidence impact is identified on private property, Austar Coal Mine will prepare a Built Features Management Plan in consultation with the property owner. This plan will clearly outline impacts of mining on the property and the management and remediation measures to be implemented.

1.3.4 Subsidence management measures to be implemented as part of the project will include:

- subsidence monitoring lines to be located as determined as part of the EP process where access is granted;
- visual assessment of all natural features and items of surface infrastructure before, during and following mining to detect subsidence impacts such as surface cracking, irregularities in the subsidence profile, erosion, damage to structures, changes in drainage patterns or loss of water from drainage structures where access is granted;
- detailed subsidence monitoring in accordance with DRE requirements. This data will be utilised to regularly update the subsidence predictions for Stage 3;
- remediation and rehabilitation of subsidence impacts will be carried out, where required, as soon as practicable following subsidence using methods specified in the EP where access is granted;
- building structures located within the subsidence affectation area will be inspected by a structural engineer prior to and after undermining and appropriate management measures implemented where access is granted;
- informing all relevant service providers of the potential impacts of mining subsidence on services;
- farm dams within the subsidence affectation area will be monitored during and following undermining where access is granted, to ensure they remain in a safe and serviceable condition. Remediation works will be undertaken as required;
- in the event of any significant loss of water from a privately-owned farm dam, Austar Coal Mine will provide an alternate source of water, as required, until the dam is repaired where access is granted; and
- any privately-owned bores within the subsidence affectation area will be monitored during and following undermining where access is granted. If the capacity of any utilised private bore is reduced to unacceptable level as a result of subsidence, Austar Coal Mine will provide an alternative supply of water until such time as the MSB re-establishes or replaces the bore.

1.3.5 Austar Coal Mine will, prior to undermining of Quorrobolong Road, Nash Lane and Coney Creek Lane prepare and implement a Traffic Management Plan to manage any subsidence impacts on the roads and associated culverts and bridges in consultation with Cessnock City Council and DRE and to the satisfaction of the Director-General.

1.3.6 Austar Coal Mine will prepare management plans in consultation with relevant service providers, for the protection of infrastructure and services within the potential Stage 3 mine subsidence area to ensure these remain in a safe and serviceable condition throughout the mining period. These plans will be submitted to the Director General for approval as part of the EP prior to undermining of the services.

1.4 Ecology

1.4.1 Austar Coal Mine will establish and manage the proposed Biodiversity Offset Area (refer to Figure 7.1 of the EA) to protect and enhance its ecological values in perpetuity, to the satisfaction of the Director-General.

1.4.2 A Weed Management Plan will be developed for the Surface Infrastructure Site.

1.4.3 The Austar bushfire management strategy will be revised to include the specific requirements of the Surface Infrastructure Site during the construction and operation phases.

1.4.4 Prior to the commencement of construction of the Surface Infrastructure Site (other than for those works identified in the Shaft Construction Management Plan), an Austar Mine Complex Ecological Management Plan which integrates management of ecological issues associated with construction of
the Surface Infrastructure Site, Stage 3 underground mining and with the remainder of Austar Coal Mine operations will be submitted to the Director-General for approval. This will include:

- clearing procedures for establishment of the Surface Infrastructure Site and associated access road/services easement;
- replacement of arboreal habitat within surrounding areas or within the Biodiversity Offset Area, should the removal of any hollow-bearing trees be required; and
- extension of the existing Austar Coal Mine ecological monitoring program to include monitoring of vegetation condition within subsidence affected areas.

1.4.5 Clearing of vegetation will be restricted to the minimum area necessary to construct the proposed infrastructure and provide adequate fire protection and will be undertaken in accordance with the tree felling procedure outlined in Section 7.5.3 of the EA.

1.4.6 An appropriate speed limit on access roads will be implemented to minimise the risk of vehicle collision with ground-dwelling fauna dispersing between adjacent habitats.

1.4.7 An appropriately designed nest box will be erected (either within remaining bushland areas or within the Biodiversity Offset Area) for the compensation of each tree hollow removed as a result of clearing required for construction of the proposed Surface Infrastructure Site.

1.4.8 Any outbreaks of invasive weeds observed on the property boundary will be appropriately controlled to avoid their escape into the surrounding Werakata State Conservation Area and subsequently competing with threatened flora species. Early detection will ensure the management required is not extensively onerous.

1.4.9 Any landscaping undertaken around infrastructure areas will use only locally occurring native plant species to reduce the risk of invasive plant species escaping into the adjacent reserve and competing with threatened flora species. Particular care will be taken to avoid planting species which are known to escape and naturalise into native bushland.

1.5 Heritage

1.5.1 An Aboriginal Cultural Heritage Management Plan (ACHMP) will be prepared for the Austar Mine Complex to outline all Aboriginal heritage management strategies for the project, responsibilities of all parties and the timeframe for required heritage works.

1.5.2 Austar will make a monetary contribution of $100,000 to an Aboriginal project or program (to be decided by Aboriginal stakeholders) as an offset for any subsidence impacts that affect the grinding groove site. Austar will make this contribution when all necessary government approvals for the Project have been obtained.

1.5.3 No Aboriginal archaeological site be visited, or have works done there, without Aboriginal stakeholders in attendance.

1.5.4 Known sites on accessible properties will be included in a monitoring program. This will involve recording each site before and after subsidence to identify any impacts. This will be done by an archaeologist and Aboriginal stakeholders.

1.5.5 Aboriginal stakeholders (and an archaeologist if requested by Aboriginal stakeholders) will provide relevant Austar personnel with a cultural heritage awareness training session.

1.5.6 If any additional sites are found within the Project area, these will be inspected by an archaeologist and Aboriginal stakeholders where access is granted to assess the site and decide on how it should be managed.

1.5.7 If remediation works are required on any of the creeklines within the Stage 3 area, an archaeological survey with Aboriginal stakeholders will be undertaken prior to commencement of any works where access is granted.

1.5.8 Historic Heritage Management Plan incorporating all of Austar Mine Complex will be developed.
1.6 Surface Water and Drainage

1.6.1 Austar will develop a detailed Soil and Water Management Plan for the Surface Infrastructure Site prior to commencement of construction.

1.6.2 Erosion and sediment control measures will be designed and implemented for construction of surface infrastructure to a standard consistent with Managing Urban Stormwater: Soils and Construction (NSW Landcom 2004) (the Blue Book) and Guidelines for Establishing Drainage Lines on Rehabilitated Minesites (Draft) (DLWC, 1999).

1.6.3 Any subsidence impacts on drainage lines will be effectively remediated where access is granted such that there is no significant impact on downstream water users and environmental flows. Drainage line monitoring and remediation protocols will be developed as part of the EP process, and in consultation with NOW, to guide the management of subsidence impacts and drainage line remediation works on surface water systems. The drainage line monitoring and remediation protocols will include:

- detailed monitoring protocols;
- a program to complete drainage remediation works in a timely manner, post-subsidence to limit the potential for surface water capture;
- details of the design of drainage line remediation works such that the rehabilitated drainage lines maintain a similar channel form and sinuosity to the pre-mining environment, to ensure that the overall erosive power of the creek system is consistent with that existing pre-mining;
- assessment of the viability and benefits of applying proactive measures such as the installation of liners or geo-fabrics in drainage lines prior to subsidence; and
- the existing Austar Site Water Management Plan will be extended to include the Surface Infrastructure Site and Stage 3 underground mining. The plan will be updated in consultation with NOW and DRE and submitted to the Director-General prior to the commencement of construction of the Surface Infrastructure Site.

1.6.4 Surface water monitoring results will be reported annually in the Annual Review.

1.7 Groundwater

1.7.1 A groundwater monitoring program will be implemented for the project as outlined in Appendix 14, or as otherwise agreed by the Director-General in consultation with NOW.

1.7.2 The results of groundwater monitoring and a comparison of measured and predicted impacts will be reported annually in the Annual Environmental Management Report.

1.7.3 Impacts on privately-owned bores will be assessed by monitoring where access is granted and in the event that any utilised privately-owned bore is significantly affected, an alternative water supply will be provided by Austar Coal Mine until such time as the bore is re-established or replaced.

1.7.4 An annual analysis of surface and groundwater monitoring data will be undertaken and will include:

- comparison of groundwater levels with rainfall information;
- identification of any changes or long-term trends in groundwater levels; and
- visual inspection of creeks and drainage lines

1.7.5 The monitoring results and analysis findings will be reported in the Annual Review.

1.8 Noise and Blasting

1.8.1 Unless otherwise agreed with the landowner, Austar Coal Mine will manage operations associated with the Stage 3 underground mining and Surface Infrastructure Site such that the noise emissions from these operations comply with the noise criteria included in Table 1.1 at surrounding residences for the range of meteorological conditions modelled in the EA.

<table>
<thead>
<tr>
<th>Location</th>
<th>Period</th>
<th>Intrusiveness Criteria</th>
<th>Amenity Criteria</th>
<th>Project Specific Noise Criteria</th>
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<tr>
<td></td>
<td></td>
<td>L&lt;sub&gt;Aeq&lt;/sub&gt;(15minute)</td>
<td>L&lt;sub&gt;Aeq&lt;/sub&gt;(Period)</td>
<td>L&lt;sub&gt;Aeq&lt;/sub&gt;(15minute)</td>
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Table 1.1 – Project Specific Noise Criteria
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<tr>
<th>Location</th>
<th>Period</th>
<th>Intrusiveness Criteria $L_{Aeq(15\text{minute})}$</th>
<th>Amenity Criteria $L_{Aeq(\text{Period})}$</th>
<th>Project Specific Noise Criteria $L_{Aeq(15\text{minute})}$</th>
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<td></td>
<td>Evening</td>
<td>35 dBA</td>
<td>45 dBA</td>
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<tr>
<td></td>
<td>Night</td>
<td>35 dBA</td>
<td>40 dBA*</td>
<td>35 dBA</td>
</tr>
<tr>
<td>Serradilla Residence, Kauter Residence, Penney and Linton Property</td>
<td>Day</td>
<td>37 dBA</td>
<td>50 dBA</td>
<td>37 dBA</td>
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<td></td>
<td>Evening</td>
<td>37 dBA</td>
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<td>35 dBA</td>
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1.8.2 Unless otherwise agreed with the landowner, Austar Coal Mine will manage the construction phase of the Surface Infrastructure Site in accordance with the requirements of DECCW’s Interim Construction Noise Guideline (2009).

1.8.3 Acoustic bunding will be constructed to a height of 3.5 metres above ground level along the northern boundary adjacent to the car park and bathhouse.

1.8.4 The ventilation fan outlet will be directed to the west.

1.8.5 Man and materials winder and second egress winder motors will be enclosed.

1.8.6 Blasting will generally take place only once per day and will be undertaken between the hours of 9.00 am to 5.00 pm Monday to Saturday with no blasting on Sundays or Public Holidays.

1.8.7 Airblast overpressure from blasting associated with shaft development at the Surface Infrastructure Site when measured at residences not associated with the development will not exceed a maximum of 120 dBL Linear Peak at any time and will not exceed 115 dBL for more than 5% of blasts over a 12 month period.

1.8.8 Peak particle velocity from blasting associated with shaft development at the Surface Infrastructure Site when measured at residences not associated with the development will not exceed a maximum of 10 mm/s at any time and will not exceed 5 mm/s for more than 5% of blasts over a 12 month period.

1.9 Air Quality

1.9.1 Austar Coal Mine will manage operations associated with the operation of the Surface Infrastructure Site so that dust deposition as a result of the development does not exceed levels set out in Table 1.2 at nearest non-project related residences.

<table>
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<tr>
<th>Pollutant</th>
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<th>Maximum Increase in Deposited Dust Level</th>
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<tr>
<td>Deposited dust</td>
<td>Annual</td>
<td>2 g/m²/month</td>
<td>4 g/m²/month</td>
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Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

1.9.2 Austar Coal Mine will expand the existing dust monitoring network to include dust deposition gauges at locations to the south and north of the proposed Surface Infrastructure Site. Dust monitoring findings relating to the Surface Infrastructure Site will be reported annually in the Annual Review.

1.10 Energy and Greenhouse Gas

1.10.1 Austar Coal Mine will develop and maintain an internal energy and GHG management plan for Stage 3 operations in accordance with Austar Coal Mine requirements. This will include reviewing:

- energy efficiency in plant and equipment procurement, consideration be given to the life cycle costs advantages obtained by using energy efficient components;
- the opportunity to install additional sub-metering for offices, workshops and winders;
- operational initiatives such as turning off idling plant equipment;
• control and temperature settings for air conditioning units in offices and switchrooms;
• automatic control of external and internal lighting;
• potential energy efficiency opportunities in water pumping and dust suppression systems (for example, variable speed drive pumps);
• review changes in power consumption with installation of new equipment and install power factor correction equipment to suit; and
• review workshop and bathhouse lighting and office and high bay lighting.

1.11 Visual

1.11.1 Austar Coal Mine will implement the following visual controls to screen or reduce the visual impact from views of the Surface Infrastructure Site from residential areas and public road locations:
• Maintain a vegetative screen along the edges of the access road to the Surface Infrastructure Site.
• Limit clearing on the Surface Infrastructure Site to that required for construction and bushfire protection purposes.
• Use appropriate natural tones on the winder building to ensure that it blends into the backdrop of native forest when viewed from Kitchener and sections of Quorrobolong Road.
• Direct night-time security lights into the site and ensure that all lighting is located and directed so as to not directly impact on residential or road locations. Lighting will be designed to minimise excessive night glow in a manner consistent with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting.
• All buildings potentially visible to the public to be coloured in suitable natural tones.

1.12 Transport

1.12.1 To mitigate potential traffic impacts associated with the development of the Surface Infrastructure Site, Austar Coal Mine will:
• Construct an Austroads type AUR intersection treatment with an auxiliary passing lane for through traffic on Quorrobolong Road around right turning traffic at the proposed Surface Infrastructure Site access.
• Provide lighting at the proposed pit top facility access intersection on Quorrobolong Road.
• Erect a left side road junction (W2-4) warning sign for northbound traffic approaching the proposed Surface Infrastructure Site access intersection to compensate for less than desirable Safe Intersection Site Distance (SISD).
• Prepare a traffic management plan for oversize and heavy vehicle movements to and from the Surface Infrastructure Site during construction of the Stage 3 development. This Plan will take into consideration specific measures that may be required in regard to address school bus movements on Quorrobolong Road during the construction phase.

1.13 Community

1.13.1 Austar Coal Mine will work with Cessnock City Council, the Department and Community Consultative Committee to incorporate representatives from the Stage 3 Project area. Austar Coal Mine will provide the Community Consultative Committee with regular information regarding the environmental management performance of the Stage 3 Project and any relevant matters regarding community relations.

1.13.2 Maintain a 24 hour per day community information and complaint line.

1.13.3 Provide regular updates of mine development and monitoring on the Austar Coal Mine website.

1.13.4 Austar Coal Mine will in consultation with Cessnock City Council contribute to the upgrade of the Wollombi Road/West Avenue intersection prior to commissioning of the Surface Infrastructure Site to provide a designated right turn lane into West Avenue to formalise traffic movements in this area and improve existing traffic problems associated with the right turn movement using the through lane and through vehicles passing in the bicycle lane/parking area.
1.13.5 Install a type F flashing light control at the Vincent Street railway level crossing.

1.13.6 Provide support to Kitchener Public School through the provision of sporting equipment and contributions to school/community projects.

1.13.7 Contribute to the ongoing maintenance of Poppet Head Reserve, Kitchener.

1.14 Decommissioning and Rehabilitation

1.14.1 A decommissioning plan will be prepared for the Surface Infrastructure Site as part of the MOP process and submitted to the DRE for approval approximately five years prior to the commencement of decommissioning works.

1.15 Continuous Improvement of Existing Operations

1.15.1 Austar Coal Mine will review and extend its current Site Water Management Plan for Austar Mine Complex to include Stage 3 operations and operation of the Surface Infrastructure Site. The water performance of the water management system will be reported in the Annual Review.

1.15.2 Activities within Austar Mine complex will be undertaken in accordance with approved Mining Operation Plan that will be reviewed and updated at least every seven years.

1.15.3 Austar Coal Mine will continue to implement the voluntary Noise Pollution Reduction Program for Pelton CHPP in consultation with OEH.

1.15.4 Austar Coal Mine will commit to a Noise Management Plan that incorporates current noise monitoring, the voluntary Noise Pollution Reduction Program and associated noise management for Austar Mine Complex operations and will investigate reasonable and feasible noise mitigation strategies where appropriate.

1.15.5 Austar Coal Mine will investigate opportunities for reduction in energy use and greenhouse gas emissions from the Austar Mine Complex. This will include:
  * ongoing review of emissions monitoring and management technology;
  * review of coal operations and potential for improvement as part of producing clean coal through coal preparation to reduce moisture and ash content, sulphur, nitrogen and other contaminants. This results in reduced emissions of greenhouse gases and other pollutants when the coal is used; and
  * consider the application of the in-force National Greenhouse and Energy Reporting System (NGERS) and the Carbon Pollution Reduction System (CPRS) on Austar operations.

1.16 Environmental Management, Monitoring, Auditing and Reporting

1.16.1 Austar Coal Mine will incorporate the Stage 3 Project into the Annual Review for Austar Mine Complex.

1.16.2 Three years after commencement of the Stage 3 Project, and every three years thereafter, Austar Coal Mine will commission and pay the full cost of an Independent Environmental Audit of the project in consultation with the Director-General of the Department. A copy of the audit report will be provided to the Director-General of the Department and DRE, OEH, NOW, Cessnock City Council, and members of the Community Consultative Committee for the Stage 3 Project. This audit may be combined with other independent environmental audits required by the Director-General of the Department.
FIGURE 7.1
Proposed Biodiversity Offset Area
Independent Dispute Resolution Process
(Indicative only)

Matter referred to Independent Dispute Facilitator appointed by the Department in consultation with Council

Independent Dispute Facilitator meets with parties concerned to discuss dispute

Dispute resolved

Dispute not resolved

Facilitator consults relevant independent experts for advice on technical issues

Facilitator meets with relevant parties and experts

Dispute resolved

Dispute not resolved

Facilitator consults the Department and final decision made

Agreed Outcome
Appendix D

Environmental Monitoring Program
Appendix E

Landscape Management Plan
Appendix F

Site Water Management Plan
Appendix G

Noise and Vibration Management Plan
Appendix H

Air Quality and Greenhouse Gas Management Plan
Appendix I

Aboriginal Cultural Heritage Management Plan
Appendix J

Historic Heritage Management Plan