



Austar Coal Mine Pty Ltd



# Independent Environmental Audit

## *Austar Coal Mine*

**April 2009**

ACM01 -003



**GSS ENVIRONMENTAL**  
Environmental, Land and Project  
Management Consultants



Project Manager/  
Auditor:

.....  
**Andrew Hutton**  
*Principal Environmental  
Consultant*

GSS Environmental  
Level 1, 241 Denison Street  
**BROADMEADOW**, NSW 2292  
Tel: 02 4920 3031  
Fax: 02 4961 3360

#### ISSUE AND AMENDMENT CONTROL HISTORY

Issue	Date	Description	Author	QA/QC
1	9 <sup>th</sup> Feb 2009	First Draft for comment	Andrew Hutton	Lyndal Hugo
2	10 <sup>th</sup> Mar 2009	Final Copy	Andrew Hutton	Lyndal Hugo

#### LIMITATIONS:

*This document was prepared for the sole use of Austar Pty Ltd and the regulatory agencies that are directly involved with this operation, the only intended beneficiaries of our work. No other party should rely on the information contained herein without the prior written consent of GSS Environmental. It has been prepared on the basis of information provided by Austar Pty Ltd and also from information collected from a site inspection undertaken on the 3<sup>rd</sup> and 4<sup>th</sup> December 2008.*

## EXECUTIVE SUMMARY

GSS Environmental (GSSE) completed an Environmental Audit of the Austar Coal Mine on the 3<sup>rd</sup> - 4<sup>th</sup> December 2008. In addition to the site inspection, the Independent Environmental Audit included a reviewed all documentation available from Austar Coal Mine to assess compliance of the mines operations with the conditions of the consent DA No. 29/95. In addition to the work undertaken by GSSE, the consent required that a number of specialist consultants be included as part of the audit team to assess a number of the key issues. A summary of these consultants is included below:

Key Issues	Consultancy Responsible	Representative
Ground Water	Douglas Partners	Will Wright
Surface Water	GSS Environmental	Rod Masters
Noise	Heggies	Katie Teyhan
Air Quality	Heggies	Jason Watson
Subsidence	Ditton Geotechnical	Stephen Ditton

The Independent Environmental Audit of the Austar Mine indicated a high level of compliance with 46 out of 51 conditions being assessed as complaint (90%). There was however four (4) non-compliance's identified in the following key areas:

- The maintenance and operation of all plant and equipment at the site;
- Groundwater Monitoring
- Surface and Groundwater Response Plan; and
- Vibration Monitoring Plan

The non compliances are addressed in more detail in Tables 4 & 7 of the audit report. These tables and the related sections of this report should be read in full detail to fully understand the non-compliances.

The Audit also considered compliance with the conditions of the Environmental Protection Licence (EPL). Table 8 of this report outlines the level of compliance assessed by GSSE. In summary there were two (2) non-compliances identified from the 45 conditions (95.5%) in the follow key areas:

- Exceedence in the concentration limits specified for that pollutant within the EPL;
- pH (twice) and Iron (once) were outside the limits;

Despite there being a few non-compliances there were a number of good environmental practices and observations recorded by GSSE during the Audit inspection and these should be noted. These include:

Good Performance observed during the Audit:

- The management and treatment of the water taken from the Underground Mine, with particular emphasis on the management of acid water in the lime treatment plant and the treatment undertaken using the Reverse Osmosis treatment plant;
- Dust levels on site comply with DECC criteria according to monthly monitoring results;
- Noise studies comply with DECC criteria according to monthly monitoring results;
- The vibration monitoring, piezometers and extensometers network established within the Longwall mining areas;
- The rehabilitation of the disturbed access tracks within the forested areas above the longwall panels;

- Noise Mitigation works around the vent shaft area;
- Use of spill kits on site;
- The bunding around the bulk diesel storage tank;
- Rehabilitation of the old Pelton Open Cut Mine;
- The environmental record keeping was considered to be of a very high standard.

## TABLE OF CONTENTS

<b>1.0 INTRODUCTION</b> .....	<b>1</b>
1.1 BACKGROUND.....	1
1.2 SCOPE OF THIS AUDIT .....	1
1.3 STRUCTURE OF THE AUDIT REPORT.....	2
1.4 METHODOLOGY .....	3
1.4.1 Preparation.....	3
1.4.2 Document Review .....	3
1.4.3 Site Inspection and Interviews .....	3
<b>2.0 PROJECT DESCRIPTION</b> .....	<b>5</b>
2.1 HISTORY OF THE OPERATION .....	5
2.2 CONSENTS, LEASES AND LICENCES .....	5
2.2.1 Consents .....	5
2.2.2 Mining Leases .....	8
2.2.3 Environmental Licences .....	9
<b>3.0 DISCUSSION OF ENVIRONMENTAL AUDIT FINDINGS</b> .....	<b>10</b>
<b>4.0 REFERENCES AND DOCUMENTS REVIEWED</b> .....	<b>12</b>
<b>5.0 PHOTOS TAKEN DURING SITE INSPECTION</b> .....	<b>14</b>
<b>6.0 MINISTER'S CONDITIONS OF APPROVAL AUDIT COMPLIANCE TABLE</b> .....	<b>33</b>
6.1 ENVIRONMENT PROTECTION LICENCE (EPL).....	66

## TABLES

<b>TABLE 1 – CONSENT CONDITIONS RELATING TO THE INDEPENDENT ENVIRONMENTAL AUDIT</b> ...	<b>2</b>
<b>TABLE 2 – LEASES, LICENCES AND APPROVALS</b> .....	<b>6</b>
<b>TABLE 3 – MINING LEASES</b> .....	<b>8</b>
<b>TABLE 4 – SUMMARY IF CONSENT CONDITIONS – NON COMPLIANT</b> .....	<b>10</b>
<b>TABLE 5 – REFERENCES AND DOCUMENTS REVIEWED</b> .....	<b>12</b>
<b>TABLE 6 – CROSS REFERENCE WITH THE CONDITIONS SPECIALLY ADDRESSED BY THE SPECIALIST CONSULTANTS</b> .....	<b>34</b>
<b>TABLE 7 – MINISTER'S CONDITIONS OF APPROVAL – AUSTAR PTY LTD</b> .....	<b>35</b>
<b>TABLE 8 – EPL CONDITIONS</b> .....	<b>66</b>

## APPENDICES

<b>APPENDIX 1 – COPY OF DEVELOPMENT CONSENT</b>
<b>APPENDIX 2 – CV'S OF SPECIALIST CONSULTANTS</b>
<b>APPENDIX 3 – PRESENTATION FROM AUSTAR – AUDIT OPENING MEETING</b>
<b>APPENDIX 4 – SPECIALIST CONSULTANT REPORTS</b>
<b>APPENDIX 5 – ENVIRONMENTAL PROTECTION LICENCE</b>

## 1.0 INTRODUCTION

### 1.1 Background

Austar Coal Mine Pty Ltd (Austar) is an aggregate of the former Pelton, Ellalong, Cessnock No.1 (Kalingo) Colliery and Bellbird South Collieries owned by Yancoal. Austar is located on Middle Road, Paxton, NSW. Austar has a long history of open cut and underground mining beginning in 1912.

In December 2003, spontaneous combustion in SL2 resulted in Southland Coal ceasing mining activities. The site of the underground fire was sealed and the mine was placed on a 'care and maintenance' program for 18 months. Yancoal purchased the mine in December 2004 and changed the name to Austar Coal Mine.

To allow for the introduction of LTCC to longwall panels A1 and A2, a modification under section 96(2) of the Environmental Planning and Assessment Act was sought in 2006. The Minister for Planning approved the modification (DA No. 29/95) to allow for the extraction of up to 6.5 metres (m) of coal in long wall panels A1 and A2 subject to a number of conditions.

This independent audit has been prepared by GSS Environmental (GSSE) in accordance with the requirements of DA No. 29/95 (see Section 1.2).

Underground mining commenced in 1916 at Pelton Colliery and continued until 1992. Kalingo Colliery began as an underground mine in 1921 and ceased operations in 1961. In the late 1960's the Kalingo Colliery was amalgamated into the Pelton Colliery. Longwall production commenced at the Pelton Colliery in 1983 and continued until the mine, then known as Ellalong Colliery, was closed in May 1998 by Oakbridge. Southland Coal then acquired the assets of Ellalong and Pelton Collieries and amalgamated those with Bellbird South, which was also owned by Southland Coal.

Southland Coal developed a longwall operation that mined the substantial Bellbird South coal reserves utilising the existing Ellalong facilities and infrastructure. Equipment was upgraded and replaced as required.

Austar has since introduced an enhanced form of the conventional retreat longwall system to the Australian Coal Mining Industry in 2006 called Longwall Top Coal Caving (LTCC). This mining method has the advantage of recovering additional coal from the roof as it collapses behind the shearer into the mine goaf area.

To allow for the introduction of LTCC to longwall panels A1 and A2, a modification under section 96(2) of the Environmental Planning and Assessment Act was sought in 2006. The Minister for Planning approved the modification (DA No. 29/95) to allow for the extraction of up to 6.5 metres (m) of coal in long wall panels A1 and A2 subject to a number of conditions.

### 1.2 Scope of this audit

The scope of this Environmental Audit was to conduct an independent assessment of the operations in accordance with Minister's Condition of Approval (MCoA) Schedule 5 Condition 6-8 of Project Approval DA No. 29/95. Table 1 below outlines the relevant conditions relating to the audit. The scope of the audit includes all mining activities (including the activities associated with the coal preparation plant area) but limited to only Longwall Panels A1 and A2. It does not include an assessment of A3 - A5 longwalls as at the time if the audit mining in these areas had not commenced.

**Table 1 – Consent Conditions relating to the Independent Environmental Audit**

Condition Number	Condition
Schedule 5 Condition 6	<p><i>Prior to 31 December 2008, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</i></p> <ul style="list-style-type: none"> <li><i>a) be conducted by suitably qualified, experienced, and independent experts whose appointment has been endorsed by the Director-General;</i></li> <li><i>b) include consultation with the relevant agencies;</i></li> <li><i>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;</i></li> <li><i>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 these approvals) and with other statutory requirements;</i></li> <li><i>e) review the adequacy of strategies, plans or programs required under these approvals; and, if necessary,</i></li> <li><i>f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.</i></li> </ul> <p><i>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.</i></p>
Schedule 5 Condition 7	<p>Within 6 weeks of completing this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.</p>
Schedule 5 Condition 8	<p>Within 3 months of submitting the audit report to the Director-General, the Applicant shall review and if necessary revise the strategies/plans/programs required under this consent, to the satisfaction of the Director-General.</p>

The Independent Audit conducted by GSS Environmental and the external consultants reviewed the documentation available from the Austar Coal and assessed compliance of the mining operations with the conditions in the DA No. 29/95 Project Approval.

Where an authority other than the Department of Planning (DoP) had administrative responsibility for the requirements of a condition, the compliance status has been determined by the review of correspondence and consultative requirements outlined in the consent conditions (where available).

The Minister's Conditions of Approval includes general requirements in relation to the overall development of the project, and reference to more specific requirements where the legislative and administrative responsibility lies with other agencies. A full copy of the Consent is attached to this report as Appendix 1. In addition, Section 6.0 includes a summary table of the compliance against each of the conditions as they are applicable.

### **1.3 Structure of the Audit Report**

The audit report has been structured to provide an assessment of all the consent conditions under the following sections:

- Section 1 Introduction - background on the purpose of the audit, including the scope of the audit and the audit methodology;
- Section 2 Project Description - outlines the history of the site, including the history of the approvals and modifications for the site;

- Section 3 Development Consent Minister's Conditions of Approval - outlines the aspects included in the Development Consent; and
- Section 4 Discussion of the Environmental Audit Findings - summary of audit results for each condition within the approval showing either compliance or non-compliance as applicable.
- Section 5 Environmental Performance and Effect on the Surrounding Environment

## **1.4 Methodology**

The methodology for the Environmental Audit consisted of the following key steps:

- (a) Preparation for the Audit by reviewing any documents provided by Austar Pty Ltd prior to the audit;
- (b) A pre-audit meeting with key Austar personnel;
- (c) A two (2) day site inspection and interviews with key personal on the 3<sup>rd</sup> and 4<sup>th</sup> December 2008;
- (d) Review of additional relevant documentation either obtained while on site during the inspection or provided by Austar after the site inspection; and
- (e) Further review and comment of the draft Audit report.

### **1.4.1 Preparation**

In order to satisfy the requirements of the Development Consent, which requires the inclusion of experts in the fields of subsidence, surface water, groundwater and noise and air quality, GSS Environmental sought approval from the Department of Planning (DoP) for the following sub-consultants to complete the following specialist parts of the Independent Environmental Audit for Austar:

- Surface Water - Rod Masters, GSS Environmental;
- Subsidence - Steve Ditton, Ditton Geotechnical Services;
- Groundwater - Will Wright, Douglas Partners; and
- Noise and Air Quality - Katie Teyhan (Noise) and Jason Watson (Air Quality) Heggies.

A copy of the CV's outlining the relevant qualifications and experience for each of the consultants listed above has been included as Appendix 2 to this report.

### **1.4.2 Document Review**

Prior to the Audit a number of preliminary documents were provided to GSSE and passed onto the sub-consultants.

Austar prepared a number of CDs containing relevant documents for each of the auditors. These were provided to the audit team at the opening meeting. These documents were reviewed on the 3<sup>rd</sup> and 4<sup>th</sup> of December 2008 at Austar as part of the Independent Environmental Audit. A number of additional documents and subsequent related information was provided to the Audit team following the site inspections in response to further information requests. A full list of the documents reviewed by GSSE and the specialists during the audit is listed in Section 4.0 of this report.

### **1.4.3 Site Inspection and Interviews**

A two (2) day site inspection was conducted at Austar Coal by Andrew Hutton (GSSE) and Michael Woolley of (URS) on the 3<sup>rd</sup> and 4<sup>th</sup> of December 2008. The specialist consultants attended the first day of the site inspection only, which included the opening audit meeting and a presentation on the operation by Austar (Appendix 3).



The site inspections included a drive around and walk around inspection of the readily accessible areas of Austar Coal including the:

Day 1: (3<sup>rd</sup> December 2008):

- The areas of accessible land directly above the active longwalls. Inspected vibrating monitors, subsidence monitoring lines, ground water piezos);
- The vent shaft and associate surface infrastructure;
- Old colliery pit top and access shaft (include part of the water management system for the site);
- General drive on public roads to observe the surrounding land use and understand the proximity of neighbours and natural features such as creeks and wetlands;
- Water Management Dams and Sediment Control Structures;
- The Coal Preparation Plant; and
- The Reverse Osmosis Plant and Licensed discharge point.

Day 2: (4<sup>th</sup> December 2008):

- The Coal Preparation Plant, including the coal stockpile areas, lime treatment plant and associated ponds, sediment dams, rejects emplacements areas and the old Pelton Open cut rehabilitation area
- The current surface facilities and pit top areas, including workshops, oil water separator and laydown areas;
- The sewerage treatment ponds;
- Water management Dams Sediment Retention Dams
- Areas where there were historical underground workings (including some surface facilities)
- Service shafts (water management system);
- Rehabilitated areas, including the Bell Bird Creek rehabilitation project;
- Hardy Holdings Land (including the haul road) which has been used for the disposal of rejects material.

## 2.0 PROJECT DESCRIPTION

### 2.1 History of the Operation

Austar is an aggregate of the former Pelton, Ellalong, Cessnock No.1 (Kalingo) Colliery and Bellbird South Collieries owned by Yancoal. Austar is located on Middle Road, Paxton, NSW.

Underground mining commenced in 1916 at Pelton Colliery and continued until 1992. Kalingo Colliery began as an underground mine in 1921 and ceased operations in 1961. In the late 1960's the Kalingo Colliery was amalgamated into the Pelton Colliery. Longwall production commenced at the Pelton Colliery in 1983 and continued until the mine, then known as Ellalong Colliery, was closed in May 1998 by Oakbridge. Southland Coal then acquired the assets of Ellalong and Pelton Collieries and amalgamated those with Bellbird South, which was also owned by Southland Coal.

Southland Coal developed a longwall operation that mined the substantial Bellbird South coal reserves utilising the existing Ellalong facilities and infrastructure. Equipment was upgraded and replaced as required.

In December 2003, spontaneous combustion in SL2 resulted in Southland Coal ceasing mining activities. The site of the underground fire was sealed and the mine was placed on a 'care and maintenance' program for 18 months. Yancoal purchased the mine in December 2004 and changed the name to Austar Coal Mine (Austar).

Austar has since introduced an enhanced form of the conventional retreat longwall system to the Australian Coal Mining Industry in 2006 called Longwall Top Coal Caving (LTCC). This mining method has the advantage of recovering additional coal from the roof as it collapses behind the shearer into the mine goaf area.

To allow for the introduction of LTCC to longwall panels A1 and A2, a modification under section 96(2) of the Environmental Planning and Assessment Act was sought in 2006. The Minister for Planning approved the modification (DA No. 29/95) to allow for the extraction of up to 6.5 m of coal in long wall panels A1 and A2 subject to a number of conditions.

The Austar Coal operation carries out its operations in accordance with the:

- (a) DA 29/95 and accompanying Environmental Impact Statement prepared by HLA Envirosciences 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; and
- (c) modification application DA29195 - 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);

### 2.2 Consents, Leases and Licences

#### 2.2.1 Consents

A summary of the development approval history and consents held by Austar is outlined in Table 2 on the following page.

Table 2 – Leases, Licences and Approvals

Consent Description	Date	Approval Authority	Approved Development
DA 74/75/79	4 December 1975	Cessnock City Council (CCC)	<ul style="list-style-type: none"> <li>Development Consent for coal mine at Ellalong</li> <li>Approval for an underground coal mine</li> <li>Construction of a new access drift, upcast shaft and ventilation shaft</li> <li>Expansion of the Pelton CHPP</li> <li>Conveyance of coal from the Ellalong pit top to the Pelton CHPP Operation of the Pelton CHPP for the washing and handling of coal</li> <li>Water management systems</li> <li>Upgrade of the Pelton rail loading facility and railway spur</li> <li>Reject emplacement underground, company owned land, open cut areas adjoining Pelton and other abandoned mine sites</li> </ul>
DA 118/680/93	8 October 1980	CCC	<ul style="list-style-type: none"> <li>Downcast Ventilation Shaft and Man Access Shaft, Bathhouse and Offices at Ellalong Colliery</li> </ul>
DA 118/691/181	26 November 1992	CCC	<ul style="list-style-type: none"> <li>Pelton Open Cut Mine</li> <li>Approval of an open cut 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.</li> </ul>
DA 118/691/181	11 January 1993	CCC	<ul style="list-style-type: none"> <li>Pelton Open Cut Mine – Modification</li> <li>Extension of open cut mining area</li> <li>Infrastructure and water management modifications</li> </ul>
DA 118/691/229	7 January 1993	CCC	<ul style="list-style-type: none"> <li>Pelton Coal Handling Preparation Plant – Raw Coal Handling Facility, Washed Coal Facility and Upgrading Water Management System.</li> <li>Upgrade and replacement of coal handling infrastructure such as surge bin, automatic stacking system, reclaim facilities and skyline conveyor.</li> <li>Increase in stockpile capacity</li> <li>Upgrade to water management system</li> <li>Extension of the reclaim tunnel</li> <li>Construction of a mine water transfer pipeline from Ellalong Colliery to Pelton</li> <li>Provision of underground workings for emergency mine water disposal</li> <li>Upgrade of lime treatment plant</li> </ul>
DA 118/693/42	26 November 1993	CCC	<ul style="list-style-type: none"> <li>Extension of Pelton Open Cut Mine</li> <li>Extension of open cut mining area including emplacement of overburden in previously mined blocks and extension of the mine's water management system</li> </ul>

Consent Description	Date	Approval Authority	Approved Development
DA 118/694/152	7 July 1994	CCC	<ul style="list-style-type: none"> <li>Relocated Office and Temporary Bathhouse at Pelton Colliery</li> </ul>
DA 118/695/22	12 July 1995	CCC	<ul style="list-style-type: none"> <li>Establishment of Overburden Stockpile at Pelton Colliery</li> <li>Establishment of an overburden stockpile for the Pelton Open Cut Operations</li> </ul>
DA 118/695/81	12 July 1995	CCC	<ul style="list-style-type: none"> <li>Additions for Bathhouse, Office and Car park at Ellalong Colliery</li> <li>Extension to the Bathhouse at the Ellalong drift site</li> <li>Extension of existing offices or construction of portable offices</li> <li>Construction of a 4000 square metre car park</li> </ul>
DA 8/1999/1658	18 February 2000	CCC	<ul style="list-style-type: none"> <li>Relocation of Ventilation Facilities at Bellbird South Underground Mine</li> <li>Installation of a ventilation shaft and fan house</li> <li>Upgrading of the existing access track to the site from the Pelton-Ellalong Road</li> </ul>
DA 8/2002/655/1	16 October 2002	CCC	<ul style="list-style-type: none"> <li>Compressor and Pump Enclosure Buildings at Ellalong Colliery</li> </ul>
DA 118/695/18	21 February 1995	CCC	<ul style="list-style-type: none"> <li>Relocatable office at Pelton Colliery</li> </ul>
DA 29/95	14 February 1996	Minister for Urban Affairs and Planning	<ul style="list-style-type: none"> <li>Ellalong Colliery Extension into Bellbird South</li> <li>Extension of Underground Mining Activities into Bellbird South area (CML2)</li> <li>Mine life of 21 years with a production of 3 Mtpa</li> <li>Reject emplacement</li> <li>Construction and operation of a new infrastructure site including new ventilation shaft and fan(s) (No.2 Shaft) adjacent to Sandy Creek Road</li> <li>Use of Pelton CHPP for washing and handling of coal</li> <li>Provision of a maximum raw coal stockpile of 100,000 t</li> <li>Reopening of disused Cessnock No.1 Colliery shafts for ventilation and access, or the sinking of new shafts, as required</li> <li>Construction of various water management devices including sedimentation and clean water dams and drainage systems</li> </ul>
DA 29/95	27 September 2006 8 June 2008 Stage 2	Minister for Planning	<ul style="list-style-type: none"> <li>Extension of Underground Mining Activities into Bellbird South (Ellalong Colliery) – Modification</li> <li>Use of long wall top coal caving mining methods in two longwall panels</li> <li>Installation of a larger capacity fan at the site approved for DA 8/1999/1658</li> </ul>

Consent Description	Date	Approval Authority	Approved Development
			<ul style="list-style-type: none"> <li>• Installation of a new downcast ventilation shaft</li> <li>• Installation of a new 10 MVA substation</li> <li>• Installation of a nitrogen inertisation plant with a 2,000cubic meter capacity</li> <li>• Provision of a diesel and emulsion fluid storage area and dispatch system</li> <li>• Installation of a tube bundle shed to house electronic monitoring equipment</li> <li>• Upgrade of the existing water treatment plant</li> <li>• Upgrade of water reticulation and pumps</li> <li>• Minor embankment stabilisation works at Kalingo Dam</li> </ul>

### 2.2.2 Mining Leases

Due to the number and complexity of the Mining Leases on the site, GSSE has not be able to assess full compliance with the environmental requirements of the Lease, rather, that the general environmental performance has been considered through the assessment of the environmental performance of the development as part of the review of the conditions of consent, Environmental Licences and the Strategy, Plan or Program required under this approvals. It has included a review environmental performance data, such as monitoring results presented in the AEMR's and observations made during the site inspection of the 3<sup>rd</sup> and 4<sup>th</sup> December, 2008.

Details of the relevant Mining Leases for the project are summarised in Table 3.

**Table 3 – Mining Leases**

Mining Title	Date Granted	Expiry Date	Area	Surface	Depth Restriction
Dam Site Lease 89 (1906)	04/04/1908	04/04/2010	3.961	Yes	Surface to 15.24 metres
Mineral Lease No. 1157 (1906)	08/07/1949	08/07/2028	10.24	Yes	Surface to 15.24 metres
Mineral Lease No 1283 (1906)	13/07/1961	13/07/2022	1.973	No (subsurface)	7.62 to 15.24 metres
Mining Purposes Lease No. 23 (1906)	17/05/1909	17/05/2010	2.421	Yes	Surface to 15.24 metres
Mining Purposes Lease No. 204 (1906)	03/02/1916	03/02/2018	1.2	Yes	Surface to 15.24 metres
Mining Purposes Lease No. 217 (1906)	12/04/1916	12/04/2018	0.6298	Yes	Surface to 15.24 metres
Mining Purposes Lease No. 223 (1906)	01/08/1916	01/08/2016	1.973	Yes	Surface to 7.62 metres
Mining Purposes Lease No. 269 (1906)	07/12/1917	07/12/2018	2.663	Yes	Surface to 6.1 metres below the level of the rails when laid
Mining Purposes Lease No 1364 (1906)	28/10/1968	28/10/2009	0.4527	Yes	Surface to 15.24 metres

Mining Title	Date Granted	Expiry Date	Area	Surface	Depth Restriction
Private Lands Lease No. 150 (1906)	27/12/1922	27/12/2023	46.54	No (subsurface)	15.24 metres to unlimited depth
Consolidated Coal Lease No. 728 (1973)	10/10/1989	30/12/2023	3251	Various	Various
Consolidated Coal Lease No. 752 (1973)	23/05/1990	30/12/2023	3802	Various	Various
Mining Purposes Lease No. 324 (1973)	14/04/1994	14/04/2015	12.89	Yes	Surface to 15.24 metres
Consolidated Mining Lease No. 2 (1992)	24/03/1993	15/05/2009	3397	Various	Various
Mining Lease No. 1345 (1992)	23/03/1995	30/12/2023	95.08	Yes	Surface to unlimited depth
Mining Lease No. 1347 (1991)	28/04/1994	28/04/2015	16.88	Yes	Surface to 15.24 metres
Mining Lease No. 1388 (1992)	02/04/1996	02/04/2017	15.12	No (subsurface)	30.48 metres to unlimited depth
Mining Lease No. 1550	24/06/2004	23/06/2025	14.4	Yes	Surface to 20 metres

### 2.2.3 Environmental Licences

Austar holds an Environmental Protection Licence (EPL) No. 416 for its operations. The EPL was granted on 7 May 2002 and is reviewed annually. Section 3.0 below has specially assessed compliance with the requirements of the Environmental Protection Licence.

### 3.0 DISCUSSION OF ENVIRONMENTAL AUDIT FINDINGS

The audit of the Ministers Condition of Approval at Austar Coal Mine was undertaken on 3<sup>rd</sup> and 4<sup>th</sup> of December 2008 and included a site inspection, document review and discussions with relevant project personnel.

It was determined by GSSE that there was a high degree of compliance with the development consent DA No. 29/95. A summary of the areas that were determined to be not complaint are included below as Table 4. A full summary of compliance has been included as Section 6.0 to this report.

The terms used in the audit for the assessment of compliance of the Austar Coal with the Consent Conditions were:

<b><u>Compliance – YES</u></b>	<i>That there is compliance with the intent and/or requirement of the consent condition.</i>
<b><u>Compliance - NO</u></b>	<i>The specific requirement of the consent condition has not been met.</i>
<b><u>Compliance – NATD</u></b>	<i>Not able to determine compliance. Where this occurs, an explanation has been provided.</i>
<b><u>In progress</u></b>	<i>Consultation or negotiations with authorities or other parties have been initiated to address the requirements of the consent approval and are ongoing.</i>
<b><u>Not Activated</u></b>	<i>The requirement of the consent condition has not yet been triggered.</i>

The following table provides a summary of the consent conditions (extracted from the full audit table in Section 6.0) where the audit and available documentation indicated other than full compliance with the requirements of the consent approvals.

**Table 4 – Summary if Consent Conditions – Non Compliant**

<b>Condition</b>	<b>Minister’s Conditions of Consent</b>	<b>Compliant</b>
<b>Schedule 2 - Condition 4</b>	The Applicant 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.	<b>NO</b>
<b>Schedule 3 – Condition 10</b>	<b>Groundwater Monitoring</b> 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;  (c) a program to monitor ground water levels and quality; and  (d) a protocol for the investigation, notification and mitigation of identified exceedences of the ground water impact assessment criteria	<b>NO</b>
<b>Schedule 3 – Condition 11</b>	<b>Surface and Groundwater Response Plan</b> The Surface and Ground Water Response Plan must include:  (a) the procedures that would be followed in the event of any exceedence of the surface or groundwater impact	<b>NO</b>

Condition	Minister's Conditions of Consent	Compliant
	<p>assessment criteria, or other identified impact on surface or groundwater;</p> <p>(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</p> <p>(c) disposal / neutralisation contingencies in the event that acid leachate problems emerge after the mine closes.</p>	
<b>16</b>	<p>The Applicant shall implement the approved Vibration Monitoring Program for the development to the satisfaction of the Director-General. This program must be capable of recording ground vibrations on the surface emanating from underground mining activities.</p>	<b>NO</b>



## 4.0 REFERENCES AND DOCUMENTS REVIEWED

The following list (Table 5) summarises the documents reviewed or referred to during the preparation this audit report.

**Table 5 – References and documents reviewed**

No.	Item	Description
1	Development Consent	Department of Urban Affairs and Planning, Notice of Modification (DA No. 29/95) 1996 Modification.
2	Annual Environmental Management Report	Austar Coal Mine, AEMR July 2004 – June 2005
3	Flora and Fauna Assessment	ERM, Flora and Fauna Assessment, Longwall Panels A1 and A2 (April 2006)
4	Statement of Environmental Effects	ERM, Statement of Environmental Effects – Section 96 Modification (April 2006)
5	Noise Impact Assessment	Austar Coal Mine, Noise Impact Assessment, Heggies (July 2006) and Noise Assessment Austar Coal Mine Washery Facilities, Atkins Acoustics (August 2006)
6	Public Safety Management Plan	Austar Coal Mine, Longwall A1 and A2 Public Safety Management Plan (August 2006)
7	Land/Stream Management Plan	Austar Coal Mine, Longwalls A1 and A2 Land/Stream Management Plan, Geoterra (October 2006)
8	Air Quality Management and Monitoring Plan	Carbon Based Environmental, Austar Coal Mine Air Quality Management and Monitoring Plan, January 2007
9	Noise Monitoring Program	Heggies, Austar Coal Mine Noise Monitoring Program (January 2007)
10	Development Approval	Department of Planning, Austar Coal Mine – Noise and Air Quality Monitoring Programs (February 2007)
11	Traffic Report	Austar Coal Mine, Report on For Rail Level Crossings in Cessnock LGA, GHD (March 2007)
12	Report of Discharge	Austar Coal Mine, Report of Discharge, June 2007
13	Annual Environmental Management Report	Austar Coal Mine, AEMR July 2006 – June 2007.
14	Annual Returns	Austar Coal Mine, Annual Return (2006 and 2007).
15	Statement of Environmental Effects	Austar Coal Mine, Statement of Environmental Effects – Section 96 Modification Stage 2 Longwalls A3-A5 (September 2007). Includes appendices and community letters.
16	Site Water Management Plan	Austar Coal Mine, Site Water Management Plan (October 2007)
17	Environmental Monitoring Program	Austar Coal Mine, Environmental Monitoring Program (October 2007).
18	Environmental Management Strategy	Austar Coal Mine, Environmental Management System (October 2007)
19	Vibration Monitoring Plan	Austar Coal Mine, Vibration Monitoring Plan Longwall Plan A2 (October 2007)
20	Development Consent	Department of Planning, Notice of Modification (DA No. 29/95) 2008 Modification.

<b>No.</b>	<b>Item</b>	<b>Description</b>
21	Environmental Assessment Report	Department of Planning, Environmental Assessment Report (March 2008)
21	Ecological Monitoring Program	Austar Coal Mine, Ecological Monitoring Program – Stage 2 Longwall Mining, Umwelt (May 2008 – in draft)
22	Mining Operations Plan	Umwelt, Austar Coal Mine Mining Operations Plan 2008 – 2015 (May 2008)
23	Annual Environmental Management Report	Austar Coal Mine, AEMR July 2007 – June 2008.
24	Development Approval	Department of Planning, Austar Coal Mine – Appointment of Community Consultative Committee Chairperson (July 2008)
25	Subsidence Management Plan	Austar Coal Mine, Subsidence Management Plan Application for Approval to Extract Longwalls A3 to A5 (September 2008)
26	National Pollutant Inventory Report	Austar Coal Mine, NPI Report 2007-2008, Umwelt (October 2008)
27	Historical Heritage Assessment	Austar Coal Mine Project – Rehabilitation at Bellbird, Cessnock No. 1 and Pelton Collieries, Umwelt (November 2008)
28	Development Approval	Department of Planning, Austar Coal Mine – Appointment of Environmental Manager (December 2008)
29	Environmental Protection Licence	DECC, Environment Protection Licence (EPL) No. 416 (January 2009)
30	Development Approval	Department of Planning, Approval of Meteorological Station and Extension of time to Complete Works (February 2009)
31	Site Excavation Permit	Austar Coal Mine, Site Excavation Permit
32	Reverse Osmosis Discharge Monitoring	Austar Coal Mine, RO Flow Data
33	Environmental Inspection Reports	Austar Coal Mine, Environmental Inspection Reports
34	Community Consultative Committee (CCC)	Austar Coal Mine, CCC Meeting Minutes
35	Community Contact Register	Austar Coal Mine, Community Contacts Register

## 5.0 PHOTOS TAKEN DURING SITE INSPECTION



**Plate 1** – Enclosure which contains the vibration monitors and piezometers / extensometers.



**Plate 2** – Rehabilitation undertaken on access tracks to establish the monitoring locations



**Plate 3** – Vibrating Wire Monitoring Data Logger over the existing Longwall Panel



**Plate 4** – Extensometer Data Logger over the existing Longwall Panel



**Plate 5** – Subsidence Monitoring Line over the existing Longwall Panel



**Plate 6** – Kallingo Dam with noise mitigation bunding around the pump.  
*Note the orange colour in the water is a results of iron oxide*



**Plate 7** – Vent fans with noise mitigation bunding



**Plate 8** – Solcenic Tanks filling point. Tanks have bunding, although water collecting on this pad is drained back into the bunded area.



**Plate 9** – Spill Kit within the bunded tank area



**Plate 10** – Vent shaft with direction of shaft facing away from the neighbours.  
*Note the sump installed to collect and retain condensation from the vent fan.*



**Plate 11** – Shade cloth on the security fence that has been installed to contain fines blown from the vent shafts. This was considered ineffective



**Plate 12** – Part of the underground water management system returning water from the underground to the Coal Preparation Plant.





**Plate 13** – The Reverse Osmosis Plant used to treat water from the Underground



**Plate 14** – Product Bins and conveyors at the Coal Preparation Plant



**Plate 15** – Final storage tank and water treatment point prior to being discharged from the site at the licensed discharge point



**Plate 16** – Licensed Discharge point (Bellbird Creek).



**Plate 17** – Erosion and sediment control fencing adjacent to the main office



**Plate 18** – Sewerage Treatment Ponds



**Plate 19** – Drain that transfer water from the underground to the Austar dam. Part of the underground water management system



**Plate 20** – Bulk Diesel storage tank.



**Plate 21** – General Waste and Wash down areas. Waste was placed on the pad and sorted (centre) into the bins (right)



**Plate 22** – Wash down pad and sediment sump. Water from this area passes through a triple interceptor before flowing onto an oil water separator.



**Plate 23** – Oil water separator – water from the facility is discharged via open drain to the main water dam below the pit top area (see photo below)



**Plate 24** – Austar dam below the main offices and pit top area. Water from this dam is sent back via overland pipe to the Coal Preparation Plant



**Plate 25** – Silt fence in a clean water diversion drain around the dam. The construction of the silt fence was considered poor and as a result it was considered ineffective



**Plate 26** – Rejects emplacement area. Water accumulating in this area drains back into the underground mine eventually returning to the longwall. The pH was apparently <2.



**Plate 27** – Run off and leachate accumulating below the reject emplacement. Note the old shallow underground workings have collapsed and day lighted – water draining back into the workings



**Plate 28** – Coal fines are pumped to voids within the rejects emplacement area. The water drains back into the underground.





**Plate 29** – An example of rehabilitation undertaken on the rejects emplacement area



**Plate 30** – An old tailings dam that is being cleaned out. At the time of the audit it was Austar's intention to utilise the dam for additional site water storage.



**Plate 31** – Dam (in water circuit) used to settle out fines after the water from the underground has been treated through the lime plant. *Note the lime plant (upper left)*



**Plate 32** – Water being mixed with a flocc prior to being treated in the lime plant



**Plate 33** – Water being discharged to the settlement dam following treatment



**Plate 34** – Water quality after it has been passed through the lime plant and completed a circuit of the settlement dam. Water is then pumped to a dam before being treated in the RO Plant and discharged from the site.



**Plate 35** – General view from the rejects noise bund back towards the coal plant



**Plate 36** – Photo showing the rehabilitation completed in the old Pelton open cut adjacent to the coal preparation area.



**Plate 37** – Photo showing the rejects dump on the land owned by Hardies Holdings (at the time of the audit it was not being used by Austar)



**Plate 38** – Photo showing the rejects dump on the land owned by Hardie Holdings land at the time of the audit it was not being used by Austar) and the proximity of neighbours. *Note: Less than 100m from the dump.*

## 6.0 MINISTER'S CONDITIONS OF APPROVAL AUDIT COMPLIANCE TABLE

Table 7 summarises the various conditions of the approval. It includes specific reference to each of the conditions within the following key areas:

- Schedule 2: Administrative Conditions;
- Schedule 3: Specific Environmental Conditions
  - Acquisition Upon Request
  - Subsidence
  - Water Quality
  - Noise and Vibration
  - Air Quality
  - Meteorological Monitoring
  - Reject Emplacement
  - Flora and Fauna
  - Heritage
  - Traffic and Transport
- Schedule 4: Additional Procedures for Subsidence Management
  - Notification of Landholders
  - Land Acquisition
- Schedule 5: Environmental Management, Monitoring, Auditing and Reporting
  - Environmental Management Strategy
  - Environmental Monitoring Program
  - Environmental Manager
  - Incident reporting
  - Annual Reporting
  - Independent Environmental Audit
  - Community Consultative Committee
  - Access to Information

In addition to the information provided in Table 7, specific reference should also be made to the specialist consultant reports included as Appendix 4. Please note that the issues related to Surface water have been included within the text of Table 7 and that there is not a separate standalone report addressing surface water.

Table 6 below outlines the specific conditions that are addressed in each of the specialist consultant's reports.

**Table 6 – Cross reference with the conditions specially addressed by the specialist consultants**

<b>Relevant Condition</b>	<b>Specialist Consultant</b>
Mine subsidence (Schedule 3, Condition 2, 3 & 4)	Ditton Geotechnical Services Report
Mine subsidence (Schedule 4, Conditions 1 – 5)	Ditton Geotechnical Services Report
Noise & Vibration (Schedule 3, Conditions 13 – 16)	Heggies Pty Ltd
Air Quality (Schedule 3, Conditions 17 – 20)	Heggies Pty Ltd
Groundwater (Schedule 2, Conditions 2, 4, 5, 6 , 10 , 11 &12)	Douglas Partners.
Surface Water (Schedule 2, Conditions 5,6, 7,8,9 and 11)	GSS Environmental

Table 7 – Minister's Conditions of Approval – Austar Pty Ltd

Schedule 2 – Administrative Conditions

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>				
1	The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development	<p>During the audit it was determined that Austar Pty Ltd has implemented a number of practical measures to prevent / minimise harm to the environment.</p> <p>Austar has employed an Environmental Coordinator who is responsible for all environmental management issues associated with the operation</p>	<b>See Comments</b>	A response to the condition is generally provided as the overall findings of this Audit.



TERMS OF CONSENT				
2	<p>The Applicant shall carry out the development generally in accordance with the:</p> <p>(a) DA 29/95 and accompanying Environmental Impact Statement prepared by HLA Envirosiences Pty Limited, dated August 1995 (August 1995 EIS);</p> <p>(b) modification application MOD-49-4-2006 and accompanying Statement of Environmental Effects, titled <i>Austar Coal Mine Section 96 Modification</i>, 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;</p> <p>(c) modification application DA29195 - Mod 2 and accompanying Statement of Environmental Effects, titled <i>Austar Coal Mine Statement of Environmental Effects Section 96 Modification Stage 2 Longwall Panels A3 A5</i>, prepared by Austar Coal Mine and dated September 2007 (September 2007 SEE); and</p> <p>(d) conditions of this consent.</p> <p>If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.</p>	<p>(a) This approval covers Stages 1 and 2 of the mine.</p> <p>(b) This approval covers Austar Longwalls A1 and A2; including the top coal caving mining methodology.</p> <p>(c) This approval includes Austar Longwall A3 and A5 which will cover mining until 2011-12.</p> <p>(d) This new EA is for Stage 3 and will allow mining to continue until 2028. Stage 3 – continue</p> <p>This audit has determined the general level of compliance with the requirements of the documents listed in 2 (a) – (d). Assessment of the compliance with the specific conditions area addressed individually below.</p> <p>GSSE did not complete a detailed compliance assessment against all documents, however where applicable the key aspects were assessed.</p> <p>It was noted that Austar indicated that they intended to consider consolidation of the various consents and Mining Leases as they applied to the operation.</p>	<p><b>See Comments</b></p>	<p>A response to the condition is generally provided as the overall findings of this Audit.</p> <p>It is recommended that any future approvals for the mine include consent consolidation to provide a consistent approval for all activities at the mine.</p>

<p><b>3</b></p>	<p>The Applicant shall comply with any reasonable requirement's of the Director-General arising from the Department's assessment of:</p> <p>(a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent; and</p> <p>(b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.</p>	<p>Austar advised that there had not been an audit completed by the Department of Planning since Austar acquired the mine in December 2004.</p> <p>Austar advised that there had not been any requests for an action since Austar acquired the mine in December 2004.</p>	<p><b>Not Activated</b></p>	
<p><b>OPERATION OF PLANT AND EQUIPMENT</b></p>				
<p><b>4</b></p>	<p>The Applicant shall ensure that all plant and equipment used at the site is:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	<p>GSSE did not make a full assessment of all plant and equipment used on the site other than the items that were relevant to the collection of data and monitoring for compliance with the Consent (ie. typically environmental and subsidence).</p> <p>GSSE understands that there is a work order system in place on the site for planned maintenance.</p> <p>It was determined that Citect is on a schedule for maintenance. This is relevant because this system is critical to the effective management of water on the site.</p> <p>It was noted during the audit that the Vibration monitors and Extensometers had not been downloaded since August 2008 and that some data will be lost due to the memory capacity of the loggers.</p> <p><b>Douglas Partners Report (Appendix 4)</b></p> <p>(a) An inspection of piezometers, extensometers and reverse osmosis treatment system was undertaken- equipment was generally observed to be in good condition.</p> <p>(b) The operation of the reverse osmosis treatment system and associated Citect continuous monitoring system was viewed.</p>	<p><b>NO</b></p>	<p>It is recommended that all environmental / subsidence monitoring equipment is included in this work order system. This should include, but not be limited to:</p> <ul style="list-style-type: none"> <li>- downloading the data;</li> <li>- calibrating the instruments;</li> <li>- undertaking planned maintenance.</li> </ul> <p><b>Douglas Partners Report</b></p> <p>A number of piezometers at Bore AQD 1077 had failed during 2007. If additional piezometers fail then consideration should be given to their replacement.</p> <p>The roles and responsibilities for the management of the environmental and subsidence monitoring equipment needs to be assigned. It may be appropriate to document in the EMS.</p> <p>This responsibility should extend to the downloading and management of data as required.</p>

LIMITS OF APPROVAL				
5	This consent lapses on 14 February 2017.	Noted	Not Activated	
MANAGEMENT PLANS AND PROGRAMS				
6	With the approval of the Director-General, the Applicant may submit any management plan or monitoring program required by this approval on a progressive basis.	It was noted that the Management Plans required under the consent were submitted December 2007. Specific reference to individual management plans are addressed in the relevant sections of the consent below.	YES	See relevant sections below for specific detail on the individual Management Plans.

### Schedule 3 – Specific Environmental Conditions

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations		
ACQUISITION UPON REQUEST						
1	<p>Upon receiving a written request for acquisition from the landowner of land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 3 to 5 of Schedule 4:</p> <p><i>Table 1: Land subject to acquisition upon request</i></p> <table border="1"> <tr> <td>Property A03a - Duff</td> <td>Property A04a - Bukanmain Pty Limited</td> </tr> </table> <p>However, the Applicant is not required to acquire the land listed in Table 1 if:</p> <p>(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</p> <p>(b) <i>the landowner has agreed to the MSB purchasing the land under the Mine Subsidence Compensation Act 1961; or</i></p> <p>(c) a request for acquisition has not been made following completion of mining in longwalls A3 to A5, and the MSB determines that the residences on the land listed in Table 1 remains safe, serviceable and</p>	Property A03a - Duff	Property A04a - Bukanmain Pty Limited	<p><b>Property A04 – John Reid:</b></p> <p>At the time of the audit, GSSE notes that Austar had notified the resident of their rights under this condition and that Austar had purchased the land with settlement due to take place on the 31 March 2009.</p> <p><b>Property A03 – Duff:</b></p> <p>At the time of the audit, GSSE notes that Austar had notified the resident of their rights under this condition and that Austar had proposed an Access and Compensation Agreement (as per condition 1(a)). At the time of the audit negotiations with the landowner in respect to that Agreement are ongoing.</p>	YES	
Property A03a - Duff	Property A04a - Bukanmain Pty Limited					

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>repairable.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>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 to Table 1 unless the residence/s on the land has been declared to be safe, serviceable and repairable by the MS8 after mining has been completed in longwalls AS to AS.</li> <li>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.</li> </ul>			
<b>SUBSIDENCE</b>				
<p><b>2</b></p>	<p><b>Subsidence Impact Assessment Criteria</b></p> <p>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 MSB exceeds safe, serviceable and repairable criteria, the Applicant shall, 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:</p> <p>However, the Applicant does not have to act on any such request if:</p> <p>(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</p> <p>(b) the landowner has agreed to the MSB purchasing the land under the <i>Mine Subsidence Compensation Act 1961</i>.</p>	<p>Condition 2 is not applicable to this audit as it concerns the management of damage to any residences affected by mine subsidence. There are no residential dwellings in the area of influence of Longwall A1 and A2.</p> <p><b>DGS Report – Subsidence Impact</b></p> <p><i>Note: Ditton Geotechnical Services (DGS) completed a Subsidence Assessment for Austar Coal Mine as part of this audit (see Appendix 4)</i></p>	<p><b>Not Activated</b></p>	
<p><b>3</b></p>	<p><b>Subsidence Management Plan</b></p> <p>Prior to carrying out any underground mining operations (except for longwall panels A1 and A2) that will potentially lead to subsidence of the land surface, the Applicant shall</p>	<p><b>DGS Report – Subsidence Impact</b></p> <p><i>Note: Ditton Geotechnical Services (DGS)</i></p>	<p><b>YES</b></p>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>prepare a Subsidence Management Plan (SMP) for those operations in accordance with the following DPI documents (or their latest versions or replacements):</p> <p>(a) <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i>; and</p> <p>(b) <i>Guideline for Applications for Subsidence Management Approvals</i>, to the satisfaction of the DPI.</p> <p><i>Note: The Applicant has an existing approval from the DPI under section 138 of the Coal Mines Regulation Act 1982 for long wall panels A1 and A2. An application has been made to modify this approval to allow an increase in the height of coal extraction from 4.5 to 6.5 metres. All future longwall panels will be regulated under the SMP approval process for managing the impacts of coal mining subsidence under the Mining Act 1992.</i></p>	<p><i>completed a Subsidence Assessment for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>Condition 3 is not applicable to this audit as it excludes longwall mining in A1 and A2. Notwithstanding this, four (4) management plans covering various aspects of mine subsidence impact management were prepared and implemented, and as such are discussed.</p> <ul style="list-style-type: none"> <li>• LWA1 and A2 - Subsidence Monitoring Program;</li> <li>• LWA1 and A2 - Public Safety Management Plan;</li> <li>• Environmental Monitoring Program;</li> <li>• LW A1 and A2 - Land and Surface Watercourse Monitoring Plan</li> </ul> <p>Trigger action response type plans have been prepared to:</p> <p>(i) assess if subsidence impacts were significantly higher than predicted; and</p> <p>(ii) ascertain if corrective management actions are necessary to either remediate damage or review/adjust proposed mine plans.</p> <p>The performance of the subsidence impact management plans during and after mining of LWs A1 to A2 has been assessed in the AEMRs for 2005, 2006 and 2007 and the End Of Panel Report for LWA1. The outcomes are discussed in <b>Sections 5.3 and 5.4</b> of the DGS report in <b>Appendix 4</b>.</p> <p>The Section 138 Application Report for LWs A1 and A2 was originally prepared for a mining height of 4.5 m. A modification to the consent to increase the mining height to 6.5 m for the</p>		

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
		<p>introduction of the Longwall Top Coal Caving (LTCC) method was approved on 26/09/06.</p> <p>The Section 138 Report produced by Austar outlined surface and subsurface monitoring and impact management for the following features within the area of mining influence:</p> <ul style="list-style-type: none"> <li>• Werakata State Conversation Area (formerly Aberdare State Forest)</li> <li>• Schedule 1 and 2 ephemeral creeks (not flowing).</li> <li>• Unsealed Fire Trails (Pelton Road Fire Trail, Sandpit Road and several un-named roads).</li> <li>• Terrestrial flora and fauna.</li> <li>• Old flooded mine workings 150 m to the north of the longwalls A1 and A2.</li> </ul>		
<p><b>4</b></p>	<p><b>Public Safety Management Plans</b></p> <p>The Applicant shall:</p> <p>(a) before carrying out any underground mining that will potentially lead to subsidence within the Werakata State Conservation Area, the Applicant shall prepare (and following approval implement) a Public Safety Management Plan for the Werakata State Conservation Area; and</p> <p>(c) before carrying out any underground mining that will potentially lead to subsidence at Nash Lane, the Applicant shall prepare (and following approval implement) a Public Safety Management Plan for Nash Lane,</p> <p>(d) to the satisfaction of the DPI</p>	<p><b>DGS Report – Subsidence Impact</b></p> <p><i>Note: Ditton Geotechnical Services (DGS) completed a Subsidence Assessment for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>Condition 4 specified a Public Safety Management Plan was to be prepared for the Werakata State Conservation Area (i.e. includes the area above LWs A1 and A2). The plan defines the public safety issues and risk management methods required during mine subsidence development.</p> <p>DGS determined that the mine has complied with the conditions of Consent for Longwalls A1 and A2 in regard to the necessary documentation (see section 4.1 of the DGS report included in <b>Appendix 4</b>) of this report.</p>	<p><b>YES</b></p>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
<b>WATER QUALITY</b>				
5	<p>Except as may be expressly provided by a DECC Environmental Protection Licence, or in accordance with section 120 of the Protection of the Environment Operations Act 1997, the Applicant shall not discharge any water from the site.</p>	<p><b>Douglas Partners Report – Groundwater</b></p> <p><i>Note: Douglas Partners completed a Groundwater Compliance report for Austar Coal Mine as part of this audit. (see Appendix 4)</i></p> <p>The site water balance indicates that all the groundwater extracted from the underground workings is either:</p> <ol style="list-style-type: none"> <li>1) Re-circulated into the underground workings</li> <li>2) Used on site for mining processes (ie Coal washing / dust suppression)</li> <li>3) Discharged to Bellbird Creek, for which EPA licence 416 applies.</li> </ol> <p>All water discharged from the Licensed discharge point passes through the RO Plant prior to being discharged in Bellbird Creek. The quantity and quality of water is monitored by Citect (observed by GSSE during the audit).</p> <p>Figure 4 – daily Average Austar Coal Mine Water Balance Summary indicates that 0.38ML/day of water is discharged to Bellbird Creek. (See Plate 16).</p> <p>There have been three (3) recorded incidents that could have resulted in a discharge of water from the site. Two were related to pumping water as part of the site water management system. On both occasions the water did not leave the land owned by Austar. Both incidents were reported in full to the EPA in accordance with the requirements of the Environmental Licence.</p> <p>The third incident occurred during the storm events on the 7 &amp; 8 June 2008, where Austar was forced to discharge water from the site at two (2) sites. One was Licensed discharge point</p>	YES	<p>Given that the site is highly dependant on being able to de-water the underground to enable normal operation of the mine, it is considered that there is a high risk of a pipe burst and subsequent off site discharge occurring.</p> <p>GSSE recommends Austar undertake a review of all pipes that are used to transfer water around the mine site. As part of the review, map the location of the pipes, with particular reference to those areas where the pipe is not buried, and those areas that do not have some form of remote monitoring (ie. pressure differential)</p> <p>Prepare a Trigger, Action Response Plan (TARP) that is linked to the existing monitoring and inspection regime.</p> <p>Prepare an emergency response plan and train the appropriate personnel. The Emergency response plan should be included as part of the site EMS.</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
		<p>1 covered by EPL No. 416 (the volume discharged exceeded the licence condition). The second was Austar Dam which is not identified as a licensed discharge point. It is estimated that 6ML of water discharged during this incident.</p> <p>Both were reported the EPA on the Pollution Hotline (9 June 2008) and in a formal report (15 June 2008).</p>		
<p><b>6</b></p>	<p><b>Site Water Management Plan</b></p> <p>Prior to mining commencing in panel A3, or other date agreed by the Director-General, the Applicant shall revise its Site Water Management Plan for the mine, in consultation with the DWE and the DECC, and to the satisfaction of the Director-General.</p> <p>This plan shall be implemented to the satisfaction of the Director General, and must include:</p> <ul style="list-style-type: none"> <li>(a) a Site Water Balance;</li> <li>(b) an Erosion and Sediment Control Plan;</li> <li>(c) a Surface Water Monitoring Program;</li> <li>(d) a Ground Water Monitoring Program; and</li> <li>(e) a Surface and Ground Water Response Plan.</li> </ul>	<p><b>Douglas Partners Report – Groundwater</b></p> <p><i>Note: Douglas Partners completed a Groundwater Compliance report for Austar Coal Mine as part of this audit. (see Appendix 4)</i></p> <p><b>GSSE – Surface Water</b></p> <p><i>Note: This table includes the outcomes from the surface water assessment undertaken by GSSE.</i></p> <p>At the time of the audit mining had not yet commenced in Longwall A3. Notwithstanding this the Surface Water Management Plan (SWMP) has been submitted to DoP and approved on the 19 November 2007.</p> <p>DECC had also responded with no comment. No response was received from DWE.</p> <p>Aspects (a) to (e) as required have been addressed in the SWMP.</p>	<p><b>YES</b></p>	<p>The implementation of the SWMP needs approval by the DoP prior to the commencement of mining in A3</p> <p>There is generally a good understanding of the water management system on the site although it must be noted that the system is complex. GSSE believes that there may be some benefit in better defining roles and responsibilities for key personnel on the site.</p> <p>The implementation and effectiveness of the Water Management Plan needs continual review.</p> <p>GSSE understands that the saline brine from the RO plant is pumped into the underground. The long term impact in terms of accumulation of salt (and therefore the long term increase in salinity in the groundwater) may require additional consideration by Austar to ensure that it does not become an operational constraint.</p>
<p><b>7</b></p>	<p><b>Site Water Balance</b></p> <p>The Site Water Balance must:</p> <ul style="list-style-type: none"> <li>(a) include details of:</li> </ul>	<p>The site water balance is addressed as Section 2 of the Site Water Management Plan.</p> <p>GSSE has reviewed the SWMP with particular reference to the elements listed in 7(a). GSSE</p>	<p><b>YES</b></p>	



Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<ul style="list-style-type: none"> <li>• sources of water;</li> <li>• water use on site;</li> <li>• water management on site;</li> <li>• off-site water transfers or discharges;</li> <li>• reporting procedures; and</li> </ul> <p>(b) describe measures to minimise water use by the development.</p>	<p>is satisfied that all aspects have been addressed in the Management Plan</p> <p>The Surface Water Management Plan (SWMP) has been submitted to DoP and approved on the 19 November 2007</p>		
<p><b>8</b></p>	<p><b>Erosion and Sediment Control</b></p> <p>The Erosion and Sediment Control Plan must:</p> <p>(a) be consistent with the requirements of Landcorns <i>Managing Urban Stormwater: Soils and Construction</i> manual;</p> <p>(b) identify activities that could cause soil erosion and generate sediment;</p> <p>(c) describe measures to minimise soil erosion and the potential for transport of sediment downstream;</p> <p>(d) describe the location, function and capacity of erosion and sediment control structures; and</p> <p>(e) describe what measures would be implemented to maintain the structures over time.</p>	<p>During the audit it was noted that the management of erosion could be improved. In particular the installation of the erosion control methods (ie. silt fence) needs improvement to ensure they are effective.</p> <p>The soils are considered erosive.</p> <p>(a) <b>Section 3.0</b> of the <b>Surface Water Management</b> Plan includes reference to Erosion and Sediment Control. The section lacks a description of the soil erosion control methods that could be adopted in the management erosion on the site. A number of silt fences observed on the site (<b>Plate 17 &amp; 25</b>) were assessed as being ineffective, predominantly due to poor construction.</p> <p>(b) Addressed in SWMP.</p> <p>(c) Addressed in SWMP.</p> <p>(d) This is addressed in general terms in the Surface Water Management Plan; it could be improved (see (a) above).</p> <p>(e) Addressed in the SWMP.</p>	<p><b>YES</b></p>	<p>The SWMP plan should be amended or a separate Environmental Procedure developed, to include more detail on the correct application of soil erosion control techniques and also include information on how to construct them appropriately.</p> <p>The personnel responsible for constructing the erosion controls should be provided with training if they are not familiar with erosion and sediment control methods.</p>
<p><b>9</b></p>	<p><b>Surface Water Monitoring</b></p> <p>The Surface Water Monitoring Program must include:</p> <p>(a) surface water assessment criteria;</p>	<p>(a) The SWMP includes surface water criteria that have been adopted from the EPL.</p> <p>(b) During the audit GSSE was able to cite documents which show that water quality</p>	<p><b>YES</b></p>	<p>The SWMP has been prepared to fulfil the monitoring requirements for EPL (No. 416), generally the requirements of the Development</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>(b) a program to monitor surface water flows and quality (particularly in Black, Cony and Quorrobolong Creeks);</p> <p>(c) a program to monitor water levels in farm dams within the subsidence zone;</p> <p>(d) a program to monitor channel stability in Quorrobolong and Cony Creeks;</p> <p>(e) reporting procedures; and</p> <p>(f) a protocol for the investigation, notification and mitigation of identified exceedences of the surface water criteria that are related to the development (particularly in respect of acid mine drainage and acid leachate).</p>	<p>samples are routinely taken on Black (at a site in Bellbird Creek) and Quorrobolong Creeks as part of the routine surface water monitoring program.</p> <p>GSSE was not able to cite any evidence that there is water quality monitoring occurring in Cony Creek, however it was noted that these creeks are well outside the Stage 2 area being mined</p> <p>GSSE was able to cite evidence that water flows were being monitoring in Black, Bellbird and Quorrobolong Creeks. GSSE was not able to cite any evidence that there is water flow monitoring occurring in Cony Creek, however it was noted that these creeks are well outside the Stage 2 area being mined</p> <p>(c) Austar advised that this is undertaken opportunistically and has been considered as part of the laser survey that is proposed for the site. There is not a formal monitoring regime.</p> <p>(d) GSSE was not able to cite evidence that Austar undertakes channel stability monitoring in Quorrobolong and Cony Creeks. However at the time of the audit, Umwelt were preparing an Ecological Monitoring Program, for Stage 2 Longwall Mining. Once this is completed and the monitoring commenced, GSSE is satisfied that the requirements of the Consent will be meet.</p> <p>Austar advised that they recently completed a fly over which has produced digital imagery (aerial laser survey) and that it was their intension to use this data.</p> <p>(e) Section 6 of the SWMP addresses this condition.</p> <p>(f) In general terms, Section 4.2.3 of the SWMP</p>		<p>Consent have not been considered in the current version of the Management Plan, in particular those relating to flow and creek stability. Austar have advised that Umwelt are currently undertaking a review and are updating the management plan for the Stage 2 and proposed Stage 3 mining areas.</p> <p>In addition, Umwelt are also preparing an Ecological Monitoring Program, for Stage 2 Longwall Mining, which will include the monitoring requirements outlined in the consent.</p> <p>Once these management plans have been updated and the monitoring commenced GSSE is satisfied that the requirements of the Surface Water Monitoring programme will be meet.</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
		<p>addresses this condition. Section 7 of the SWMP is a response plan for any exceedence in the criteria.</p> <p>The plan outlines a proposed investigation/ verification program, however no procedures are provided for notification, and mitigation.</p> <p>In addition, the AEMR process requires Austar to review and report on surface water quality data and identifies any exceedences of the surface water criteria. pH is considered an appropriate measure for monitoring acid mine drainage.</p>		
<p><b>10</b></p>	<p><b>Groundwater Monitoring</b></p> <p>The Groundwater Monitoring Program must include:</p> <ul style="list-style-type: none"> <li>(a) ground water impact assessment criteria;</li> <li>(b) a program to monitor the volume and quality of ground water seeping into the underground mine workings;</li> <li>(c) a program to monitor ground water levels and quality; and</li> <li>(d) a protocol for the investigation, notification and mitigation of identified exceedences of the ground water impact assessment criteria</li> </ul>	<p><b>Douglas Partners Report – Groundwater</b></p> <p><i>Note: Douglas Partners completed a Groundwater Compliance report for Austar Coal Mine as part of this audit. (see Appendix 4)</i></p> <ul style="list-style-type: none"> <li>a) No specific groundwater impact assessment criteria are nominated in the SWMP.</li> <li>b) Section 5 of the SWMP includes a program to monitor groundwater inflows. Results are recorded on monthly basis in spreadsheet database.</li> <li>c) Section 5 of the SWMP includes a program to monitor groundwater inflows. Results are recorded on monthly basis in spreadsheet database.</li> <li>d) Section 7 of the SWMP is a surface and groundwater response plan. The plan outlines a proposed investigation/ verification program, however no procedures are provided for notification, and mitigation.</li> </ul>	<p><b>NO</b></p>	<p>Specific criteria for groundwater compliance may be inappropriate, however regular review of groundwater, surface water and mine subsidence monitoring data, as proposed in Section 7 of the SWMP is considered essential.</p> <p>Refer to Section 2.5 of the <b>Douglas Partners Report – Groundwater</b> report for additional discussion. (see <b>Appendix 4</b>)</p>
<p><b>11</b></p>	<p><b>Surface and Groundwater Response Plan</b></p> <p>The Surface and Ground Water Response Plan must include:</p>	<p><b>Douglas Partners Report – Groundwater</b></p> <p><i>Note: Douglas Partners completed a Groundwater Compliance report for Austar Coal Mine as part of this audit. (see Appendix 4)</i></p>	<p><b>NO</b></p>	<p>Although the Connell Wagner GW Impact Assessment (Ref 1) indicates that “The likely impact of the proposed extraction on the alluvial</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations				
	<p>(a) the procedures that would be followed in the event of any exceedence of the surface or groundwater impact assessment criteria, or other identified impact on surface or groundwater;</p> <p>(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</p> <p>(c) disposal / neutralisation contingencies in the event that acid leachate problems emerge after the mine closes.</p>	<p>(a) Section 7 of the SWMP is a surface and groundwater response plan. The plan outlines a proposed verification program to identify the need for remedial measures and modifications to future operations, however no procedures are provided.</p> <p>(b) As above, no measures are included in Section 7 of the SWMP.</p> <p>(c) Section 7.3 of the SWMP indicates that a mine closure water plan will be developed however such a plan has not been developed yet as the mine is planned to be operated for a further 23 years.</p>		<p><i>aquifer is assessed to be minimal</i>" potential impact scenarios could be developed as a contingency and appropriate procedures identified for each scenario and include in a review of the SWMP.</p> <p>Austar should consider preparing a Conceptual Mine Closure Plan which should include the disposal/ neutralisation contingencies that may be required sooner than 23 years in the case of an early mine closure.</p>				
<p><b>12</b></p>	<p><b>Groundwater Study</b></p> <p>The Applicant shall, 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 Director-General and the DPI which includes a groundwater study and mine water disposal plan prepared in accordance with the requirements of the DPI and DECC.</p>	<p>The mine is not using Cessnock No. 1 shaft at Kalingo.</p>	<p><b>Not Activated</b></p>	<p>The mine is not using Cessnock No. 1 shaft at Kalingo. If it is not intending to use the used as part of any future mining in the area, Austar should consider having the condition removed from the consent.</p>				
<p><b>NOISE AND VIBRATION</b></p>								
<p><b>13</b></p>	<p><b>Impact Assessment Criteria</b></p> <p>The Applicant shall 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.</p> <p><b>Table 2: Noise impact assessment criteria dB(A)</b></p> <table border="1" data-bbox="367 1190 949 1278"> <thead> <tr> <th data-bbox="367 1190 645 1246">Day/Evening/Night <i>L<sub>Aeq</sub>(5 minutes)</i></th> <th data-bbox="645 1190 949 1246">Land</th> </tr> </thead> <tbody> <tr> <td data-bbox="367 1246 645 1278">35</td> <td data-bbox="645 1246 949 1278">All privately owned land</td> </tr> </tbody> </table> <p>a) <i>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,</i></p>	Day/Evening/Night <i>L<sub>Aeq</sub>(5 minutes)</i>	Land	35	All privately owned land	<p><b>Heggies Pty Ltd Report – Noise and Vibration</b></p> <p><i>Note: Heggies completed a Noise and Vibration Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>Quarterly Noise Monitoring Reports from Q1 2007 to Q3 2008 were reviewed.</p> <p>Monitoring has been conducted for Q4 2008 and reporting was currently underway at the time of the Audit.</p> <p>It is noted that negotiated noise agreements currently do not exist.</p> <p>It was noted by GSSE that 38 of the 49 (78%) of the complaints in the 2008 complaints register (up to the 13/11/2008) were noise related. All</p>	<p><b>YES</b></p>	<p>It was noted by GSSE that 38 of the 49 (78%) of the complaints in the 2008 complaints register (up to the 13/11/2008) were noise related. All were specific to the CHPP area. The majority of the complaints come from the same complainant.</p> <p>Significant commitment is required by Austar to ensure that the Noise reduction initiatives outlined in the <i>Austar Coal CHPP Assessment of Noise Impacts</i> dated September 2008 prepared by Global Acoustics are implemented. In particular, the First stage of the voluntary Pollution Reduction Program (PRP).</p>
Day/Evening/Night <i>L<sub>Aeq</sub>(5 minutes)</i>	Land							
35	All privately owned land							

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p><i>to determine compliance with the <math>L^9_{ag}(t6mi,,m)</math> 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 DECC 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 shall also be applied to the measured noise levels where applicable.</i></p> <p>b) <i>The noise emission limits identified in the above table apply under meteorological conditions of:</i></p> <ul style="list-style-type: none"> <li>• <i>wind speeds of up to 3 m/s at 10 metres above ground level; or</i></li> <li>• <i>temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground Level.</i></li> </ul> <p>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 DECO, then the Applicant may exceed the noise limits in Table 2 in accordance with the negotiated noise agreement.</p>	<p>were specific to the CHPP area. The majority of the complaints come from the same complainant.</p> <p>The noise criteria at the CHPP are listed as L6 of the EPL. The limits are:</p> <ul style="list-style-type: none"> <li>• Pelton Village 43dB(A) <math>L_{90}</math></li> <li>• Pyne Residence 40dB(A) <math>L_{90}</math></li> <li>• O'Hearne Residence 37dB(A) <math>L_{90}</math></li> </ul> <p>The noise criteria in Table 2 of Condition 13 <u>does not</u> apply to the CHPP. It is related to only those items identified in Figure 1.3 of the 2006 SEE (ERM).</p> <p>The 2008 AEMR shows that the results from the four quarterly noise surveys undertaken during the reporting period the mine was compliant with the noise criteria for the site (as detailed above).</p>		<p>It was noted by GSSE at the time of the audit that Austar were progressing the construction of a noise bund (or wall) made out of coal rejects in an attempt to assist in reducing the noise from the CHPP.</p>
14	<p>(a) Implement all reasonable and feasible noise mitigation measures.</p> <p>(b) Investigate noise reduction techniques;</p> <p>(c) Report on these investigations and the implementation and effectiveness in the AEMR to the satisfaction of the D-G.</p>	<p><b>Heggies Pty Ltd Report – Noise and Vibration</b></p> <p><i>Note: Heggies completed a Noise and Vibration Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>(a) Letter to Environment Protection and Regulation RE: Environmental Protection Licence 416 - Noise Pollution Reduction Program U1.1 - Austar Coal Mine dated 11 December 2008</p> <p>Austar Coal CHPP Assessment of Noise Impacts dated September 2008 prepared by Global Acoustics. First stage of the voluntary Pollution Reduction Program</p>	YES	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
		<p>(PRP)</p> <p>(b) Austar Coal CHPP Assessment of Noise Impacts dated September 2008 prepared by Global Acoustics. First stage of the voluntary Pollution Reduction Program (PRP).</p> <p>(c) Given that the investigation was completed in September 2008 the findings should be reported in the June 2008 – 2009 reporting Period for the AEMR.</p>		Findings from the noise reduction investigations should be reported in the June 2008 – 2009 reporting Period for the AEMR.
15	<p><b>Noise Monitoring</b></p> <p>The Applicant shall implement the approved Noise Monitoring Program for the development to the satisfaction of the Director-General. 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</p>	<p><b>Heggies Pty Ltd Report – Noise and Vibration</b></p> <p><i>Note: Heggies completed a Noise and Vibration Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>Austar Coal Mine Noise Monitoring Program prepared by Heggies Pty Ltd dated 22 January 2008.</p> <p>GSSE cited a letter from the DG of the DoP dated 15<sup>th</sup> February 2007 approving the Management Plan.</p> <p>Quarterly Noise Monitoring Reports from Q1 2007 to Q3 2008 were reviewed.</p>	YES	A more detailed description of on-site activities or an operational log should be included with the noise monitoring reports.
16	The Applicant shall implement the approved Vibration Monitoring Program for the development to the satisfaction of the Director-General. This program must be capable of recording ground vibrations on the surface emanating from underground mining activities.	<p><b>Heggies Pty Ltd Report – Noise and Vibration</b></p> <p><i>Note: Heggies completed a Noise and Vibration Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>The Austar Coal Mine Vibration Monitoring Plan Issue 1: January 2007 has been reviewed.</p> <p>Austar Coal Mine Vibration Monitoring Plan Longwall Panel A2 dated October 2007 has been reviewed.</p> <p>Letter Communication from DoP cited by GSSE Re: Austar Coal Mine - Revised Vibration Monitoring Plan dated 17/10/07.</p>	NO	It is recommended that the methodology for download and calibration of the vibration monitors be more clearly defined and implemented (See <b>Schedule 2, condition 4</b> ).

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations																							
		<p>While the Monitoring Plans have been prepared and submitted to the DoP, the implementation of the Plan is not satisfactory as vibration data has not been downloaded since May 2008.</p> <p>Monthly review of the data and vibration monitors has not been conducted in accordance with the VMP. (See <b>Schedule 2, condition 4</b>).</p>																									
<p>17</p>	<p>The Applicant shall 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 exceedences 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.</p> <p>Table 3: Long term impact assessment criteria for particulate matter</p> <table border="1" data-bbox="347 767 976 922"> <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/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>30 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p>Table 4: Short – term impact assessment criterion for particulate matter</p> <table border="1" data-bbox="347 1050 976 1129"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>50 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p>Table 5: Long term impact assessment criteria for deposited dust</p> <table border="1" data-bbox="347 1262 976 1353"> <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/m<sup>2</sup>/month</td> <td>4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month	<p><b>Heggies Pty Ltd Report – Air Quality</b></p> <p><i>Note: Heggies completed an Air Quality Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>The Austar Dust and HVAS monitoring reports 2007 has been reviewed.</p> <p>Austar Dust and HVAS monitoring 2008 database Sept 08 has been reviewed.</p> <p>AEMR July 2007 – June 2008 has been reviewed.</p> <p>Air quality monitoring did not commence until April 2007. This was 6 months after re-commencement of mining activities.</p> <p>There was one exceedence (55 ug/m<sup>3</sup>) of the 24-hr average PM<sub>10</sub> criterion (50 ug/m<sup>3</sup>) at Bimbadeen Road on 31/12/2007.</p> <p>As described within the 2007 AEMR, high wind speeds predominantly from the east occurred on this day indicating the mine may not have been the main source of particulate. All other air monitoring results including deposited dust and annual average PM<sub>10</sub> are well below the assessment criteria.</p>	<p><b>YES</b></p>	
Pollutant	Averaging period	Criterion																									
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>																									
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>																									
Pollutant	Averaging period	Criterion																									
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>																									
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level																								
Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month																								

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
<p><b>18</b></p>	<p>The Applicant shall:</p> <p>(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</p> <p>(b) implement all practicable measures to minimise the off-site odour and fume emissions generated by the mine's ventilation system or any spontaneous combustion at the development, to the satisfaction of the Director-General.</p>	<p><b>Heggies Pty Ltd Report – Air Quality</b></p> <p><i>Note: Heggies completed an Air Quality Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>(a) Air Quality Management and Monitoring Plan 2007 has been reviewed</p> <p>Letter to NSW Dept of Planning dated 14 December 2006 concerning the AQMP has been reviewed.</p> <p>There was no visible dust observed leaving the Austar property during the audit.</p> <p>GSSE noted that there were no dust related complaints received by the mine or the CHPP area in 2008 (up to the 13/11/2008).</p> <p>Measures for air quality impact mitigation are described within the AQMP and are considered adequate.</p> <p>(b) Air Quality Management and Monitoring Plan 2007</p> <p>DoP letter dated 15/2/07 approving the air quality monitoring program.</p> <p>Complaints Register 2006 – 2008.</p> <p>NATA certificates of examination for underground monitoring equipment dated: 18/3/08 and 1/5/2008.</p> <p>Statutory 6 monthly test and calibration certificate dated 2 April 2008 for underground gas detection equipment.</p> <p>GSSE noted that there were two (2) odour related complaints received by the mine (up to the 13/11/2008).</p> <p>Real time monitoring data of underground gases viewed during the audit</p>	<p><b>YES</b></p>	<p><i>Note: The Heggies Pty Ltd report assessed <b>18(a) as non compliant</b> on the basis of Austar not being able to demonstrate that they regularly assess visible air pollution. On balance when considering the entire consent, GSSE is satisfied that the condition is compliance (for the reasons described in the evidence column).</i></p> <p>It is recommended that a visual dust inspection be conducted regularly at (but not limited to) the Coal Handling and processing Plant and in the vicinity of any underground ventilation fans.</p> <p>The AQMP notes that “odour issues have not been a historical problem at the site and therefore no definitive monitoring or evaluation of odour is recommended in this AQMP”.</p> <p>The AQMP was approved by the Director General and therefore this condition is considered to be met.</p> <p>All underground monitoring systems for detection of combustion gases are adequate.</p>



Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
19	The applicant shall implement the approved Air Quality Monitoring Program for the development to the satisfaction of the director – General. This program must include an air quality monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent.	<p><b>Heggies Pty Ltd Report – Air Quality</b></p> <p><i>Note: Heggies completed an Air Quality Compliance report for Austar Coal Mine as part of this audit. (see <b>Appendix 4</b>)</i></p> <p>Air Quality Management and Monitoring Plan 2007</p> <p>DoP Letter dated 15/02/2007 approving the Air Quality monitoring program was cited by GSSE.</p>	YES	
<b>METEOROLOGICAL MONITORING</b>				
20	The Applicant shall 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 of Air Pollutants in New South Wales and to the satisfaction of the Director-General.	<p>The weather station was inspected by Heggies during the audit.</p> <p>The Weather data for 2007 and 2008 reviewed.</p> <p>Addressed in section 3.2 of the 2008 AEMR.</p> <p>GSSE cited a letter from the DG of the DoP (dated 6 February 2009) which approved the weather station on site.</p>	YES	
<b>REJECT EMPLACEMENT</b>				
21	<p>The Applicant shall undertake reject emplacement in accordance with the current Mining Operations Plan as updated and approved by the Department of Primary Industries from time to time. If reject emplacement in Areas 1, 3 and 4 as described in the August 1995 EIS is proposed, the Applicant shall:</p> <p>(a) investigate and report to the DPI 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;</p> <p>(b) provide a report on the geotechnical investigations and engineering specifications for emplacement areas 1, 3 and 4 to the DPI, and the Director-General at least 6 months prior to commencement of reject emplacement in these areas; and</p> <p>(c) commence use of emplacement areas 1, 3 and 4 only after consultation with the</p>	<p>Austar advised that rejects have not been placed in these areas, and that the long term rejects strategy for the site did not include utilising these areas.</p> <p>The current MOP does not permit the dumping of rejects in these areas.</p>	Not Activated	<p>Review the Life of Mine Rejects emplacement strategy to ensure that these areas are not required.</p> <p>If the areas are required then the requirements of this condition will apply prior to the use of these areas (see conditions for detail).</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	Council and approval by the DPI.			
<b>FLORA AND FAUNA</b>				
22	<p>The Applicant shall:</p> <p>(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</p> <p>(b) salvage all useable trees and shrubs for reuse in controlling erosion and or site rehabilitation.</p>	<p>(a) A Clearing permit is included as part of the document management system, GSSE cited a permit during the audit.</p> <p>GSSE considers that the effective use of the clearing permit satisfies the requirements of this condition.</p> <p>It was also noted that the Environmental Inspection Checklist (through regular inspection) could be used to monitor clearing on the site.</p> <p>(b) At the time of the audit, Austar advised that there had not been the need to clear any trees other than 6 large trees cleared for safety at intersection and these trees were chipped and the material stockpiled on site for use in erosion control and landscaping around the site.</p>	YES	
23	<p>The Applicant Shall;</p> <p>(a) undertake fauna surveys for bat species at undisturbed sites proposed for reject emplacement as required by the DECC;</p> <p>(b) report results of any fauna surveys to the DECC;</p> <p>(c) undertake a monitoring program of riparian vegetation along Quorrobolong and Cony Creeks in the area of longwalls A3 to A5 with particular reference to River Flat Eucalypt Forest EEC; and</p> <p>(d) carry out any necessary ameliorative measures requested by the DECC in relation to the findings of the fauna surveys and riparian vegetation monitoring program, to the satisfaction of the DECC.</p>	<p>(a) The reject emplacement areas have not been used (see Condition 21 above). The bat surveys are not required.</p> <p>(b) Not needed for this audit – (see (a) above).</p> <p>(c) At the time of the audit, mining had not commenced in the A3 and A5 longwall areas. Austar advised that Umwelt had been commissioned to map the Quorrobolong creek area, and that it would be completed prior to mining commencing in A3 – A5.</p> <p>Austar advised that the Cony creek area was not included to be mapped.</p>	YES	GSSE recommended that a suitable qualified ecologist be engaged to undertake the required monitoring of the Cony Creek area prior to the commencement of mining in the A3 – A5 Longwall areas.

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
<b>HERITAGE</b>				
24	<p><b>Aboriginal Heritage</b></p> <p>Six months prior to commencing activities in undisturbed reject emplacement areas to use Cessnock No. 1 Colliery surface facilities, the Applicant shall undertake additional Aboriginal heritage surveys to the satisfaction of the DECC.</p>	<p>Austar advised that they did not intended to utilise the Cessnock No. 1 Colliery Area. It was part of the original mine plan that had been changed.</p> <p>As such the Aboriginal Heritage Survey was not required.</p>	<b>Not Activated</b>	
25	<p><b>European Heritage</b></p> <p>The Applicant shall:</p> <p>(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 recommencing any mining activities at the Cessnock No 1 Colliery surface facilities at Kalingo;</p> <p>(b) make <i>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</i></p> <p>(c) take all reasonable measures to protect the ring-barked tree referenced in the April 2006 SEE, to the satisfaction of the Director-General.</p> <p><i>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.</i></p>	<p>(a) Austar advised that they did not intended to utilise the Cessnock No. 1 Colliery Area. It was part of the original mine plan that had been changed.</p> <p>(b) Umwelt have completed a heritage assessment for Austar land (Nov 2008). A copy of the report was cited by GSSE during the audit</p> <p>(c) Initially the site was not aware of localisation of ring-barked tree. The site is known as EL2, but the location was not identified in the ERM report.</p> <p>Further investigation during the audit identified the location of the tree, and it was confirmed by Austar that the area had not been disturbed. GSSE were not able to inspect the site during the audit.</p>	<b>YES</b>	<p>Prior to the commencement of longwall mining in this area (as defined by condition 25), Austar are to utilise the work completed by Umwelt and make application under section 132 of the Heritage Act.</p> <p>Mark the location of the tree on a mine plan and communicate its significance (ie. specifically listed in the development consent) with the appropriate personal on site to ensure the ongoing protection of the tree.</p>
<b>TRAFFIC AND TRANSPORT</b>				
26	<p>The Applicant shall:</p> <p>(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 RTA 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</p>	<p>(a) Austar advised that rejects have not been placed in these areas, and that the long term rejects strategy for the site did not include utilising these areas (see condition 21 above).</p>	<b>Not Activated</b>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>type and sight distance in accordance with AS2890-1. Such crossing shall consist of pavement and bitumen seal extending at least 30 metres either side of Main Road 218; and</p> <p>(b) provide a Type BA intersection at the nominated entry to the Cessnock No 1 Colliery site The intersection type and location shall be determined in conjunction with Council and constructed prior to commencement of operations at the Cessnock No 1 Colliery site.</p>	<p>(b) Austar advised that they did not intended to utilise the Cessnock No. 1 Colliery Area. It was part of the original mine plan that had been changed.</p>		
<p><b>27</b></p>	<p>The Applicant shall:</p> <p>(a) prior to 31 December 2008, or as otherwise agreed with the Director-General, undertake upgrade works to the road level crossing al Vincent Street, Kitchener, as recommended in <i>Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit</i> (GHD March 2007); and</p> <p>(b) prior to 30 June 2009, use its best endeavors to undertake upgrade works at the following road level crossings as recommended in <i>Austar Coal Mine Pty Limited Report on Four Rail Level Crossings in Cessnock LGA Stage 5 Road Safety Audit</i> (GHD March 2007):</p> <ul style="list-style-type: none"> <li>• Cessnock Road, Kearsley;</li> <li>• Neath Road, Neath; and</li> <li>• Mitchell Avenue, Weston,</li> </ul> <p>in consultation with the South Maitland Railway, and to the satisfaction of the Council and the RTA.</p>	<p>(a) At the time of the Audit, Austar advised that the planning for the upgrade had commenced. GHD had been provided with a Purchase Order to undertake the works and that they expected to have a final design completed by the 31 December 2008. It was not anticipated that the works would be completed until June 2009.</p> <p>Austar have written to the DG of the DoP requesting that the DoP give Austar until the end of June 2009 to complete the works. GSSE cited a letter from the DoP approving the extension in time (dated 2 February 2009).</p> <p>(b) Austar was able to provide e-mails and file notes demonstrating that they had commenced consultation with the South Maitland Railways in order to resolve the upgrade of the level crossing. These documents cited by GSSE dated back to the 11 August 2008.</p> <p>A copy of the GHD report was provided to GSSE for review.</p> <p>GSSE cited e-mails that were seeking the services from specialist railway consultants to review the line capacity and design.</p> <p>GSSE is satisfied that Austar is working with</p>	<p><b>YES</b></p>	<p>Continue to progress the upgrade works with the appropriate stakeholders. Consult with the DoP so they can continue to be made aware of the timing of the works as they relate to the requirements of the development consent.</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
		<p>the stakeholders relating to the upgrade of the rail loop and that the issue is being progressed.</p> <p>GSSE was not able to determine whether the current status of negotiations would enable the upgrade to be completed by the 30 June 2009.</p>		

#### Schedule 4 – Additional Procedures for Subsidence Management

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
<b>NOTIFICATION OF LANDOWNERS</b>				
1	Prior to 31 June 2008, the Applicant shall notify the landowners of land listed in Table I 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.	<p>GSSE has cited letters sent to the owners of <b>Property A03a</b> – Duff and <b>Property A04a</b> – Bukanmain Pty Ltd specially addressing this condition.</p> <p>Both letters were dated 30 June 2008.</p>	YES	
2	Prior to 31 June 2008, the Applicant shall 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 <i>the Mine Subsidence Compensation Act 1961</i> .	<p>GSSE has cited letters sent to the owners of <b>Property A03a</b> – Duff and <b>Property A04a</b> – Bukanmain Pty Ltd specially addressing this condition.</p> <p>Both letters were dated 30 June 2008.</p>	YES	
<b>LAND ACQUISITION</b>				
3	<p>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 shall make a <i>binding written offer to the landowner</i> based on:</p> <p>(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:</p>	<p><b>Property A04a – John Reid:</b></p> <p>At the time of the audit, GSSE notes that Austar had notified the resident of their rights under this condition and that Austar had purchased the land with settlement due to take place on the 31 March 2009.</p>	NATD	<p>At the time of the audit GSSE cited a number of letters from both Austar and from legal council representing both Austar and the land holders in relation to the Land listed in Table I.</p> <p>GSSE understands that these negotiations are ongoing and that Austar are working to achieve an appropriate outcome in accordance with</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<ul style="list-style-type: none"> <li>• existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>• 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 MSB;</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>• relocating within the Cessnock local government area, or to any other local government area determined by the Director-General;</li> <li>• obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>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 Director-General for resolution (see Appendix 1).</p> <p>Upon receiving such a request, the Director-General shall 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.</p> <p>Within 14 days of receiving the independent valuer's determination, the Applicant shall make a written offer</p>	<p><b>Property A03a – Duff:</b></p> <p>At the time of the audit, GSSE notes that Austar had notified the resident of their rights under this condition and that Austar had proposed an Access and Compensation Agreement (as per condition 1(a)). At the time of the audit negotiations with the landowner in respect to that Agreement are ongoing.</p>		<p>the requirements of this condition.</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>to purchase the land at a price not less than the independent valuer's determination.</p> <p>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 shall cease, unless otherwise agreed by the Director-General.</p>			
4	<p>The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, or the Director General and the costs of determination referred above.</p>		NATD	<p>At the time of the audit GSSE cited a number of letters from both Austar and from legal council representing both Austar and the land holders in relation to the Land listed in Table I.</p> <p>GSSE understands that these negotiations are ongoing and that Austar are working to achieve an appropriate outcome in accordance with the requirements of this condition.</p>
5	<p><i>If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall 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.</i></p>		NATD	<p>At the time of the audit GSSE cited a number of letters from both Austar and from legal council representing both Austar and the land holders in relation to the Land listed in Table I.</p> <p>GSSE understands that these negotiations are ongoing and that Austar are working to achieve an appropriate outcome in accordance with the requirements of this condition.</p>

**Schedule 5 – Environmental Management, Monitoring, Auditing and Reporting.**

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
1	<p><b>Environmental Management System</b></p> <p>The Applicant shall implement the approved Environmental Management Strategy for the development to the satisfaction of the Director-General. This Strategy must:</p> <p>(a) provide the strategic context for environmental management of the development;</p> <p>(b) identify the statutory requirements that apply to the development;</p> <p>(c) describe in general how the environmental performance of the development would be monitored and managed during the development;</p> <p>(d) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance;</li> <li>• manage any cumulative impacts;</li> <li>• respond to emergencies; and</li> </ul> <p>(e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development.</p>	<p>A letter from the DoP dated 8.11.2007 approving the EMS has been cited by GSSE.</p> <p>GSSE is satisfied that conditions 1 (a) – (e) have been adequately addressed in the EMS.</p> <p>At the time of the audit, the implementation of the EMS appears to be inadequate as it was outdated and requiring review.</p> <p>The document was last updated on the 26 October 2007 according to the Document Control details on the EMS Main Document.</p> <p>The EMS document review element requires that the EMS be reviewed at least annually.</p>	YES	<p>The EMS requires a full review to bring it up to date with the current site requirements. In particular:</p> <ul style="list-style-type: none"> <li>• Statutory Obligations;</li> <li>• the key roles and responsibilities need to be redefine;</li> <li>• Environmental Awareness Training; and</li> <li>• Environmental Aspects Register;</li> </ul> <p>The requirements of the EMS need to be reviewed and fully implemented across the site.</p>
2	<p><b>Environmental Monitoring Program</b></p> <p>The Applicant shall undertake monitoring in accordance with the approved Environmental Monitoring Program for</p>	<p>A letter from the DoP dated 15.11.2007 approving the EMP has been cited by GSSE.</p> <p>The document was last updated on the 31</p>	YES	<p>The EMP requires a full review to bring it up to date with the current site requirements.</p>



Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>the development, to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements of this consent into a single document.</p>	<p>October 2007 according to the Document Control details on the EMP Main Document.</p> <p>GSSE is generally satisfied that the monitoring detailed in the EMP is being undertaken by Austar. The minor exception to that is the Vibration Monitoring.</p> <p>Monthly review of the data and vibration monitors has not been conducted in accordance with the VMP. (See <b>Schedule 2, condition 4</b>).</p>		<p>The requirements of the EMP need to be reviewed and fully implemented across the site.</p> <p>There is additional monitoring, particularly the creek stability and additional surface water monitoring (required by the consent) that should be added to the EMP in any future reviews.</p>
<p><b>3</b></p>	<p><b>Environmental Manager</b></p> <p>Prior to carrying out any development, the Applicant shall employ a suitably qualified and experienced Environmental Manager, whose appointment has been endorsed by the Director-General, for the duration of the development to oversee the environmental performance of the development and compliance with the conditions of this approval.</p>	<p>At the time of the audit, Sarah Harvey was the Environmental Co-ordinator for the site.</p> <p>Sarah holds an Honours Degree in Environmental Science and has been employed in the mining industry and associated industries for approximately 2 years.</p> <p>GSSE cited a letter from the DG of the DoP (dated 8<sup>th</sup> December 2008) approving Sarah Harvey for the position of Environmental Manager.</p> <p>In addition, GSSE cited a letter provided to the DECC advising them of the appointment of Sarah Harvey to the position of Environmental Co-ordinator.</p>	<p><b>YES</b></p>	
<p><b>4</b></p>	<p><b>Incident Reporting</b></p> <p>Within 7 days of detecting an exceedance of the limits/performance criteria in this consent, the Applicant shall report the exceedance/ incident to the Department (and any relevant agency). The report must:</p> <ul style="list-style-type: none"> <li>(a) describe the date, time, and nature of the exceedance/ incident;</li> <li>(b) identify the cause (or likely cause ) of the exceedance/incident;</li> <li>(c) describe what action has been taken to date; and</li> <li>(d) describe the proposed measures to address the</li> </ul>	<p>There have been three (3) recorded incidents that could have resulted in a discharge of water from the site. Two were related to pumping water as part of the sites water management system. On both occasions the water did not leave the land owned by Austar. Both incidents were reported in full to the EPA in accordance with the requirements of the Environmental Licence.</p> <p>The third incident occurred during the storm events on the 7 &amp; 8 June 2008, where Austar was forced to discharge water from the site at two (2) sites. One was Licensed discharge point 1 covered by EPL No. 416 (the volume</p>	<p><b>YES</b></p>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>exceedance/incident.</p>	<p>discharged exceeded the licence condition). The second was Austar Dam which is not identified as a licensed discharge point. It is estimated that 6ML of water discharged during this incident.</p> <p>Bothe were reported the EPA on the Pollution Hotline (9 June 2008) and in a formal report (15 June 2008).</p> <p>GSSE cited a copy of the Environmental Incidents Form.</p> <p>GSSE is satisfied that Austar are meeting this condition.</p>		
<p><b>5</b></p>	<p><b>Annual Reporting</b></p> <p>Each year, the Applicant shall submit an Annual Environmental Management Report (AEMR) to the Director-General and the relevant agencies. This report must:</p> <p>(a) identify the standards and performance measures that apply to the development;</p> <p>(b) describe the works carried out in the last 12 months;</p> <p>(c) describe the works that will be carried out in the next 12 months;</p> <p>(d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;</p> <p>(e) include a summary of the monitoring results for the development during the past year;</p> <p>(f) include an analysis of these monitoring results against the relevant:</p> <ul style="list-style-type: none"> <li>• impact assessment criteria/limits;</li> <li>• monitoring results from previous years; and</li> <li>• predictions in the EIS and/or SEE;</li> </ul> <p>(g) identify any trends in the monitoring results over the</p>	<p>As part of the audit GSSE reviewed the latest AEMRs for the site.</p> <p>AEMRs from the 2005 reporting to current have been cited. Austar was not responsible for the AEMRS prior 2005.</p> <p>GSSE is satisfied that the AEMRs satisfy the reporting requirements outlined in condition 5 (a) through to (i).</p>	<p><b>YES</b></p>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>life of the development;</p> <p>(h) identify any non-compliance during the previous year; and</p> <p>(i) describe what actions were, or are being, taken to ensure compliance.</p>			
<p><b>6</b></p>	<p><b>Independent Environmental Audit</b></p> <p>Prior to 31 December 2008, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>a) be conducted by suitably qualified, experienced, and independent experts whose appointment has been endorsed by the Director-General;</p> <p>b) include consultation with the relevant agencies;</p> <p>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;</p> <p>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 these approvals) and with other statutory requirements;</p> <p>e) review the adequacy of strategies, plans or programs required under these approvals; and, if necessary,</p> <p>f) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.</p> <p><i>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.</i></p>	<p>This audit report satisfies the requirements of the Independent Audit.</p> <p>A letter dated 27.11.2009 from the DoP Approved GSSE as the audit team, along with the specialist consultants.</p>	<p><b>YES</b></p>	<p>Read this report in full for compliance with the condition.</p>

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
7	Within 6 weeks of completing this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.	See condition 6 above.	YES	
8	Within 3 months of submitting the audit report to the Director-General, the Applicant shall review and if necessary revise the strategies/plans/programs required under this consent, to the satisfaction of the Director-General.	To be undertaken following review of the Audit report by the DoP	Not Activated	
9	<p><b>Community Consultative Committee</b></p> <p>The Applicant shall establish and maintain a Community Consultative Committee (CCC) to oversee the ongoing environmental performance of the development. The CCC shall:</p> <p>(a) be comprised of:</p> <ul style="list-style-type: none"> <li>• 2 representatives from the Applicant, including the person responsible for environmental management at the mine;</li> <li>• at least 1 representative from Council; and</li> <li>• at least 3 representatives from the local community,</li> </ul> <p>whose appointment has been approved by the Director-General in consultation with the Council. The local community representative positions will be re-appointed every two years unless otherwise agreed by the Director-General;</p> <p>(b) be chaired by an independent chairperson, or council representative, whose appointment has been approved by the Director-General;</p> <p>(c) meet at least 4 times a year, or as otherwise approved by the Director-General;</p> <p>(d) review the Applicant's performance with respect to environmental management and community</p>	<p>(a) GSSE cited a letter dated 2/4/2007 from the DoP which endorses the nominees for the Austar CCC. In addition, after receiving an additional nomination, the DoP also appointed Mr Roger Lewis as an additional CCC member.</p> <p>(b) Ms Margaret McDonald-Hill was appointed the Independent Chair to the CCC. GSSE cited a letter from the DoP dated 12/2/2007. GSSE understands that Margaret was reappointed to the role in mid 2008.</p> <p>GSSE has reviewed the CCC meeting minutes</p>	YES	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>relations;</p> <p>(e) undertake regular inspections of the mine operations;</p> <p>(f) review community concerns or complaints about the mine operations, and the Applicant's complaints handling procedures; and</p> <p>(g) provide advice to:</p> <ul style="list-style-type: none"> <li>• the Applicant on improved environmental management and community relations, including the provision of information to the community and the identification of community initiatives to which the Applicant could contribute;</li> <li>• the Department regarding the conditions of this consent; and</li> <li>• the general community on the performance of the mine with respect to environmental management and community relations; and</li> </ul> <p>(h) be operated generally in accordance with any guidelines the Department may publish in regard to the operation of Community Consultative Committees for mining developments.</p> <p><i>Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the applicant complies with this consent.</i></p>	<p>and is satisfied that conditions (c) through to (h) are being met.</p>		
<p><b>10</b></p>	<p>The Applicant shall fulfil all responsibilities set out for companies in the CCC guidelines, including at its own expense:</p> <p>(a) ensuring that 2 of its representatives attend CCC meetings;</p> <p>(b) regularly providing the CCC with reports and other information on the environmental performance and management of the development;</p> <p>(c) providing meeting facilities for the CCC, if the CCC</p>	<p>GSSE has reviewed the CCC meeting minutes and is satisfied that conditions (a) through to (g) are being met.</p>	<p><b>YES</b></p>	

Condition	Minister's Conditions of Consent	Evidence Reviewed / Comments	Compliance (Yes or No)	Comments / Recommendations
	<p>requests;</p> <p>(d) arranging site inspections for the CCC, if the CCC requests;</p> <p>(e) taking minutes of the CCC meetings, if the CCC requests;</p> <p>(f) making these minutes available to the public; and</p> <p>(g) responding to any advice or recommendations the CCC may have in relation to the environmental management or community relations</p>			
11	<p>The Applicant shall fund the payment of invoices received to facilitate the general purposes and functioning of the CCC up to \$2,000 each year until the cessation of operations under the consent.</p> <p><i>Note. The contribution is to be indexed according to the CPI at the time of each payment. The first <b>payment</b> shall be <b>made</b> by the <b>date</b> of the <b>first</b> CCC meeting.</i></p>	GSSE cited evidence of payment for \$2000 per year to the CCC.	YES	
12	<p><b>Access to Information</b></p> <p>By 30 April 2008, and thereafter within 3 months of the approval of any strategy / plan/ program required under this consent (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or AEMRs required under this consent, the Applicant shall:</p> <p>(a) provide a copy of the relevant documents to the relevant agencies and CCC; and</p> <p>(b) put a copy of the documents on its website.</p>	GSSE is satisfied that the Austar Website provides access to the required information in accordance with this condition.	YES	
13	<p>By 30 April 2008, and thereafter during the life of the development, the Applicant shall:</p> <p>(a) include a copy of this consent, as may be modified from time to time, on its website;</p> <p>(b) provide a full summary of monitoring results required under this consent on its website; and</p> <p>(c) update this summary on a regular basis (at least every 3 months)</p>	GSSE is satisfied that the Austar Website provides access to the required information in accordance with this condition.	YES	

## 6.1 Environment Protection Licence (EPL)

Conditions relevant to air quality provided in Licence No. 416 (the most recent version dated 2 January 2009) have been summarised and are provided in **Table 8**. The relevant Licence is provided in **Appendix 5**.

**Table 8 – EPL Conditions**

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997	YES	At the time of the audit GSSE was satisfied that Austar were complying with section 120 of the P&EO Act 1997. See schedule 3, Condition 5 of the Compliance Table ( <b>Table 7</b> ).
L1.2	Discharge from Point 1 is permitted only when the discharge occurs solely as a result of rainfall at the premises exceeding: a) a total of 168 millimetres over any consecutive five day period; or b) 48 millimetres in less than any consecutive 12 hour period.	YES	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with and investigation and report. See schedule 3, Condition 5 of the Compliance Table ( <b>Table 7</b> ).
L3.1	For each monitoring/discharge point or utilisation area specified in the table's below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	NO	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with and investigation and report. See schedule 3, Condition 5 of the Compliance Table ( <b>Table 7</b> ).  Over the period ending 30 December 2007 there were 2 incidents where the pH and 1 of Iron that was marginally outside the limits specified by L3.1.
L3.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	NO	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with and investigation and report. See schedule 3, Condition 5 of the Compliance Table ( <b>Table 7</b> ).  Over the period ending 30 December 2007 there were 2 incidents where the pH and 1 of Iron that was marginally outside the limits

Condition	Description	Compliance (Yes/No)	Comments / Recommendations																																																												
			specified by L3.1.																																																												
<b>L3.3</b>	<p>To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the tables.</p> <p><b>POINT 1</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile Concentration Limit</th> </tr> </thead> <tbody> <tr> <td>Iron</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td>6.5-8.5</td> </tr> <tr> <td>Total dissolved solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>6000</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table> <p><b>POINT 6</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile Concentration Limit</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td></td> <td></td> <td></td> <td>600</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td>6.5-8.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit	Iron	milligrams per litre				1	pH	pH				6.5-8.5	Total dissolved solids	milligrams per litre				6000	Total suspended solids	milligrams per litre				50	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit	Conductivity	microsiemens per centimetre				600	Iron	milligrams per litre				1	pH	pH				6.5-8.5	Total suspended solids	milligrams per litre				50	<b>Noted</b>	No action required.
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit																																																										
Iron	milligrams per litre				1																																																										
pH	pH				6.5-8.5																																																										
Total dissolved solids	milligrams per litre				6000																																																										
Total suspended solids	milligrams per litre				50																																																										
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit																																																										
Conductivity	microsiemens per centimetre				600																																																										
Iron	milligrams per litre				1																																																										
pH	pH				6.5-8.5																																																										
Total suspended solids	milligrams per litre				50																																																										
<b>L4.1</b>	<p>For each discharge point or utilisation area specified below (by a point number), the volume/mass of:</p> <p>(a) liquids discharged to water; or;</p> <p>(b) solids or liquids applied to the area;</p> <p>must not exceed the volume/mass limit specified for that discharge point or area.</p> <table border="1"> <thead> <tr> <th>Point</th> <th>Unit of measure</th> <th>Volume/Mass Limit</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>kilolitres per day</td> <td>2000</td> </tr> <tr> <td>6</td> <td>Measure 1</td> <td>2000</td> </tr> </tbody> </table> <p>For the purpose of this condition 'Measure 1' means kL/day measured as an annual average.</p>	Point	Unit of measure	Volume/Mass Limit	1	kilolitres per day	2000	6	Measure 1	2000	<b>NATD</b>	<p>GSSE was not able to verify during the audit that the volume / mass limit specific for that particular discharge point was not exceeded.</p> <p>Information on the volume of the discharges was not available at the time of the audit.</p> <p><i>Recommendation: Set up a system to record the total volume of discharge from Discharge Point 1.</i></p> <p>GSSE understands that the Citect System that controls the Reverse Osmosis Plant records the volume of water discharged, although it was not determined</p>																																																			
Point	Unit of measure	Volume/Mass Limit																																																													
1	kilolitres per day	2000																																																													
6	Measure 1	2000																																																													
<b>L6.1</b>	<p>The licensee must ensure that every practical effort is undertaken to control noise from the premises to meet the following environmental noise goals:</p> <p>Pelton Village 43dB(A) L<sub>90</sub>;</p> <p>The Pyne residence 40dB(A) L<sub>90</sub>; and</p>	<b>YES</b>	See Noise Report prepared by Heggies contained with <b>Appendix 4)</b>																																																												



Condition	Description	Compliance (Yes/No)	Comments / Recommendations
	The O'hearn residence 37dB(A) L <sub>90</sub> .		
<b>O1.1</b>	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	<b>YES</b>	
<b>O2.1</b>	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.	<b>YES</b>	All monitoring items required by the licensed activity were assessed as meeting this condition.
<b>O3.1</b>	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	<b>YES</b>	None
<b>M1.1</b>	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	<b>YES</b>	Reported in the AEMR and EPL Annual Return. Records are kept as a excel spreadsheet which was sighted by GSSE. Records are maintained by the contractor who undertakes the monitoring.
<b>M1.2</b>	All records required to be kept by this licence must be: (a) in a legible form, or in a form that can readily be reduced to a legible form; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) produced in a legible form to any authorised officer of the EPA who asks to see them.	<b>YES</b>	Reported in the AEMR and EPL Annual Return. Records are kept as a excel spreadsheet which was sighted by GSSE. Records are maintained by the contractor who undertakes the monitoring.
<b>M1.3</b>	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and	<b>YES</b>	Reported in the AEMR and EPL Annual Return. Records are kept as a excel spreadsheet which was sighted by GSSE. Records are maintained by the contractor who undertakes the monitoring.

Condition	Description	Compliance (Yes/No)	Comments / Recommendations																																																																																																								
	(d) the name of the person who collected the sample.																																																																																																										
<b>M2.1</b>	<p>For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <table border="1" data-bbox="465 491 1160 1088"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Special Frequency 1</td> <td>Representative sample</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Representative sample</td> </tr> <tr> <td>Total dissolved solids</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Representative sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Representative sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Special Frequency 1</td> <td>Representative sample</td> </tr> </tbody> </table> <table border="1" data-bbox="465 635 1160 737"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> </tbody> </table> <table border="1" data-bbox="465 762 1160 865"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> </tbody> </table> <table border="1" data-bbox="465 890 1160 992"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Special Frequency 2</td> <td>Representative sample</td> </tr> </tbody> </table> <table border="1" data-bbox="465 1018 1160 1120"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Conductivity</td> <td>microsiemens per centimetre</td> <td>Monthly</td> <td>A probe designed to measure the range 0 to 8,000 uS/cm</td> </tr> <tr> <td>Iron</td> <td>milligrams per litre</td> <td>Monthly</td> <td>Representative sample</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Monthly</td> <td>Representative sample</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Monthly</td> <td>Representative sample</td> </tr> </tbody> </table> <p>Special Frequency 1 means daily collected at a minimum of twelve hourly intervals when a discharge is occurring.</p> <p>Special Frequency 2 means three times per week during any period of discharge from Point 1 at a minimum of 48 hour intervals commencing as soon as practical after discharge has commenced. Once per month during any period of discharge from Point 6 at a minimum of 4 weekly intervals.</p>	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Special Frequency 1	Representative sample	Iron	milligrams per litre	Special Frequency 1	Representative sample	Total dissolved solids	milligrams per litre	Special Frequency 1	Representative sample	Total suspended solids	milligrams per litre	Special Frequency 1	Representative sample	pH	pH	Special Frequency 1	Representative sample	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample	Iron	milligrams per litre	Special Frequency 2	Representative sample	Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample	pH	pH	Special Frequency 2	Representative sample	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample	Iron	milligrams per litre	Special Frequency 2	Representative sample	Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample	pH	pH	Special Frequency 2	Representative sample	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample	Iron	milligrams per litre	Special Frequency 2	Representative sample	Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample	pH	pH	Special Frequency 2	Representative sample	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	Monthly	A probe designed to measure the range 0 to 8,000 uS/cm	Iron	milligrams per litre	Monthly	Representative sample	Total suspended solids	milligrams per litre	Monthly	Representative sample	pH	pH	Monthly	Representative sample	<b>YES</b>	<p>Reported in the AEMR and EPL Annual Return. Records are kept as a excel spreadsheet which was sighted by GSSE.</p> <p>Records are maintained by the contractor who undertakes the monitoring.</p>
Pollutant	Units of measure	Frequency	Sampling Method																																																																																																								
Conductivity	microsiemens per centimetre	Special Frequency 1	Representative sample																																																																																																								
Iron	milligrams per litre	Special Frequency 1	Representative sample																																																																																																								
Total dissolved solids	milligrams per litre	Special Frequency 1	Representative sample																																																																																																								
Total suspended solids	milligrams per litre	Special Frequency 1	Representative sample																																																																																																								
pH	pH	Special Frequency 1	Representative sample																																																																																																								
Pollutant	Units of measure	Frequency	Sampling Method																																																																																																								
Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample																																																																																																								
Iron	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
pH	pH	Special Frequency 2	Representative sample																																																																																																								
Pollutant	Units of measure	Frequency	Sampling Method																																																																																																								
Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample																																																																																																								
Iron	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
pH	pH	Special Frequency 2	Representative sample																																																																																																								
Pollutant	Units of measure	Frequency	Sampling Method																																																																																																								
Conductivity	microsiemens per centimetre	Special Frequency 2	Representative sample																																																																																																								
Iron	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
Total suspended solids	milligrams per litre	Special Frequency 2	Representative sample																																																																																																								
pH	pH	Special Frequency 2	Representative sample																																																																																																								
Pollutant	Units of measure	Frequency	Sampling Method																																																																																																								
Conductivity	microsiemens per centimetre	Monthly	A probe designed to measure the range 0 to 8,000 uS/cm																																																																																																								
Iron	milligrams per litre	Monthly	Representative sample																																																																																																								
Total suspended solids	milligrams per litre	Monthly	Representative sample																																																																																																								
pH	pH	Monthly	Representative sample																																																																																																								

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
<b>M3.2</b>	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	<b>YES</b>	Records are maintained by the contractor who undertakes the monitoring. The water monitoring Contractor is known to GSSE and is considered reputable. They are responsible for the monitoring in accordance with the Approved Methods Publication.
<b>M4.1</b>	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which the license applies.	<b>YES</b>	Complaints record is maintained in excel. This was sighted by GSSE during the audit.
<b>M4.2</b>	The record must include details of the following: (a) the date and time of the complaint; (b) The method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow up contact with the complainant: and (f) if no action was taken by the licensee, the reasons why no action was taken.	<b>YES</b>	Complaints record is maintained in excel. This was sighted by GSSE during the audit.
<b>M4.3</b>	The record of a complaint must be kept for at least 4 years after the complaint was made.	<b>YES</b>	Data is available since operations recommenced in 2006.
<b>M4.4</b>	The record must be produced to any authorised officer of the EPA who asks to see them.	<b>Not Activated</b>	This has not been required.
<b>M5.1</b>	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the license.	<b>YES</b>	
<b>M5.2</b>	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	<b>YES</b>	

Condition	Description	Compliance (Yes/No)	Comments / Recommendations												
<b>M5.3</b>	<p>Conditions M5.1 and M5.2 do not apply until 3 months after:</p> <p>(a) the date of the issue of this licence or</p> <p>(b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.</p>	<b>YES</b>	noted												
<b>M6.1</b>	<p>For each discharge point or utilisation area specified below, the licensee must monitor:</p> <p>(a) the volume of liquids discharged to water or applied to the area;</p> <p>(b) the mass of solids applied to the area;</p> <p>(c) the mass of pollutants emitted to the air;</p> <p>at the frequency and using the method and units of measure, specified below.</p> <p><b>POINT 1</b></p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit Of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Special Frequency 1</td> <td>kilolitres per day</td> <td>In line instrumentation</td> </tr> </tbody> </table> <p><b>POINT 6</b></p> <table border="1"> <thead> <tr> <th>Frequency</th> <th>Unit Of Measure</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Monthly</td> <td>kilolitres per day</td> <td>In line instrumentation</td> </tr> </tbody> </table>	Frequency	Unit Of Measure	Sampling Method	Special Frequency 1	kilolitres per day	In line instrumentation	Frequency	Unit Of Measure	Sampling Method	Monthly	kilolitres per day	In line instrumentation	<b>YES</b>	<p>Reported in the AEMR and EPL Annual Return. Records are kept as a excel spreadsheet which was sighted by GSSE.</p> <p>Records are maintained by the contractor who undertakes the monitoring.</p>
Frequency	Unit Of Measure	Sampling Method													
Special Frequency 1	kilolitres per day	In line instrumentation													
Frequency	Unit Of Measure	Sampling Method													
Monthly	kilolitres per day	In line instrumentation													
<b>M7.1</b>	The licensee is required to install and maintain a rainfall depth measuring device	<b>YES</b>	Weather Station is on site located near the CHPP.												
<b>M7.2</b>	Rainfall at the premises must be measured and recorded in millimeters per 24 hours, at the same time each day.	<b>YES</b>	Weather Station is on site located near the CHPP.												
<b>R.1.1</b>	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <p>(a) statement of compliance; and</p> <p>(b) a monitoring and complaints summary</p>	<b>YES</b>	<p>Records on the DECC website show that the Annual Return has been submitted up to and including the period 30 December 2007.</p> <p>The 2008 Annual Return is due within 60 days of the end of December 2008. At the time of the audit it had not been prepared as the end of the reporting period was the 30th December 2008.</p>												

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	YES	
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>(a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and</p> <p>(b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</p> <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>	NOT ACTIVATED	This has not been required.
R1.4	<p>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</p> <p>(a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</p> <p>(b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</p>	NOT ACTIVATED	This has not been required.
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	YES	
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	YES	
R1.8	<p>Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <p>(a) the licence holder; or</p> <p>(b) by a person approved in writing by the EPA to sign on behalf of the licence holder.</p>	YES	

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
R1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	YES	
R2.1	Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.	YES	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with an investigation and report. See schedule 3, Condition 5 of the Compliance Table (Table 7).
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	YES	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with an investigation and report. See schedule 3, Condition 5 of the Compliance Table (Table 7).
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that:  (a) where this licence applies to premises, an event has occurred at the premises; or  (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,  and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Not Activated	This has not been required.
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	YES	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and followed up with an investigation and report. See schedule 3, Condition 5 of the Compliance Table (Table 7).
R3.3	The request may require a report which includes any or all of the following information:	YES	There was one discharge outside the criteria at Discharge Point 1. This was reported to the DECC on the pollution hotline and

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
	<ul style="list-style-type: none"> <li>(a) the cause, time and duration of the event;</li> <li>(b) the type, volume and concentration of every pollutant discharged as a result of the event;</li> <li>(c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;</li> <li>(d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;</li> <li>(e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</li> <li>(f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</li> <li>(g) any other relevant matters.</li> </ul>		<p>followed up with and investigation and report. See schedule 3, Condition 5 of the Compliance Table (<b>Table 7</b>).</p>
<b>R3.4</b>	<p>The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.</p>	<b>Not Activated</b>	<p>This has not been required.</p>
<b>G1.1</b>	<p>A copy of this licence must be kept at the premises to which the licence applies.</p>	<b>YES</b>	
<b>G1.2</b>	<p>The licence must be produced to any authorised officer of the EPA who asks to see it.</p>	<b>Not Activated</b>	<p>This has not been required.</p>
<b>G1.3</b>	<p>The licence must be available for inspection by any employee or agent of the licensee working at the premises.</p>	<b>YES</b>	
<b>U1.1</b>	<p>The licensee must complete the following noise control options as identified in the report "Austar Coal CHPP Assessment of Noise Impacts" prepared by Global Acoustics Pty Ltd and dated 15 September 2008 ("the Report").</p> <ul style="list-style-type: none"> <li>(a) Close all openings (including but not limited to the crane hoist openings, missing cladding or windows and access openings) in the Coal Handling and Preparation Plant (CHPP) building where practical to do so.</li> </ul>	<b>YES</b>	<p>In progress - See Heggies Noise Report attached as <b>Appendix 4</b>.</p>

Condition	Description	Compliance (Yes/No)	Comments / Recommendations
	<p><b>Date for Completion: 30 June 2009</b></p> <p>(b) Upgrade the acoustic performance of the CHPP external walls and roof using one of the methods outlined in Section 4.4.1 of the Report. Where practical this includes closing all openings above ground level with either doors or otherwise sealing openings.</p> <p><b>Date for Completion: 31 December 2009</b></p> <p>(c) Construct a noise bund around the CHPP as indicated in Figure 15 of the Report.</p> <p><b>Date for Completion: 30 June 2010</b></p> <p>(d) Submit a report to DECC Regional Manager Hunter detailing the feasibility, including a cost/benefit analysis, for the implementation of the following noise mitigation works:</p> <ul style="list-style-type: none"> <li>i) Installation of silencers on all roof vents of the CHPP;</li> <li>ii) Installation of shielding or other enclosures to all open conveyors and conveyor drives; or</li> <li>iii) Replacement of conveyor rollers with rollers with improved noise emissions and lower vibration generation performance.</li> </ul> <p><b>Date for Completion: 31 March 2009</b></p>		
<p><b>U1.2</b></p>	<p>The licensee must submit noise monitoring and verification reports to the EPA's Regional Manager, Hunter after the completion of each stage of noise mitigation works. The reports must include, but need not be limited to the following:</p> <ul style="list-style-type: none"> <li>(a) Results of noise monitoring conducted to verify the noise level predictions in the Report for noise emissions from the CHPP and associated activities following the completion of noise reduction works;</li> <li>(b) A comparison of measured noise levels with the Project Specific Noise Levels identified in the Report;</li> <li>(c) Identification of further noise reduction or mitigation strategies that could be implemented to address noise levels that exceed the Project Specific Noise Levels at any residential or other sensitive receiver;</li> </ul> <p><b>Due dates for submission of reports:</b> Every 6 months – with first report due 31 July 2009.</p>	<p><b>YES</b></p>	<p>In progress - See Heggies Noise Report attached as <b>Appendix 4</b>.</p>



Condition	Description	Compliance (Yes/No)	Comments / Recommendations
E1.1	<p>The licensee must maintain a system acceptable to water users on Black Creek for advising those water users registered with the company of the discharge of waters from discharge point 1.</p> <p>Where possible, water users will be advised within the 24 hour period immediately prior to the commencement of any discharge. Where prior advice is not possible, advice will be given as soon as practicable after discharge commences.</p> <p>The licensee will advise water users of the conductivity of water being discharged. The conductivity of the waters of Bellbird Creek at the intersection of Black Creek with Lomas Lane will be advised to water users on request.</p>	NATD	<p>GSSE was not able to verify during the audit whether Austar had a suitable system in place.</p> <p><i>Recommendation: Set up a system for notifying water users on Black Creek.</i></p>