



28 July 2015

Mr Chris Knight Northern Region - Mining & Industry Projects Mining Projects Department of Planning and Environment PO Box 3145 SINGLETON NSW 2330

Dear Chris,

## **INDEPENDENT ENVIRONMENTAL AUDIT 2014**

Austar Coal Mine Pty Ltd (Austar) commissioned an Independent Environmental Audit of the Austar Mine Complex prior to 31 December 2014 in accordance with Condition 6, Schedule 5 of DA 29/95 and Condition 7, Schedule 7 of Project Approval 08\_0111.

The Independent Environmental Audit for Austar was led by Trevor Brown & Associates during November 2014, with final audit report completed 16 July 2015 (the Audit Report). The Independent Environmental Audit indicates Austar Coal operations have generally demonstrated a high degree of compliance with Development Consent DA29/95, Project Approval 08\_0111, Environment Protection Licence No. 416, and mining lease conditions.

In accordance with Condition 7, Schedule 5 of DA 29/95 and Condition 8, Schedule 7 of Project Approval 08\_0111, please find **enclosed** a copy of the Audit Report and also Austar's responses to recommendations in the Audit Report (Attachment 1).

In accordance with Condition 12, Schedule 5 of DA29/95 and Condition 9, Schedule 7 of Project Approval 08\_0111, a copy of the Audit Report and the responses to recommendations in the Audit Report will also be forwarded to relevant agencies, our Community Consultative Committee, and a copy placed on the Austar Coal Mine website (www.austarcoalmine.com.au).

If you have any queries in relation to this matter, please do not hesitate to contact me on (02) 4993 7334.

Yours faithfully,

Gary Mulhearn Environment & Community Manager Austar Coal Mine

Encl: Attachment 1 - Austar Responses to 2014 Independent Environmental Audit Recommendations Independent Environmental Audit Report (Trevor Brown & Associates, 16 July 2015)

## Attachment 1

	Independent Environmental Audit	Austar Coal Mine
NO	Recommendations	Responses
1	Assessment of low frequency noise during attended monitoring should be modified and reported with reference to the noise descriptor of the relevant noise criteria.	Austar has instructed this recommendation to be undertaken from Q2 2015 onwards.
2	The Pollution Reduction Program should continue to build on the outcomes of the Premises Noise Assessment in consultation with the EPA.	Austar have progressed noise control inspection and options identification at the Austar CHPP in Q1-Q2 2015 as follow up to the Premises Noise Assessment. This has been undertaken as continuation of the Pollution Reduction Program to inform further consultation with the EPA.
3	It is recommended that the piezometers be installed at least 1 year in advance of the Stage 3 mining to allow establishment of baseline data. Austar has indicated that access to privately owned land will be available in the near future and that installation of additional monitoring wells should commence in 2015.	Austar's approved SWMP identifies proposed monitoring bores for Stage 3 (Figure 16 of the SWMP). It is noted that all bore locations are sited on private lands, to which agreement from landholders is required prior to installation. Agreement for the nearest monitoring bore to the first Stage 3 panels was finalised in November 2014, and monitoring bore installed over Longwall A9 in January 2015. This was ahead of subsidence impacts in the area of the monitoring bore, and more than 1 year ahead of longwall extraction beneath the monitoring well. An additional deeper monitoring bore was installed over LWA11 in May 2015 on an opportune basis aligned with
		our exploration program. This is significantly in advance of secondary extraction in that area. Where access to private property allows, the installation of future proposed groundwater monitoring bores will be undertaken at least one year in advance of secondary workings to allow sufficient baseline data to be recorded ahead of mining.
4	It is recommended that a revision of the Erosion and Sediment Control Plan section 6.3 occur to clearly describe the actual management of the Kitchener Basins.	An updated Site Water Management Plan (SWMP) was submitted to the Department of Planning and Environment on 30 January 2015 which includes the management of the Kitchener basins.
5	Any sediment basin is designed to the requirements of "Managing Urban Stormwater – Soils and Construction" Volume 1, Landcom, 2004 and its companion document "Managing Urban Stormwater – Soils and Construction" Volume 2e (DECC 2008).	Austar's SWMP specifies that the sediment basins in the major disturbed areas (Kitchener SIS and Aberdare emplacement area) are designed in accordance with the requirements of <i>"Managing Urban Stormwater – Soils and Construction"</i> Volume 1, Landcom, 2004 and its companion document <i>"Managing Urban Stormwater – Soils and Construction"</i> Volume 2e (DECC 2008).

## Austar Responses to 2014 Independent Environmental Audit Recommendations

No	Independent Environmental Audit	Austar Coal Mine
	Recommendations	Responses
6	Stabilise disturbed lands in the small catchments to the Aberdare Emplacement Area to ensure capture of dirty water and to reduce the potential for loss of sediment laden water to Black Creek.	The Aberdare Reject Emplacement Area is staged to ensure disturbed lands drain into the emplacement area presently, with a sediment basin to be commissioned prior to connecting capped areas of the emplacement area to the Black Creek catchment. This staging will provide erosion and sediment controls prepared in accordance with the requirements of <i>"Managing Urban Stormwater – Soils and Construction"</i> Volume 1, Landcom, 2004 and its companion document <i>"Managing Urban Stormwater – Soils and Construction"</i> Volume 2e (DECC 2008) whilst vegetation is establishing.
		Staged rehabilitation of areas of emplacement at the eastern and western ends of the emplacement area has occurred during the audit period, with these areas draining into the emplacement area during the vegetation establishment phase.
7	Attention should be focused during rehabilitation planning to achieve stable areas around the SIS site as soon as possible via shaping channels with broad flat bases and a low grade. Including rock grade stabilising structures to reduce elevation rather than having steep sections of channel would reduce water flow rates and potential erosion of the channel base/walls. Use of jute mesh in the channel invert with rock cover and revegetation of the bare surface areas of the waste emplacement and storage / handling area should also occur to control runoff.	Disturbed parts of the Kitchener SIS that are not used for operational purposes at the SIS were prepared and seeded to stabilize those areas in the period between 2014 and Q1 2015 in accordance with the Kitchener SIS Landscape Management Plan. This included the surface area of the shaft cuttings stockpile. Topsoil was spread prior to seeding, or alternatively, areas were stabilized with mulch. Significant steeper portions of concentrated drainage channels have been rock armoured to prevent scour between elevation changes (the audit report notes this). Austar is currently monitoring vegetation establishment on the seeded areas. Significant road works (including table drains) were also completed to ensure wet weather access and reduce potential scour from drainage works. Other drainage channels within the stabilized parts of the site are wide with shallow grade and have been grassed.
8	A review of the surface water management along power line easement should be undertaken as part of ongoing maintenance and management.	This was completed in May 2015. A local remediation project was undertaken in the specific power line easement observed during the audit which has successfully stabilized this area with grass and drainage works.
9	It is recommended that a separate risk based examination of the impact of doubled strains around any sensitive features (only), rather than double strain predictions throughout be included in future extraction plans.	In End of Panel reports when analyzing subsidence monitoring data, some higher level strains were identified, however were dismissed as being due to disturbed survey pegs on the subsidence lines. Although evidence suggests that survey peg disturbance is more likely to be the cause of higher strains but cannot be unequivocally proved, the audit has recommended that future Extraction Plans should undertake a risk based examination of the impact of double strains around sensitive features to allow development of suitable management strategies. Austar accepts this recommendation for future Extraction Plans in the absence of other confirmation regarding disturbed survey marks.

	Independent Environmental Audit	Austar Coal Mine
No	Recommendations	Responses
10	It is recommended that: (i) curvature values should be included in subsequent Stage 3 End of Panel Reports; and (ii) the Statement of Commitments values should be reviewed to ascertain whether the quoted values are unnecessarily / un-realistically low and should be amended to reflect measured values of strains (and curvatures) to-date.	<ul> <li>(i) Noted. Curvature reporting will be undertaken in the End of Panel report for Longwall A8 and subsequent panels.</li> <li>(ii) Austar will continue to monitor subsidence parameters in accordance with the Extraction Plan for Stage 3. Any update to subsidence predictions required will be undertaken through the Extraction Plan process, as identified in the DPE Guidelines for Extraction Plans, or through the Annual Review process identified in Project Approval PA08_0111.</li> </ul>