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13 January 2012

The Director-General  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Attention: Howard Reed,

### **S75W Modification Application to DA29/95 for Longwall A5a Varied Commencing End**

#### **INTRODUCTION**

Austar Coal Mine holds development consent DA29/95 (granted by the Minister for Urban Affairs and Planning on 14 February 1996) which authorises longwall mining of the Greta Seam by conventional retreat longwall over an area described by an Environmental Impact Statement (HLA, 1995) up to a maximum extraction height of 4.5m. The application area of the 1995 HLA EIS is shown on **Figure 1**.

Austar has the capability to utilise an enhanced form of longwall mining known as Longwall Top Coal Caving (LTCC) technology, which allows a greater extraction height (up to 6.5m in the case of the Greta Seam at Austar Coal Mine). To date, Austar has lodged modification applications to allow use of the LTCC method (and therefore increased extraction height) within part of the area approved for longwall mining by DA29/95.

Austar was granted planning approval to extract longwall A5a on 7 December 2010 by Modification 4 to DA29/95. Modification 4 approved the use of LTCC technology for longwall A5a, which increased the approved height of coal extraction from 4.5m to 6.5m.

Additional geological information has prompted Austar to propose a slight change to the commencing end of Longwall A5a. The proposed variation to the approved commencing end will involve a slight increase to length of the original A5a longwall in the order of 127m. Please refer to **Figure 2** for the extent of the lengthening of LWA5a.

In discussions with Department of Planning and Infrastructure officers it has been indicated that the preferred course is for the proposed change to be specifically authorised by a modification to DA29/95 under section 75W of the *Environmental Planning and Assessment Act 1979 (EPA Act)*. Accordingly, please accept this letter, application form, and attachments in support of our modification application.

#### **PLANNING CONTEXT**

Clause 12 of Schedule 6A of the EPA Act provides

*Section 75W of Part 3A continues to apply to modifications of the development consents referred to in clause 8J (8) of the Environmental Planning and Assessment Regulation 2000, and so applies whether an application for modification is made before or after the commencement of this clause.*

Clause 8J(8) of the Environmental Planning and Assessment Regulation NSW 2000 provides that

*For the purposes only of modification, the following development consents are taken to be approvals under Part 3A of the Act and section 75W of the Act applies to any modification of such a consent ...*

*(b) a development consent granted by the Minister under State Environmental Planning Policy No 34—Major Employment-Generating Industrial Development,*

DA 29/95 was granted by the Minister on 14 February 1996 pursuant to clause 8 of State Environmental Planning Policy No. 34 – Major Employment Generating Development.

Therefore, the modification of DA 29/95 is appropriately effected pursuant to section 75W of the EPA Act (as it was immediately prior to the repeal of Part 3A of the EPA Act).

Section 75W of the EPA Act provides as follows:

*(2) The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*

*(3) The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*

*(4) The Minister may modify the approval (with or without conditions) or disapprove of the modification.*

### **BACKGROUND TO PROPOSED CHANGE**

There is a dyke structure which limits the length of all Stage 2 longwall panels. The dyke exists as two igneous intrusions, of which the western intrusion is smaller than the eastern. LWA5a was originally proposed to be limited in length by the western dyke.

Exploratory drivage was undertaken after driving the LWA5 maingate (eastern roadway which sits between A5 and A5a) to intersect and pass through the western dyke in the vicinity of the proposed varied LWA5a install location; this exploration was favourable. Additional information on the composition of the same dyke was also gained from driving through to access the Stage 3 mining area in another location. Austar completed drivage of the LWA5a maingate in Quarter 4 2011 and found that the eastern igneous intrusion (the largest of the two) was not intersected by the maingate corner of the longwall installation road. It was critical to locating the maingate end of LWA5a that the second dyke was not intersected, as difficult mining conditions were anticipated in the area of the second dyke such that longwall installation and mining would not be possible.

In November 2011, the exploration drivage was backholed to complete the ventilation circuit for LWA5a, which also confirmed that longwall mining to the varied commencing end of LWA5a was possible.

### **IMPACT ASSESSMENT OF VARIED COMMENCING END**

Mine Subsidence Engineering Consultants (MSEC) were engaged to complete subsidence predictions and impact assessment for the proposed increased length of A5a. A copy of their assessment is **attached**.

The assessment indicates that the maximum predicted incremental and total conventional subsidence and tilt resulting from the extraction of Longwall A5a increase slightly as a result of the proposed variation to the Longwall A5a layout. The resulting increases based on the variation to the Longwall A5a layout are less than 5% greater than those based on the original layout, which is considered minimal and in the order of accuracy of the method of prediction. The maximum predicted incremental conventional curvatures (strains) do not change.

The MSEC report also focussed on assessment of natural and built features in an area they defined as the "Supplemental Study Area", which is the surface area where the predicted conventional subsidence parameters resulting from the extraction of lengthened LWA5a would vary from the original LWA5a layout.

It is noted that the only two buildings in the Supplemental Study Area are owned by Austar Coal Mine.

The MSEC report indicates that an increase in maximum conventional total subsidence at Cony and Quorrobolong Creeks as a result of the proposed variation is less than 10% of that for the Original Layout. Any potential impacts to Cony and Quorrobolong Creeks will however be predominantly caused by changes in grade, curvature and upsidence and closure rather than vertical subsidence. Changes in upsidence and valley closure are minimal and within the order of prediction. Changes in grade and hogging curvature to the creeks (Quorrobolong and Cony Creeks) are minor and, although are slightly increased for Cony Creek compared to the original layout, mean that assessed impacts are no more than previously approved for Quorrobolong Creek for the original LWA5a layout.

MSEC considered the approved existing impact and management strategies proposed to manage the original layout of longwall A5a when considering impact from the increased length of longwall A5a. The MSEC report indicates "The impact assessments and proposed management strategies for the natural features and items of surface infrastructure within the Supplemental Study Area...do not change as a result of the proposed variation."

Therefore, it is proposed that the management strategies proposed for the approved Longwall A5a layout will be appropriate to manage impacts from the varied layout.

From a coal recovery perspective, the varied commencing end would permit extraction of an additional amount of run of mine coal (approximately 175,000 tonnes) which would otherwise be sterilised by the approved layout.

#### **SUBSIDENCE MANAGEMENT PLAN APPROVAL LONGWALL A5a**

Austar was granted Subsidence Management Plan Approval No 10/22 for the original LWA5a by Department of Industry and Investment (now Trade and Investment, Regional Infrastructure and Services) (DTIRIS) on 27 April 2011 and has had discussions with DTIRIS regarding this proposed modification. DTIRIS see no major issues with the proposal and Austar will seek a variation to the SMP approval for Longwall A5a for the varied commencing end.

#### **CLOSURE**

I trust the information provided is suitable to process our modification application. If you require any further information in regard to this matter, please do not hesitate to contact me on 02 4993 7334.

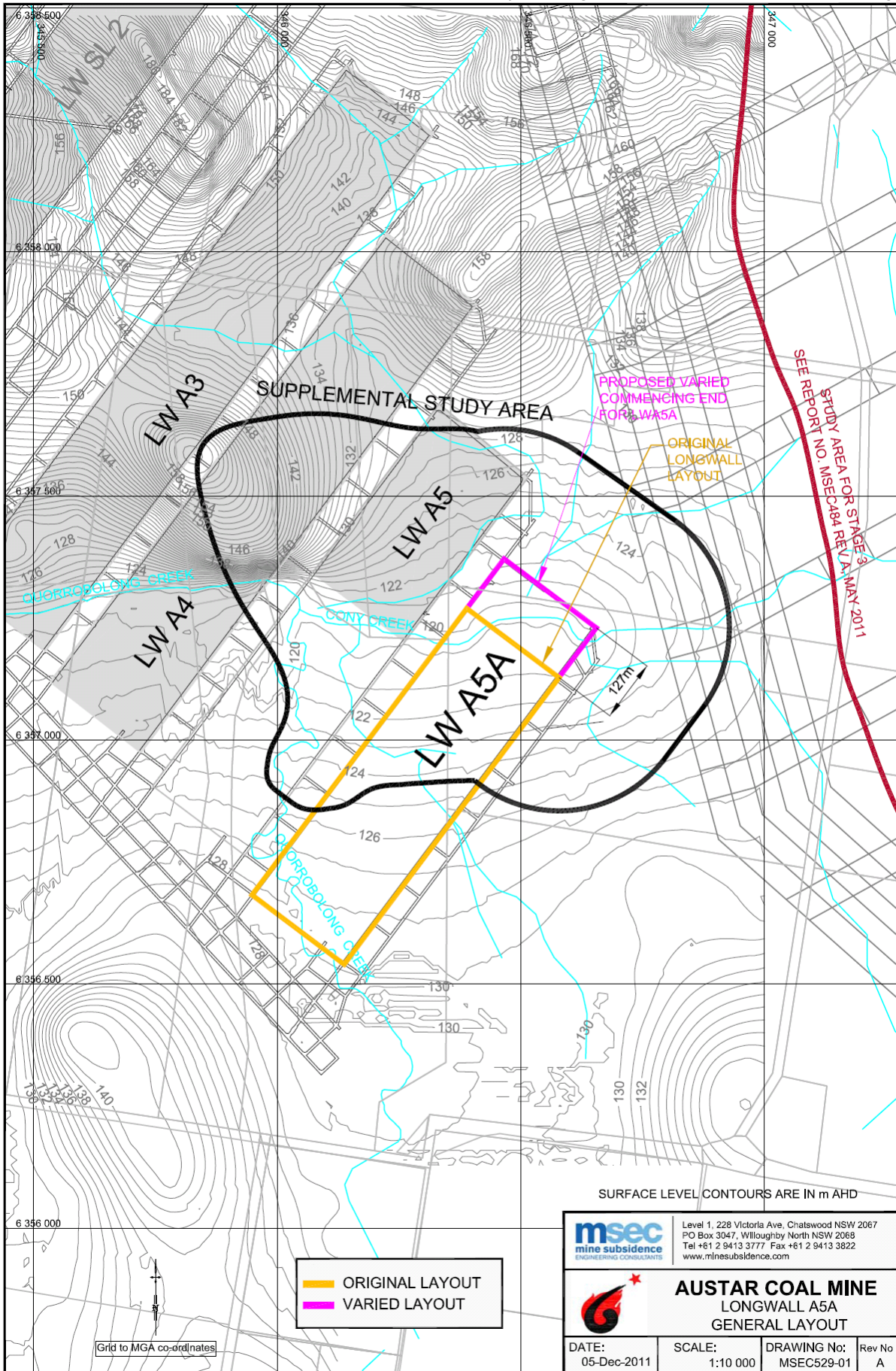
Yours faithfully,



Gary Mulhearn  
Environment & Community Manager  
**Austar Coal Mine**

Encl *Figure 1 DA29/95 1996 EIS Application Area (A5a shown in blue as "Stage 2 Extension Longwall Panel")*  
*Figure 2 Original and varied layout for Longwall A5a*  
*MSEC Subsidence Impact Assessment Report: Longwall A5a Variation to Commencing End (MSEC, December 2011)*  
*Modification Application Form*





SURFACE LEVEL CONTOURS ARE IN m AHD



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**AUSTAR COAL MINE**  
 LONGWALL A5A  
 GENERAL LAYOUT

DATE: 05-Dec-2011	SCALE: 1:10 000	DRAWING No: MSEC529-01	Rev No A
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**FIGURE 2: Original and varied layout for Longwall A5a**