

Conditional Gateway Certificate

Glendell Continued Operations Project

Part 4AA, Division 4 Of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

Pursuant to clause 17H of State Environmental Planning Policy (Mining, Petroleum

Pursuant to clause 17H of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, we determine the application made by Glendell Tenements Pty Ltd by issuing this certificate.

We certify that in the opinion of the Mining and Petroleum Gateway Panel, with regards to the relevant criteria in clause 17H(4) of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, the proposed development described in Schedule 1:

- does meet the following relevant BSAL criteria:
 - ➤ NA
- does not meet the following relevant BSAL criteria:
 - > 17H(4)(a) (i),
 - > 17H(4)(a) (ii),
 - > 17H(4)(a) (iii),
 - > 17H(4)(a) (iv),
 - > 17H(4)(a) (v).
 - > 17H(4)(a) (vi).
- does not include any CIC land in the Application area.

The reasons for forming the opinion on each of the relevant criteria, together with recommendations of the Gateway Panel, are contained in Schedule 2.

Prof. Snow Barlow

Chairperson

Mr George Gates PSM

Member of the Gateway

Panel

Dr Ian Lavering

Member of the Gateway

Panel

Date certificate issued: 24 July 2019

This certificate will remain current for 5 years from the date of issue

SCHEDULE 1

Site:

The site is located approximately 24 kilometres southeast of the township of Muswellbrook. The Project is present within the Singleton Shire Council Local Government Area, in the Hunter Valley region of New South Wales.

Development description:

The Glendell Continued Operations Project proposes to undertake further open cut mining through the extension of the Glendell Open Cut component of the Mount Owen Mining Complex, and other associated activities within CCL 708, EL 6594, EL 8184 and ML 1629. The Glendell Continued Operations Project will extract an additional 135 million tonnes (Mt) of run-of-mine (ROM) coal and extend the life of the mine from 2024 to 2044.

Applicant: Glendell Tenements Pty Ltd

SCHEDULE 2

Relevant criteria	Consideration	Recommendations
17H4(a)(i)	Relocation of the MIA and realignment of Hebden Road will significantly impact on a contiguous area of BSAL	Detailed plans for the stockpiling and reconstitution of this BSAL must be provided. Strong arguments for why the MIA and Hebden Road should be located on this area must be provided
17H4(a)(ii)	Plans to stockpile and reconstitute this area of impacted BSAL may impact on fertility, rooting depth and drainage of reconstituted soil	Detailed procedures for ensuring how the fertility, effective rooting depth and drainage will be re-established in the reconstituted BSAL must be outlined

17H4(a)(iii)

Reconstitution of BSAL may result in increases in microrelief and subsequent changes of soil drainage in 17H4(a)(iii) Detailed procedure for the reconstitution of BSAL must be described including the avoidance of any overburden contamination resulting in increased rockiness

Only a very limited discussion on local groundwater conditions was presented in the Gateway Application. The Gateway Panel agrees with the basic hydrogeological framework and aquifer characterisations that were provided.

A numerical groundwater flow model is required to be developed to estimate the magnitude of environmental impacts that the proposed mine extension will have on local water assets/environment and to predict mine water inflows.

All water losses from affected water sources, caused by mining, will require an appropriate water license.

More work is also required to establish baseline groundwater conditions. In particular the following is inadequately defined:

- The interaction between surface and groundwater between Bowmans Ck, and the proposed pit extension;
- Hydraulic parameters of model layers;
- Groundwater dependent ecosystems (GDE).

 Using a calibrated transient 3D model quantify the impacts on nearby water assets (bores/wells and GDEs).

This modelling and reporting should:

- Capture the hydrogeological complexity of the site;
- Use temporal input data;
- Have distributed input parameters;
- Quantify any uncertainties in the groundwater /surface water connection;
- Undertake both sensitivity and uncertainty analysis and have the model independently peer reviewed.
- Undertake appropriate studies to establish baseline groundwater conditions, including groundwater dependent ecosystems.
- Monitor and report actual mine water inflows and develop a strategy for complying with Water Sharing Plan rules.

17H4(a)(iv)

17H4(a)(v)	Re-alignment of Hebden Road to traverse significant areas of BSAL will significantly fragment agricultural land	Consideration should be given to re-routing the proposed realignment of Hebden Road to avoid traversing a contiguous area of BSAL on a permanent basis
17H4(a)(vi)	The Gateway Panel notes that significant verified BSAL will be covered by mine surface infrastructure for the duration of mining	The panel requires a detailed plan for the storage of BSAL topsoil removed for surface infrastructure development and its subsequent reconstitution in the mine rehabilitation process at the end of mine life

Note: Further information on the Gateway Panel's reasoning in relation to the relevant criteria is contained in the Gateway Panel report available at: www.mpgp.nsw.gov.au