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**Rix's Creek Continuation Project (SSD 6300) - Response to Applicant's response to the Independent Planning Commission Review and Draft Conditions of Approval**

Dear Megan,

I refer to the Department of Planning and Environment – Resources Assessments (DPE – Resources & Assessment) email dated 10/12/2018 inviting the Resources Regulator to provide advice on the Applicant's response to the Independent Planning Commission Review and provide Draft Conditions of Approval for the Rix's Creek Continuation Project.

**Development Details**

The Rix's Creek Coal Mine is an existing open cut operation located approximately five kilometres north of Singleton, NSW. The Rix's Creek Continuation Project proposes to:

- Continuation of open cut mining until approximately 2038 with coal extraction of up to 4.5 million tonnes of ROM coal per annum;
- Extension of open cut mining of Pit 3 (West Pit) to the northwest;
- Continued use of existing mine infrastructure;
- Out-of-pit overburden emplacement as per 'Option 2' defined by Rix's Creek Continuation of Mining Project – Response to IPC Recommendations to achieve a reduced area of disturbance required for the Western Out of Pit dump that involves:
  - Overburden emplacement of 9.01Mbcm within the northern half of the proposed Western Out of Pit dump footprint;
  - Overburden emplacement of 1.41Mbcm within the South Pit dump to increase the maximum approved dump level from 115mRL to 140mRL;
  - Overburden emplacement of 7.09Mbcm within the North Pit dump to increase the maximum approved dump level from 154mRL to 160mRL.

The Resources Regulator has previously provided the following advice:

- Review of Environmental Impact Statement (EIS) dated 7 December 2015 (BN15/8578).
- Response to Submissions report dated 16 November 2016 (BN16/9015).
- Revised Response to Submissions dated 8 December 2017 (OUT17/48483).

## **Environment and Rehabilitation Comments**

The Compliance Operations unit within the Resources Regulator has responsibility for providing strategic advice for environmental issues pertaining to the proposed project in so far as they relate to or affect rehabilitation.

The Resources Regulator advises the Department of Planning and Environment – Resource Assessments that the information provided in the Response to IPC Recommendations for the Rix’s Creek Continuation of Mining Project dated 7 December 2018 and appendices adequately addresses the issues raised in the submission from the Resources Regulator dated 7 December 2015 (BN15/8578), 16 November 2016 (BN16/9015) and 8 December 2017 (OUT17/48483).

The Resources Regulator has determined that sustainable rehabilitation outcomes can be achieved as a result of the project and that any identified risks or opportunities can be effectively regulated through the conditions of mining authorities issued under the *Mining Act 1992*.

The Resources Regulator provides following considerations for the Department of Planning and Environment – Resource Assessments:

1. Appendix E – Rix’s Creek Mine – Rehabilitation Strategy adequately describes the primary and secondary mining domains applicable to the Rix’s Creek Mine as required by Recommendation 11 of the IPC. The Resources Regulator does not endorse the rehabilitation objectives and completion criteria, as they:
  - a. Have not been provided for each primary and secondary domain (for example; water management and the final void), with various domains lacking rehabilitation objectives and completion criteria for specific phases (such as decommissioning);
  - b. Lack specific detail in relation to species diversity and density and weed presence;
  - c. Generally do not include quantifiable completion criteria and rehabilitation objectives that are Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

It is noted that further refinement and development of rehabilitation objectives and completion criteria can be effectively managed via the Mining Operations Plan / Rehabilitation Management Plan process.

2. Further information is required regarding the proposed retention of the proposed and existing cut and cover tunnels under the New England Highway to demonstrate how liability associated with these structures is to be managed following mine closure.

The Resources Regulator has determined that the current Conditions of Approval are adequate to enable sustainable rehabilitation outcomes to be achieved as a result of the project, but recommends the following revisions/updates to bring these in line with contemporary development consents:

### ***Condition 16A Rehabilitation Objectives***

*The Applicant must rehabilitate the site to the satisfaction of the Resources Regulator. This rehabilitation must be generally consistent with the proposed rehabilitation activities described in the document/s listed in Condition 1 (and conceptually shown in the figure Appendix X (insert final landform figure of ‘Option 2’)), and comply with the objectives in Table X.*

**Table X Rehabilitation Objectives**

<b>Feature</b>	<b>Objective</b>
<i>All areas of the site affected by the development</i>	<ul style="list-style-type: none"> <li>• Safe, stable and non-polluting</li> <li>• Fit for the intended post-mining land use/s</li> </ul>
<i>Final Landform</i>	<ul style="list-style-type: none"> <li>• Stable and sustainable for the intended post-mining land use/s</li> <li>• Integrated with surrounding natural landforms and rehabilitated landforms of surrounding mines, to the greatest extent practicable</li> <li>• Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable</li> <li>• Maximise surface water drainage to the natural environment (excluding final void catchment)</li> <li>• Minimise visual impacts, to the greatest extent practicable</li> </ul>
<i>Final Voids</i>	<ul style="list-style-type: none"> <li>• Designed as long-term groundwater sinks to maximise ground water flows across back filled pits to the final void</li> <li>• Minimise to the greatest extent practicable: <ul style="list-style-type: none"> <li>- the size and depth of final voids;</li> <li>- the drainage catchment of final voids;</li> <li>- any high wall instability risk; and</li> <li>- the risk of flood interaction</li> </ul> </li> <li>• Maximise potential for beneficial reuse, to the greatest extent practicable</li> </ul>
<i>Surface Infrastructure</i>	<ul style="list-style-type: none"> <li>• To be decommissioned and removed, unless authorised under the Environmental Planning &amp; Assessment Act 1979</li> </ul>
<i>Revegetation</i>	<ul style="list-style-type: none"> <li>• Establish and maintain native vegetation links to the surrounding environment using native species found in the local area</li> <li>• Re-establish land and agricultural capabilities to greater than or similar to land and agricultural classes and capabilities that existed prior to mining disturbance</li> <li>• Establish or restore 'Pasture' and 'Trees over Grass' to support sustainable agricultural activities as conceptually shown in <b>Appendix X (insert final landform figure of 'Option 2')</b></li> </ul>
<i>Rehabilitation Materials</i>	<ul style="list-style-type: none"> <li>• Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li> </ul>
<i>Community</i>	<ul style="list-style-type: none"> <li>• Ensure public safety</li> <li>• Minimise the adverse socio-economic affects associated with mine closure</li> </ul>
<i>Water Quality</i>	<ul style="list-style-type: none"> <li>• Water retained on site is fit for the intended post-mining land use/s</li> <li>• Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li> </ul>

### **Condition 16B Progressive Rehabilitation**

*The Applicant shall carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim dust control strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.*

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in the future.*

### **Condition 16C Rehabilitation Strategy**

*The Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:*

- a) Be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;*
- b) Be prepared in consultation with the Resources Regulator and Council;*
- c) Include a program to periodically review and refine the final landform and final void outcomes to meet the relevant Rehabilitation Objectives in **Table X**;*
- d) Build upon the Rehabilitation Objectives in **Table X** and the Rehabilitation Plans in **Appendix X** including identification of opportunities for increasing the areas of woodland and habitat connectivity within the rehabilitated landscape;*
- e) Include details of the canopy, sub-canopy, understorey and ground strata species to be established in the rehabilitation areas, with a particular focus on ensuring the achievement of an appropriate level of diversity and mix of functional groups within each target community;*
- f) Identify opportunities for the incorporation of preferred feed trees, foraging resources and habitat features for threatened fauna species; and*
- g) Include an indicative schedule for the staged rehabilitation of the development.*

### **Condition 16D**

*The Applicant must implement the Rehabilitation Strategy approved by the Planning Secretary.*

### **Condition 16E Rehabilitation Management Plan**

To avoid regulatory duplication the Resources Regulator requests consideration of whether the Rehabilitation Management Plan condition currently applied to mining project development consents could be omitted from DA49/94. The current Mining Operations Plan condition on the relevant mining lease(s) (soon to be a Rehabilitation Management Plan under the Regulator's reforms) already covers this requirement. It is the Resources Regulator's view that the implementation of this condition be considered as a transferrable condition given that it duplicates requirements across the development consent and mining lease.

Should this condition be included, the Resources Regulator recommends that it is reworded to consolidate the separate requirements of conditions 16A (Landscape Management Plan), 16B (Rehabilitation Management Plan), 16C (Final Void Management Plan) and 16D (Mine Closure Plan) and replace these with a contemporary condition dealing with a consolidated Rehabilitation Management Plan. The wording below duplicates the current wording used for Rehabilitation Management Plan on contemporary development consents:

*The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Resources Regulator. This plan must:*

- a) Be prepared by a suitably qualified and experienced person/s;*
- b) Be prepared in consultation with the Department, DOI Water, OEH and Council;*
- c) Be prepared in accordance with any relevant DRG guidelines;*
- d) Describe how the rehabilitation of the site would achieve the objectives identified in Table X, the outcomes described in the Rehabilitation Strategy referred to in Condition 16C and be integrated with the measures in the Biodiversity Management Plan referred to in Condition 16F;*
- e) Include detailed mine plan and final landform designs;*
- f) Include a detailed plan for the reinstatement and review of the proposed:*
  - a. Trees over Grass, including a protocol for progress reviews to demonstrate that the target vegetation species diversity is being achieved;*
  - b. Agricultural land capability for pasture areas;*
- g) Include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and for triggering remedial action;*
- h) Describe the measures to be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform (including final voids), final land use/s and water management in the final landform;*
- i) Include procedures for the use of interim stabilisation and temporary vegetation strategies, where reasonable to minimise the area exposed for dust generation*
- j) Include a program to monitor, independently audit and report on the effectiveness of the measures in paragraph h), and progress against the detailed performance and completion criteria in paragraph g);*
- k) To the greatest extent practicable build on and integrate with the other management plans required under this consent; and*
- l) Include detailed scheduling for progressive rehabilitation to be initiated, undertaken and/or completed over the next three years.*

#### **Condition 16F**

*The Applicant must implement the Rehabilitation Management Plan as approved from time to time by the Resources Regulator.*

*Notes:*

- The Rehabilitation Management Plan should address all land impacted by the development.*
- Satisfaction of the Resources Regulator is demonstrated through the approval of a Rehabilitation Management Plan / Mining Operations Plan required as a condition of a mining lease granted for the development under the Mining Act 1992.*

#### **Mine Safety Comments**

The Resource Regulator Mine Safety Operations is responsible for ensuring mine operators manage the risk to worker health and safety through compliance with the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and the subordinate mining legislation. In particular the effective management of risk associated with the principal hazards as specified in the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

The Resource Regulator Mine Safety Operations have not identified any risk that would require comment in relation to this matter.

### **Conclusion**

The Resources Regulator requests a review of the draft development consent conditions prior to finalisation and any granting of development consent.

For enquiries regarding this matter please contact me on 4063 6444 or [minres.environment@planning.nsw.gov.au](mailto:minres.environment@planning.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink, appearing to read 'D. Humphris', with a stylized, cursive script.

David Humphris  
**Principal Compliance Officer**  
**Resources Regulator**  
**NSW Department of Planning and Environment**

On behalf of  
Matthew Newton  
**Director Compliance Operations**  
**Resources Regulator**  
**NSW Department of Planning and Environment**

**19 December 2018**