

6 November 2020

**NSW Resources Regulator  
NSW Government  
Email: [rr.feedback@planning.nsw.gov.au](mailto:rr.feedback@planning.nsw.gov.au)**

Dear Sir/Madam

**Submission on Mining Amendment (Standard Conditions of Mining Leases – Rehabilitation) Regulation 2020 and Supporting Documents.**

Thank you for the opportunity to have discussions with staff from the NSW Resource Regulator on the proposed Operational Rehabilitation Reforms, and to make submissions.

Council is supportive of the introduction of a consistent approach to mine in NSW to plan for and implement rehabilitation on mine sites notwithstanding the date in which the mine approvals were given.

Coal mining commenced in the Muswellbrook Shire in the late 1800s, initially as underground mining and then, from 1944, as open cut mining. There are currently six open cut mining operations in the Shire: BHP Billiton's Mount Arthur coal mine, New Hope Mining's Bengalla, Glencore's Mangoola Coal mine, Glencore's Liddell Mine, MACH Energy's Mt Pleasant and Idemitsu's Muswellbrook Coal. An application is being considered for a new longwall underground mine (Maxwell Mine) to the south of Mt Arthur, and Dartbrook Mine, which is in care and maintenance, recently obtained approval to recommence as a board and pillar underground mine.

Muswellbrook Coal mining operations will cease in the year 2022 and future use options for the site are currently being considered. The former Drayton Mine site is currently being rehabilitated, however infrastructure on the site, and some of the land area, are proposed to be utilised by the Maxwell Mine project. The Liddell Mine will cease mining operations in 2023, and the Dartbrook Mine will cease mining operations in 2027.

1.0 General Comments

Overall the Regulation and Form and Way documents focus on the starting point and journey towards a relatively intangible destination but do not explicitly detail how the process will conclude i.e. what the relinquishment process may look like. This is important given the number of mines in the Muswellbrook Shire that are proposed for closure within the next 10 years (understanding that rehabilitation obligation continues beyond closure) or have consents that are due to expire.

Details on the relinquishment process would inform how Council, as a stakeholder, would consider the significance of proposed completion criteria, progress against those criteria,

as well as proposed modifications/amendments. An example of a process that may have an impact on Council's consideration of rehabilitation criteria etc. would be if [redacted] were to adopt a certification process like the Queensland model.

Council supports the statement in the *Operational Rehabilitation Reforms - Questions from online public consultation forums* that 'trending towards' is not an acceptable completion criterion, but this doesn't appear to be supported in the draft regulation or in any other documents.

The information that will be contained in Rehabilitation Risk Assessment, Risk Management Plan and Rehabilitation Management Plan, as prescribed in the Form and Way documents, would be useful for the EA process. Requiring draft copies of these documents as a part of the SEARs for new mines is encouraged.

## 2.0 Mining Amendment (Standard Conditions of Mining Leases - Rehabilitation) Regulation 2020

Regarding Part 3 – Conditions related to rehabilitation; we request an additional sentence that deals with situations where rehabilitation may not be able to follow closely behind site disturbance.

### **3 Lease holder to rehabilitate as soon as reasonably practicable after disturbance**

*The lease holder must rehabilitate land and water in the mining area that is disturbed by activities under the mining lease as soon as reasonably practicable after the disturbance occurs. **Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated in a reasonable time.***

***Note: Nothing in this condition prevents further disturbance at some later stage of the development of areas that have been rehabilitated.***

Regarding Part 6 - Amendment of approved rehabilitation outcomes and forward program; the approved rehabilitation objectives, the approved rehabilitation completion criteria, and final landform may require revision as the mine approaches closure and more detailed consultation occurs with Council, the community and different industry groups on potential uses of the site. There may be numerous societal, economic and technological changes between the date of the EA and closure. The zoning of the land at EA stage is not a ready guide for how the land should be used at closure either. Consultation closer to mine closure is important to avoid impoverishment of the local community's social fabric through maximising employment opportunities if practical. In the case of mine buffer land this may include enabling rural lifestyle and farm lots to exist once again.

A suggested change may be:

## **9 When lease holder may amend approved rehabilitation outcomes and submitted forward program**

- (1) *This clause applies to the following—*  
(a) *the approved rehabilitation objectives,*

- (b) the approved rehabilitation completion criteria,
- (c) for large mines—the approved final landform and rehabilitation plan,
- (d) the submitted forward program.

(2) The lease holder must not amend a document to which this clause applies unless—

- (a) the Secretary directs the lease holder in writing to do so, or
- (b) it is an outcome of investigations and consultation to determine potential community benefits on the future use of the mine site and any infrastructure, in consultation with stakeholders and the Secretary, within two years of the cessation of mining operations, or
- (c) the Secretary, on written application by the lease holder, approves of the amendment in writing.

(3) The lease holder must amend the document in accordance with the Secretary's direction or approval.

### 3.0 Form and Way: Rehabilitation Management Plan for Large Mines

#### **Part 2**

Section 2.2 Final Land Use Options Assessment & 2.3 Final Land use Statement

There may be numerous societal, economic and technological changes between the date of the EA for a mine and its closure. The zoning of the land at EA stage is not always a useful guide for how the land should be by the time mining is expected to cease. Consultation on final land use closer to mine closure is important. The Form and Way should indicate that a further Land Use options Assessment and Final Land use Statement be prepared two years prior to cessation of mining.

#### **Part 4**

Council supports the requirements that rehabilitation objectives and completion criteria for final land use domains must be based on the defining characteristics of appropriate analogue sites.

#### **Part 6**

Section 6.2.1. *Active mining phase point L* & section 6.3. *Rehabilitation of areas affected by subsidence*. These sections need to be consistent with the *Biodiversity Assessment Methodology 2020 Section 8.5 Adaptive management for uncertain biodiversity impacts*, in particular *Addendum to NSW Biodiversity Offsets Policy for Major Projects: upland swamps impacted by longwall mining subsidence*.

Section 6.2.2 Decommissioning. This section of the Rehabilitation Management Plan should also be revisited as a result of consultation on final land use closer to mine closure.

6.2.6. *Ecosystem and land use development* needs to require more detail on soil profile development potential, the risk that this profile won't develop, and whether nutrients required for plant growth and development will be depleted not just in the short term but in perpetuity. This is a real concern as there is often minimal topsoil for rehabilitation available and it is a homogenous mix once stripped, stockpiled and respread. Underlying mine spoil may not be a sufficient source of the macro and micronutrients required for adequate plant growth. This is important as the composition and structure of many vegetation communities are determined by soil and geological characteristics and rehabilitation targets and conditions of consent often prescribe very specific vegetation

types for mine rehabilitation. This also needs to be a required consideration for rehabilitation risk assessments.

## Part 8

Rehabilitation monitoring programs needs to be supported by a standard monitoring method or at least a selection of methods to choose from. It has been Council's experience that some metrics chosen by mines are inadequate measures for a particular potential impact. For example, we have had a mine propose a criteria/trigger for erosion that stated where *'vegetation is established above 50% cover erosion is considered controlled'* with no consideration of whether erosion was actually occurring. A large area of rehabilitation within this site displayed noticeable riling and sheet erosion but has an established groundcover of weeds that would have satisfied and likely exceeded the proposed criteria/trigger. Vegetation cover assessments was the method proposed to monitor this criteria/trigger and clearly is not appropriate.

The importance of standardised monitoring methods is considerable. Standardised monitoring methods (e.g. for vegetation) allow for comparison between sites (transparency), cost effective delivery of monitoring programs that minimise confusion to both applicants, contractors, and reviewers, and they minimise the complexity and therefore the time to review plans for both the regulator and stakeholders. Many mines are currently using the Biodiversity Assessment Methodology vegetation plots as a method for monitoring progress/condition of rehabilitation and conservation sites. This is not appropriate as BAM plots are designed for a very specific purpose; the collection of specific data for input into the Biodiversity Assessment Method Calculator (BAMC) which is used to calculate credits. Council understands that DPIE is working on a more appropriate vegetation monitoring method. This should be released before the proposed rehabilitation reforms are made as the monitoring method will have a considerable influence on completion criteria, for biodiversity in particular.

### 4.0 Annual Rehabilitation Report and Forward Program for Large Mines

It is not clear if the data in Section 1.7.2 Rehabilitation key performance indicators (KPIs) is proposed to be graphically displayed in the Mine Rehabilitation Portal. Would a user be able to graphically compare how rehabilitation and disturbance is progressing cumulatively not just by switching between layers? This could be achieved through a timeline view or animation; this is important as context and cumulative outcomes/progress are very important parts of determining progress and would enable the community to better understand the outcomes of a complex process. A link should be made from the Mine Rehabilitation Portal to the relevant document (the source of the information) by simply clicking on a layer in the portal.

In regards to table 14, details on what percentage of the previous reporting periods targets etc. were met need to be detailed. It is possible for a mine to make an ambitious commitment to achieve a particular rehabilitation outcome, but may fail to achieve this outcome, and potentially on a regular basis. Details need to be provided on how a mine is delivering on those goals, and not just against a previous period, but for each period.

Regarding *Appendix 1 – Symbology Guidance* the proposed Mine Rehabilitation Portal colour pallet chosen does not achieve enough contrast between fields and needs to consider colour-blind users. For example, red-green colour blindness affects approximately 8% of males, and around 0.4% of females. Proposed Rehabilitation Phase and Forecast Year colour pallets are problematic.

5.0 Form and Way: Rehabilitation Objectives, Rehabilitation Completion Criteria and Final Landform and Rehabilitation Plan for Large Mines

This document lacks meaningful detail. Deferring to a subordinate guideline for the detail would diminish the requirement to consider one of the more important aspects of mine rehabilitation.

6.0 Muswellbrook Coal Mine

Muswellbrook Shire Council is the Consent Authority for the existing Muswellbrook Coal Mine. As part of the reforms, the Resources Regulator will no longer be approving Rehabilitation Management Plans. Muswellbrook Coal's consent requires them to gain approval from Resources Regulator for the Rehabilitation Management Plan. We understand that the Resources Regulator has discussed this issue with DPIE in relation to mines where DPIE are the consent authority. The outcome of those discussions should be made available to the other mine consent authorities to allow a consistent approach.

Yours faithfully



Fiona Plesman  
**GENERAL MANAGER**