

# Upper Hunter Mining Dialogue

Final and Temporary Rehabilitation Principles and Commitments

REPORT BY BENGALLA MINING COMPANY  
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## Final and Temporary Rehabilitation Principles and Commitments

### Introduction

The nine coal producers of the Upper Hunter, through the Upper Hunter Mining Dialogue have agreed to this set of principles and commitments with regard to final and temporary rehabilitation. The Principles and Commitments have been developed with advice and guidance from the UHMD Joint Working Group – Land Management which is a stakeholder and industry group.

The Upper Hunter Mining Dialogue has two five-year goals with regard to land management:

- *Goal 1 To decrease the time that disturbed areas are left without final or temporary cover, recognising that different mining operations are at different points in rehabilitation.*
- *Goal 2 To achieve a consistent level of best practice, quality, integrated rehabilitation – both within the industry and with future land uses - across the Upper Hunter and to be a responsible steward of the land.*

The primary focus of the Rehabilitation Principles and Commitments is to contribute to Goal 1. A number of other projects are underway to progress Goal 1. The industry participants in the UHMD acknowledge the importance of clear goals for rehabilitation developed through consultation with community and regulators, continuing to improve rehabilitation techniques and sharing innovative and successful rehabilitation techniques within the industry. Projects under Goal 2 focus on continuous improvement of rehabilitation practices.

### Principles and Commitments

The Upper Hunter coal producers will publicly report against the Principles and Commitments on an annual basis. The reporting will be aggregated by the NSW Minerals Council and shared with the community. Table 1 sets out the six principles and provides a description of how each will be reported against.

**Table 1 – Principles and Commitments**

Principle	Reporting
<p><b>Principle 1 – Include rehabilitation planning in mine planning</b></p> <p><i>Planning for rehabilitation should be integrated into the mine planning process and should include allocating adequate and dedicated resources to achieve the planned rehabilitation outcomes.</i></p>	<p>The Bengalla Mining Company Pty Ltd (BMC) Technical Services Department develop an annual Rehabilitation Project Execution Plan (Plan). The Plan included details such as: scope of the work and services, considerations for project execution, the approach, roles and responsibilities, schedules, equipment, and safety and environment risk.</p>
<p><b>Principle 2 – Undertake progressive rehabilitation</b></p> <p><i>Companies should undertake rehabilitation progressively, with the objective of ensuring that rehabilitation is as close as possible to active mining.</i></p>	<p>The 2017 Plan identified that the 2017 rehabilitation area would comprise Strips 24 and 25, adjacent to the open cut pit.</p>
<p><b>Principle 3 – Minimise time that disturbed areas are left without vegetation</b></p> <p><i>Companies should actively seek to minimise the time that land is left without cover during mining. This should include:</i></p> <ul style="list-style-type: none"> <li>▪ <i>Taking steps to ensure that rehabilitation is commenced within 12 months of land becoming available for rehabilitation</i></li> <li>▪ <i>Utilising methods of temporary rehabilitation<sup>1</sup>, such as aerial seeding of over burden and other disturbed areas where permanent rehabilitation has not commenced.</i></li> </ul>	<p>At the commencement of 2017, approximately 14 ha of final landform was available for rehabilitation. In February 2017 the 14 ha was sown with a woody species mix.</p> <p>Dumping and shaping of a further 8 ha was completed throughout 2017. In December 2017, an interim cover crop of Millet was spread to stabilise the landform and minimise the potential dust emissions. When the conditions are suitable for the woody species, the cover crops will be cultivated into growth media and the woody species mix will be sown.</p>
<p><b>Principle 4 – Prioritise areas of rehabilitation and temporary cover to reduce impacts</b></p> <p><i>Companies should prioritise rehabilitation and temporary cover in those areas where leaving land exposed will have the most impact. The following areas should be considered to have priority:</i></p> <ul style="list-style-type: none"> <li>▪ <i>Areas that have the greatest impact</i></li> </ul>	<p>Over the 2017 – 2021 Mining Operations Plan (MOP) term the main Overburden Emplacement Area (OEA) will continue to be rehabilitated, with focus on the southern faces and implementing the visual relief areas. This will assist in improving noise, air quality and visual impacts on the township of Muswellbrook and the Muswellbrook Racecourse.</p>

<sup>1</sup> Temporary rehabilitation describes reshaping, revegetation and other rehabilitation techniques that are used for purposes other than final rehabilitation. This includes such initiatives as seeding overburden emplacement areas to reduce erosion, which are only temporary.

Principle	Reporting
<p><i>on visual amenity, such as areas that face townships, residences, or the highway</i></p> <ul style="list-style-type: none"> <li>▪ <i>Areas that have the potential to generate dust leaving the site</i></li> <li>▪ <i>Areas that are important for biodiversity, such as rehabilitation adjoining or providing connectivity to remnant vegetation.</i></li> </ul>	
<p><b>Principle 5 – Meet target for rehabilitation progress identified in the Mining Operations Plan</b></p>	<p>MOP target – 24ha Actual rehab – 22ha</p>
<p><i>Each company should meet the annual target for rehabilitation quantity (area) set in the Mining Operations Plans for each of its mines.</i></p>	<p>The remaining 2 ha of rehabilitation planned to be completed on the RL 240 in 2017 was not rehabilitated as access through this area was required for the relocation of the topsoil stockpile on the RL 270. The 2 ha area will be rehabilitated in 2018.</p>
<p><b>Principle 6 – Set quality targets for rehabilitation in the Mining Operations Plan and implement a monitoring program to measure performance</b></p>	<p>The Bengalla Mine (Bengalla) MOP outlines performance indicators and completion criteria for the various rehabilitation phases. BMC implements an annual monitoring program to address the performance indicators and completion criteria. The annual rehabilitation monitoring program is undertaken through the implementation of both transect-based monitoring and a rehabilitation audit. Eight rehabilitation sites were assessed in the 2017 monitoring program. The 2017 monitoring program found that the eight monitored rehabilitation sites are generally developing in accordance with the relevant MOP criteria for pasture or high density woody vegetation.</p>
<p><i>Each company should include quality targets for the various types of rehabilitation in the Mining Operations Plan for each of its mines. A monitoring program to measure the performance of rehabilitation areas against the quality targets should be implemented at each of its mines.</i></p>	

### Contextual information

<p><i>This section provides an opportunity for each company to provide some commentary or contextual information regarding their reported results. Such information could include advice on:</i></p> <ul style="list-style-type: none"> <li>- <i>Any material changes to the site (i.e. expansions, acquisitions or divested assets);</i></li> <li>- <i>Why any figures may have changed since the last reporting period</i></li> </ul>	<p>Not applicable</p>
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### Future rehabilitation priorities

<p><i>This section provides an opportunity for each company to provide details on rehabilitation activities at their site/s for the upcoming year.</i></p>	<p>BMC rehabilitation target for 2018 is 16ha.</p>
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