

Upper Hunter Mining Dialogue

Final and Temporary Rehabilitation Principles and Commitments

2018 Results and Commentary

REPORT BY MUSWELLBROOK COAL 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 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 - Provide transparent and reliable information through the Rehabilitation Reporting Principles, and*
- *Goal 3 - 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. Several 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 3 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. Contextual information is also sought from industry regarding variations in their annual reporting, as well as an opportunity to provide commentary on their future rehabilitation targets for the years ahead.

Table 1 – Principles and Commitments

Principle	Reporting
Principle 1 – Include rehabilitation planning in mine planning	<i>Narrative</i> – how has this been done in the last period
<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>	Mine planning incorporates the rehabilitation goals set in the MOP commitment. As dumps receive final shaping, rehabilitation activities commence, and planting operations are optimally timed for maximum seedling development and growth (spring or autumn).
Principle 2 – Undertake progressive rehabilitation	<i>Narrative</i> – how has this been implemented in the last twelve months
<i>Companies should undertake rehabilitation progressively, with the objective of ensuring that rehabilitation is as close as possible to active mining.</i>	Rehabilitation activities follow closely behind final shaping of waste emplacements and are undertaken in accordance with the requirements of the Mining Operations Plan.
Principle 3 – Minimise time that disturbed areas are left without vegetation	<i>Narrative</i> – how has this been implemented in the last twelve months
<i>Companies should actively seek to minimise the time that land is left without cover during mining. This should include:</i> <ul style="list-style-type: none"> ▪ <i>Taking steps to ensure that rehabilitation is commenced within 12 months of land becoming available for rehabilitation</i> ▪ <i>Utilising methods of temporary rehabilitation¹, such as aerial seeding of over burden and other disturbed areas where permanent rehabilitation has not commenced.</i> 	Rehabilitation activities follow closely behind final shaping of waste emplacements and are undertaken in accordance with the requirements of the Mining Operations Plan. Inactive mining areas may be temporarily stabilised to reduce dust emission from these areas. This temporary stabilisation can be achieved through crusting of the surface material or seeding with grass. The requirement for additional temporary stabilisation works will be based on dust monitoring results and visual observations of wind-blown dust being generated from these areas.
Principle 4 – Prioritise areas of rehabilitation and temporary cover to reduce impacts	<i>Narrative</i> – how has this been implemented in the last twelve months
<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> <ul style="list-style-type: none"> ▪ <i>Areas that have the greatest impact on visual amenity, such as areas that face townships, residences, or the highway</i> ▪ <i>Areas that have the potential to generate dust leaving the site</i> ▪ <i>Areas that are important for biodiversity, such as rehabilitation adjoining or providing</i> 	Rehabilitation activities follow closely behind final shaping of waste emplacements and are undertaken in accordance with the requirements of the Mining Operations Plan. Inactive mining areas may be temporarily stabilised to reduce dust emission from these areas. This temporary stabilisation can be achieved through crusting of the surface material or seeding with grass. The requirement for additional temporary stabilisation works will be based on dust monitoring results and visual observations of wind-blown dust being generated from these areas.

¹ 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
<i>connectivity to remnant vegetation.</i>	
Principle 5 – Meet target for rehabilitation progress identified in the Mining Operations Plan	<i>Quantitative</i> – report MOP target and actual rehabilitation <i>Narrative</i> – explanation of performance
<i>Each company should meet the annual target for rehabilitation quantity (area) set in the Mining Operations Plans for each of its mines.</i>	The yearly rehabilitation commitments are included in the Mining Operations Plan. Rehabilitation activities are reported annually in the Annual Environmental Management Report.
Principle 6 – Set quality targets for rehabilitation in the Mining Operations Plan and implement a monitoring program to measure performance	<i>Narrative</i> – summary of quality targets for the various rehabilitation types; and summary of monitoring program scope and status.
<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>	Closure objectives and criteria are included in the Mining Operations Plan. The monitoring program is also included in the Mining Operations Plan and is undertaken annually in Spring.

Contextual information

<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> <ul style="list-style-type: none"> - Any material changes to the site (i.e. expansions, acquisitions, or divested assets); or - Why any figures may have changed since the last reporting period? 	There were no areas available for rehabilitation in 2018. The focus in 2018 was on rehabilitation maintenance and planning for mine closure. MCC took advantage of the dry conditions in 2018 to remove sediment from dams in areas that have been rehabilitated.
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Future rehabilitation priorities

<i>This section provides an opportunity for each company to provide details on rehabilitation activities at their site/s for the upcoming year.</i>	Rehabilitation will continue to be undertaken in accordance with the Mining Operations Plan and will be focusing on mine closure activities.
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