#### **VALE INTEGRA COAL OPERATIONS**

#### TEMPORARY AND FINAL REHABILITATION PRINCIPLES AND COMMITMENTS

Principle	Reporting
Principle 1 - Include rehabilitation planning in mine planning	The Rehabilitation Management Plan and Mining Operations Plans (MOPs) address proposed rehabilitation objectives at the Integra Coal Operations (ICO).
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.	Rehabilitation at Integra Coal Operations is undertaken progressively as outlined in the EA, Project Approval and Mine Operations Plan (MOP) commitments. The rehabilitation of the final landform features are integrated across the underground, open cut and surrounding natural landforms. Planning for rehabilitation on site is collaboratively planned between Technical Services, Operations and Environment departments. In the previous year a schedule is developed and tracked by weekly and monthly planning meetings to discuss the appropriate allocation of resources throughout the year to uphold rehabilitation outcomes.
Principle 2 – Undertake progressive rehabilitation	Long term mine planning of available dumps are decommissioned which allow rehabilitation to progress in close proximity to active mining.
Companies should undertake rehabilitation progressively, with the objective of ensuring that rehabilitation is as close as possible to active mining.	During 2013, the combined amount of rehabilitation undertaken across the ICO exceeded the amount of disturbance by 16.5 hectares. This measure is a good indicator that progressive rehabilitation is being achieved.

## Principle 3 – Minimise time that disturbed areas are left without vegetation

Companies should actively seek to minimise the time that land is left without cover during mining.
This should include:

- Taking steps to ensure that rehabilitation is commenced within 12 months of land becoming available for rehabilitation
- Utilising methods of temporary rehabilitation (refer to note1), such as aerial seeding of over burden and other disturbed areas where permanent rehabilitation has not commenced.

Integra Coal Operations aims to commence rehabilitation on decommissioned dumps and disturbed areas as soon as practically possible with the goal to mitigate dust impacts and improve visual amenity. Aerial seeding is undertaken where suitable landforms become available and cover crops are established to reduce erosion, dust and visual amenity impacts.

## Principle 4 – Prioritise areas of rehabilitation and temporary cover to reduce impacts

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:

- Areas that have the greatest impact on visual amenity, such as areas that face townships, residences, or the highway
- Areas that have the potential to generate dust leaving the site
- Areas that are important for biodiversity, such as rehabilitation adjoining or providing connectivity to remnant vegetation.

Progressive rehabilitation is managed in accordance to the final landform design plan with the main goal to link undisturbed land and rehabilitated sites and return the site to a suitable land capability class. The final land form design plan incorporates sites where rehabilitated pasture, grass and woodland areas are to be established.

When the Operations department release areas such as inactive dumps, cover crops are established to reduce erosion and aid in dust mitigation.

## Principle 5 – Meet target for rehabilitation progress identified in the Mining Operations Plan

Integra Coal Complex achieved its MOP target of 16.5 ha for the 2013 reporting period.

Each company should meet the annual target for rehabilitation quantity (area) set in the Mining Operations Plans for each of its mines.

# Principle 6 – Set quality targets for rehabilitation in the Mining Operations Plan and implement a monitoring program to measure performance

During the reporting period, rehabilitation monitoring of landforms and associated water management structures, plus plant vigour and cover, were monitored by way of inspections to assist in the management of instability, erosion and/or failure. This process will continue over the life of the mine, with the extent and nature of activities undertaken being consistent with the MOP.

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.

In 2013, a detailed assessment of rehabilitation establishment was undertaken by independent consultants. The report compared six pasture rehabilitation sites to three representative reference sites to allow a comparison of the development and success of the rehabilitation against remnant vegetation. Reference sites indicate the condition of surrounding undisturbed areas and allow comparisons to be made between the rehabilitated sites and the undisturbed areas.