

# 25 | Decommissioning and Rehabilitation



## Section 25 Decommissioning and Rehabilitation

### 25.1 Introduction

The Alpha Rail Project (herein referred to as the Project) has a design life of at least 30 years. However, third party usage of the Project infrastructure is expected and this will result in the effective life of the Project corridor being extended beyond the expected life of the Alpha Coal Project (Mine). Effectively the Project infrastructure is expected to be utilised for an indeterminate period and it is not envisaged that the rail infrastructure would be decommissioned.

As such this section describes the options, strategies and methods for rehabilitation of the environment disturbed during the construction of the Project, being the construction workers' camps, and construction access roads.

### 25.2 Rehabilitation of Construction Areas

#### 25.2.1 Overview

Construction and operation of the Project includes both temporary and permanent changes to the land. Information regarding the final topography of the area post construction is detailed further in Volume 3, Section 5 of this EIS.

There are some opportunities for returning disturbed land such as the access tracks, storage areas and construction camps to a condition that poses no liabilities to future land uses and to the surrounding environment. The rehabilitation goals aim to create a site that is safe to humans and wildlife; non-polluting; stable; and able to sustain an agreed land use after the disturbance and rehabilitation works are undertaken (Qld EPA, 2007).

Rehabilitation is intended to progressively occur following installation of the Project corridor. Areas at high risk of erosion such as the banks of drainage lines/creeks/streams and rivers, areas of steep and/or sustained slopes and areas of high erosive soils are required to be stabilised and rehabilitated as soon as practical following construction in those areas. Information regarding reinstatement of waterways post construction and after operations have ceased is detailed further in Volume 3, Section 11 of this EIS.

The final landform of the Project corridor will be designed to ensure the surface water runoff is managed and that the areas other than the rail line itself are restored to a condition that resembles the pre-disturbed landscape as close as possible. Information regarding the final drainage and seepage control systems and long term management plans are provided in Volume 3, Section 12 of this EIS.

Information regarding the management of waste generated from the decommissioning of the Project is detailed further in Volume 3, Section 16.

#### 25.2.2 Revegetation

Revegetation will be undertaken during construction and operation of the Project in areas of cleared vegetation along the river/creek banks, temporary access routes, and construction camps.

Revegetation is to commence in a progressive manner as soon as practical following the construction of the Project corridor in any given area. Where topsoil has been stripped, it is to be placed back over the disturbed area and ameliorated to a standard that will allow for successful revegetation. The

potential for erosion will be minimised. Information regarding amelioration and testing of soils is detailed further in Volume 3, Section 5 of this EIS.

### 25.2.3 Decommissioning

As the Project construction phase approaches completion, temporary storage construction camps will be decommissioned and rehabilitated. All buildings and workshops not required for operation of the Project will be removed. Haul roads and unnecessary access tracks will be rehabilitated. Sediment basins constructed along the Project corridor for sediment treatment may be given permanent status if landowners request they stay as small water reservoirs. If this is requested and agreed by the relevant stakeholders, additional stabilisation works may be required to ensure the sediment basins remain structurally sound. If the sedimentation basins are no longer required they will be decommissioned and rehabilitated along with other aspects of the construction phase.

### 25.2.4 Rehabilitation Criteria

The following rehabilitation criteria are prescribed for the revegetation of disturbed areas:

- flora and fauna will be surveyed prior to disturbance, to establish the presence of any species of concern (weeds, threatened, rare etc.) and to provide a species list for rehabilitation purposes;
- rare and threatened species, and articles and places of cultural significance shall be conserved and protected, and will be identified prior to construction;
- rehabilitation of disturbed areas will be done progressively during construction;
- rehabilitation of disturbed areas will be done with consideration of climatic conditions, particularly erosive rainfall and high erosion potential periods. Where possible, rehabilitation will occur prior to the wet season periods along the Project corridor;
- clearing, like rehabilitation, will be done progressively, in order to retain as much stabilising vegetation at any given time along the Project corridor. High risk areas (erodible soils, steep/sustained slopes, streams and creeks) will not be cleared until such time that the construction is scheduled to start for those given areas;
- preference shall be given to placing topsoil on land to be rehabilitated immediately after it is removed/stripped from areas due to be constructed within. The topsoil however must be made suitable for plant growth and land use for the disturbed area;
- all stockpiled topsoil shall be placed in uncompacted windrows not more than two metres high with a base width not exceeding three metres;
- all surfaces will be prepared to ensure successful rehabilitation; this may include ripping to reverse compaction and addition of ameliorants if required;
- topsoil replacement will involve placing it in layers consistent with its natural profile;
- all areas which are rehabilitated shall be monitored using Ecosystem Function Analysis as the primary broadscale;
- monitoring shall include flora, fauna, surface conditions, soil condition and surface runoff;
- rehabilitation techniques shall be improved through the findings of monitoring and research; and

- site monitoring shall continue until such time that government agencies and traditional owners are confident that the disturbed areas have returned to an approved natural state.

Details on species selection and maintenance requirements are detailed in Volume 3, Section 9 of this EIS.

### **25.3 Conclusions**

The proposed rail corridor is unlikely to be decommissioned due to the large demand for coal export from the Galilee Basin.

Decommissioning and rehabilitation of construction areas will be undertaken progressively. Should decommissioning of the rail corridor be undertaken, detailed rehabilitation plans will be developed prior to works.