

## 12 TRANSPORTATION

### 12.1 INTRODUCTION

This chapter provides transport-related information in response to various submissions on the Environmental Impact Statement (EIS). The information presented builds on the EIS Volume 1, Chapter 12 Transportation and should be read in conjunction with the EIS chapter.

No additional studies or assessment regarding transportation were conducted for the Supplementary EIS. Information regarding road relocations has been provided in Chapter 6, section 6.6.2 of this Supplementary EIS.

### 12.3 EXISTING ENVIRONMENT

#### 12.3.1 EXISTING ROAD NETWORK

The majority of construction materials and plant are expected to come from Brisbane or the Port of Gladstone, as stated in Volume 1, Chapter 12 Transportation, section 12.4.1. Minimal materials or plant are expected to be transported from the section of the Leichhardt Highway south of Miles, including NSW. The existing road network described in Chapter 12 of the EIS, therefore, did not discuss this section of the Leichhardt Highway.

#### Public transport

The EIS Volume 1, technical report TR 12-1-V1.5, section 2.2.3 stated that no public transport services exist in the area surrounding the Project.

However, Kynoch Coaches operate a service three times a week between Toowoomba and Rockhampton via Miles, Wandoan and Taroom. The service stops at the Wandoan BP Service Station. The Project does not propose to utilise public transport, and therefore the existence of this bus service does not alter the outcome of the transport assessment undertaken for the EIS.

School bus services also exist in the Wandoan district, and are discussed further in section 12.5.3 below.

### 12.4 DESCRIPTION OF PROPOSED DEVELOPMENT

#### 12.4.1 CONSTRUCTION

##### Workforce

Transport movements of the construction phase workforce were discussed in Volume 1, Chapter 12 Transportation, section 12.4.1, which stated that during construction, the workforce is expected to organise its own transport between the accommodation facilities and employees' home bases. This situation has not changed from what was provided in the EIS, and is common for remote construction projects.

As discussed in the EIS, Chapter 24 Health and Safety, section 24.6.4, a Fatigue Management Policy will be developed and implemented by the WJV. This policy may include measures such as requiring workers to stay for a set period following the end of their shift, as well as traffic and journey awareness training and monitoring.

##### Construction traffic

Initial mining, that is the 500,000 tonne initial mining during Year -2 and Year -1, was assessed as part of the Wandoan Coal Project EIS under the *State Development and Public Works Organisation Act 1971*, and was assessed under construction phase activities as described in Volume 1, Chapter 12 Transportation, section 12.4.1. The impacts arising from initial mining have been considered in the impact assessment presented in section 12.5 of the EIS and the EIS technical report, TR 12-1-V1.5 Transport Impact Study.

Over-mass over-dimension loads, or oversize loads, resulting from the Project were discussed in the EIS, technical report 12-1-V1.5, sections 4.1.4 and 4.3. The number of likely oversize loads was included in Chapter 12 Transport, Table 12-6, and section 4.3 of the technical report TR 12-1-V1.5. Oversize loads are expected to be mostly associated with construction phases of the Project, being Year -2 to Year 4, and during construction of additional draglines in Years 15 and 17. Some oversized loads are expected to be generated

during the operational phase of the Project, with use of oversized loads depending on the equipment requirements of the mine for each operational year.

Oversize loads are anticipated to come from either Brisbane or the Port of Gladstone with material from Brisbane delivered to site via the Warrego and Leichhardt Highways, and materials through the Port of Gladstone delivered to site via the Dawson Highway and Leichhardt Highway to the north of the MLA areas. The proposed haulage routes from Gladstone and Brisbane were shown in Figure 12-2-V1.3 of the EIS, and these routes are approved routes for Type 1 road trains, as well as 23 m and 25 m B-doubles, according to the Guideline for Multi Combination Vehicles (Queensland Transport 2008).

All oversize loads will conform to Department of Transport and Main Roads standards and may require special permits for travelling on state controlled roads. Compliance assessment will be the responsibility of the relevant haulage contractor/s to ensure suitable arrangements are in place. The WJV will require the relevant contractors to discuss oversize loads with the Department of Transport and Main Roads during the planning of these movements.

## 12.4.2 OPERATION

As discussed in Volume 1, Chapter 6 Project Operations, section 6.5.2 and Chapter 12, section 12.4.2, during operations the transport of export coal from the site will be by rail from the mine to the port, and will not involve use of the road network. This will minimise the impact of the Project on the road network.

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## 12.5 POTENTIAL IMPACTS

### 12.5.2 PAVEMENT IMPACT ASSESSMENT

A pavement impact assessment examined the potential degradation of road pavements caused by traffic related to the Project, as discussed in the EIS, Chapter 12 Transportation, section 12.5.2 and technical report TR 12-1-V1.5. The Department of Main Road's *Guidelines for Assessment of Road Impacts of Development* (2006), defines significant pavement impacts as an increase in equivalent standard axles (ESA) in excess of 5%.

An equivalent standard axle (ESA) is a unit of measurement which converts wheel loads of traffic to an equivalent number of 'standard' or 'equivalent' loads, and it therefore an effective measuring tool in determining pavements impacts caused by a mix of vehicles. Volume 1, technical report TR 12-1-V1.5, section 4.1.4 and Table 4-5 outlines the typical ESA values used in the transport assessment. For example, a B-double truck has an ESA standard loading of 7.2, while a low loader has a standard loading of 17.2 ESAs.

As discussed in Volume 1, Chapter 12 Transportation, section 12.5.2, the pavement impact assessment for the Project found that significant pavement impacts occur along the Leichhardt Highway between the intersection with the Warrego Highway and the mine access road for each scenario year from Year -2 through to Year 4 due to the construction of the Project, as well as roads utilised during the initial mining transportation.

The other roads investigated experience load increases below 5% over existing levels for each of the years investigated, being Years -2, 4, 14, 15 and 17.

### 12.5.3 ROAD SAFETY

The routes taken by school bus services in the Wandoan region, including the bus service from Wandoan to the Miles High School, were discussed in the EIS, Chapter 12 Transportation, section 12.5.3, and the associated technical report TR 12-1-V1.5, section 2.2.3 and Figure 2-1, and will be managed through the Traffic Management Plan as discussed in section 12.7.1 below.

A school bus stop is currently located at the junction of Booral Road and Grosmont Road. As part of the modifications to the Project since release of the EIS, the Booral and Grosmont Road intersection has been moved further away from the ROM coal dump station near Mud Creek Pit as part of the road realignments, as discussed in Chapter 6, section 6.6.2. Relocation of the school bus stop as part of the road relocation will ensure children are a safe distance from mine activities, and will occur in consultation and conjunction with the school bus operator.

## 12.6 MITIGATION MEASURES

### 12.6.1 CONSTRUCTION PHASE

#### Pavement impact assessment

Regarding consultation and negotiations on the contributions that the WJV will make to the Department of Transport and Main Roads for state controlled roads, and Western Downs Regional Council for local roads, the WJV has commenced these activities, as described in the EIS Volume 1, Chapter 12 Transportation, section 12.6.1. Resolution of the value of contributions and the associated requirements and terms between the WJV will be an ongoing process with both government agencies, considering existing and proposed Roads Implementation Program and infrastructure maintenance programs of the Department of Transport and Main Roads.

### 12.6.2 OPERATIONAL PHASE

#### Pavement impact assessment

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## 12.7 RESIDUAL IMPACTS

### 12.7.1 SAFETY IMPACTS

As stated in Volume 1, Chapter 12 Transportation, section 12.7.1, a Traffic Management Plan will be developed for the road network adjacent to the mine site addressing state controlled roads and local roads, to ensure the safety of the public (including school buses), construction workers and operations workers, and to minimise as far as practicable disruptions to traffic. The Traffic Management Plan will be developed in consultation with Department of Transport and Main Roads, and Western Downs Regional Council.

The scope of the Traffic Management Plan shall include traffic control measures for potential hazards associated with workforce shift changes and school bus routes, as described in Volume 1, Chapter 12 Transportation, section 12.5.3.

### 12.7.2 ENVIRONMENTAL AND OTHER IMPACTS

## 12.8 REFERENCES