



Taroborah Coal Project

Environmental Impact Statement

Section 1 - Introduction

Prepared for:
Shenhua International Group Pty Ltd



Chapter 1

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1.0 INTRODUCTION

This Environmental Impact Statement (EIS) has been prepared in accordance with an application to prepare a Voluntary EIS in accordance with Section 71 of the *Environmental Protection Act 1994* (EP Act) as part of the development of the Taraborah Coal Mine Project (the "Project").

This EIS aims to satisfy the approval assessment process, essential for a Level 1 Mining Activity, under the EP Act by providing an assessment of the current conditions at the Project site and identifying both potentially adverse and beneficial impacts of the proposed Project upon local and regional natural, social and economic environments.

This document provides detailed and relevant information regarding the Project to the general public, affected and interested parties and advisory bodies.

The main structure of this EIS has been summarised and is presented in Section 1.4.3.

1.1 PROJECT PROPONENT

The Proponent of the Project is Shenhua International Group Pty Ltd (Shenhua) (ABN 62 118 366 591), a Brisbane-based subsidiary of the Henan Shenhua Group Co Ltd. The Project's mining tenements are / will be held in the name of Shenhua, a coal exploration and development company.

Contact details for the Proponent are as follows:

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1.2 PROJECT DESCRIPTION

The Project concerns the development of a thermal coal deposit which is located in the Bowen Basin, Queensland, Australia, approximately 22 kilometres (km) west of the town of Emerald (refer to Figure 1.1 and Figure 1.2 for the Project location). The proven and probable coal resource in the open cut and underground areas of this deposit has been estimated at 202 Million tonnes (Mt). The Project is located entirely within the Central Highlands Regional Council (CHRC) local authority area.





Figure 1.1 Regional Project Location

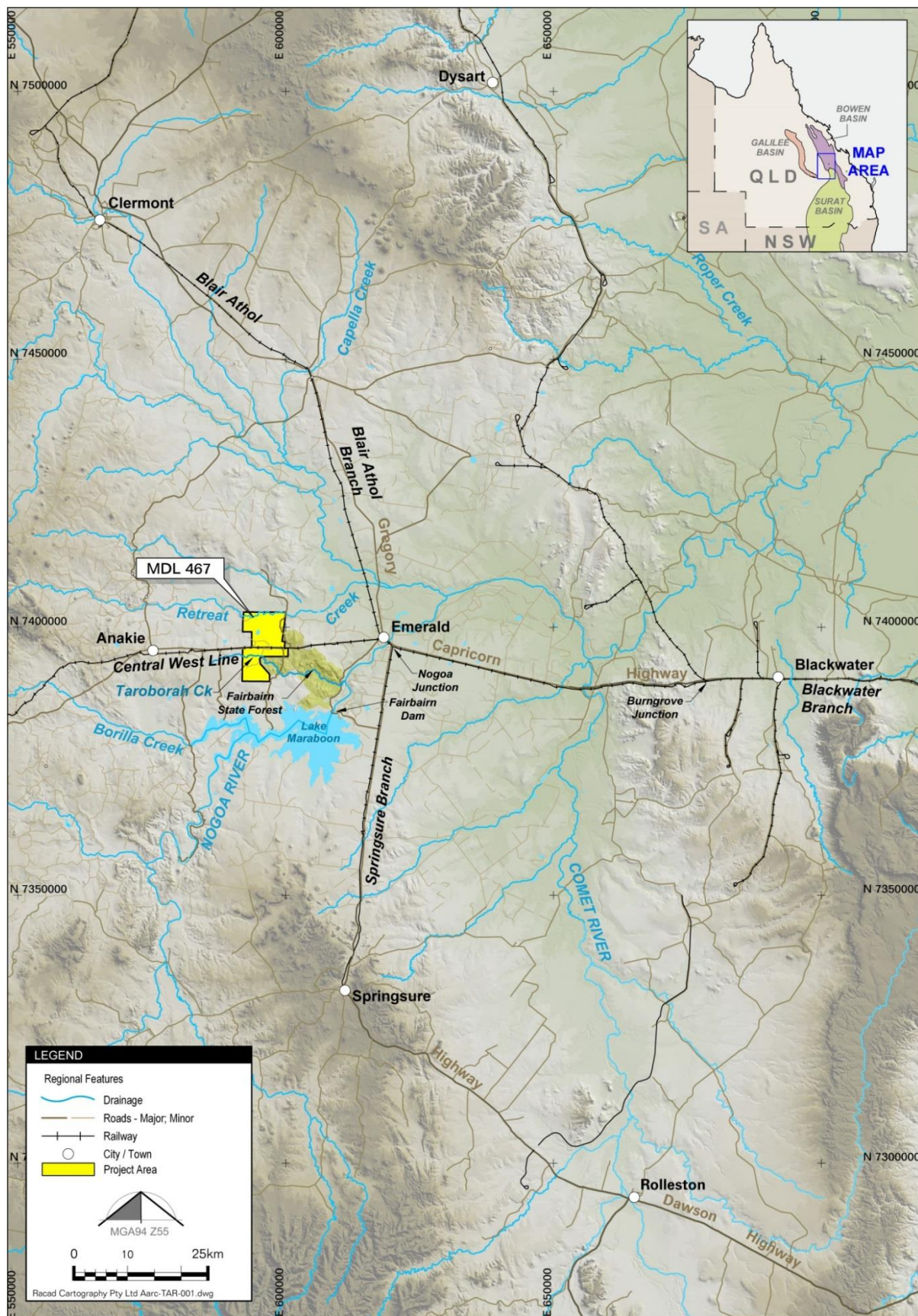


Figure 1.2 Local Project Location

The EIS Project study area comprises 5,195 hectares (ha) and is contained wholly within Mineral Development Licence (MDL) 467 (7,966 ha). Figure 1.3 illustrates the Project boundary in relation to the underlying mining tenements.

The key features and major infrastructure associated with the Project include:

- The development of a mine for the extraction and export of thermal coal, utilising both underground and opencut methods;
- Run of Mine (ROM) and product stockpiles;
- ROM hoppers and sizers;
- Conveyors to transport ROM and product coal on site;
- Coal Preparation Plant (CPP) and refuse bin;
- Radial stacker, train load-out facility and rail loop to transport export quality coal;
- Spoil dumps;
- Haul roads and site access corridors;
- Workshops for maintenance of equipment, heavy vehicles and machinery;
- Offices for mine site management and employees;
- Fuel stores and washdown bays;
- Site drainage features, including sediment dams
- Mine waste water and CPP recycle water dams;
- Potable water, mine water and sewage treatment plants; and
- Power and telecommunications infrastructure.

Figure 1.4 illustrates the proposed Mine Infrastructure Area (MIA) layout.

Access to the Project site will be via the Capricorn Highway, which laterally dissects MDL467. A suitable turning and deceleration lane will be developed to connect the Capricorn Highway with the Project's site-access road.

The Queensland Rail (QR) Central West system also runs through the centre of the Project site, adjacent to the Capricorn Highway. A train load-out facility and rail loop will be constructed on the Project site and connected to the Central West railway system in order to facilitate the transport of product coal.

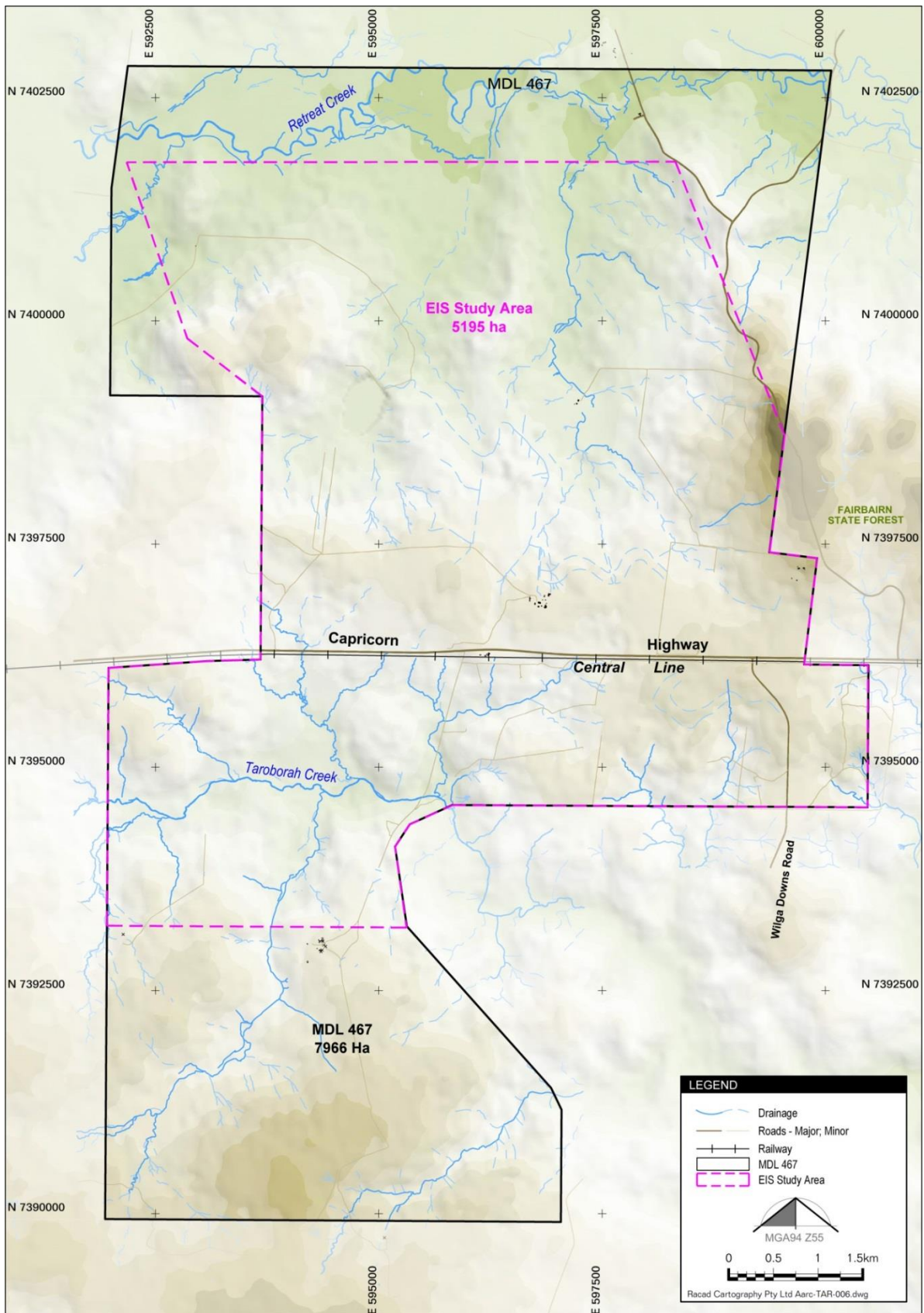


Figure 1.3 Project Tenement and EIS Study Areas

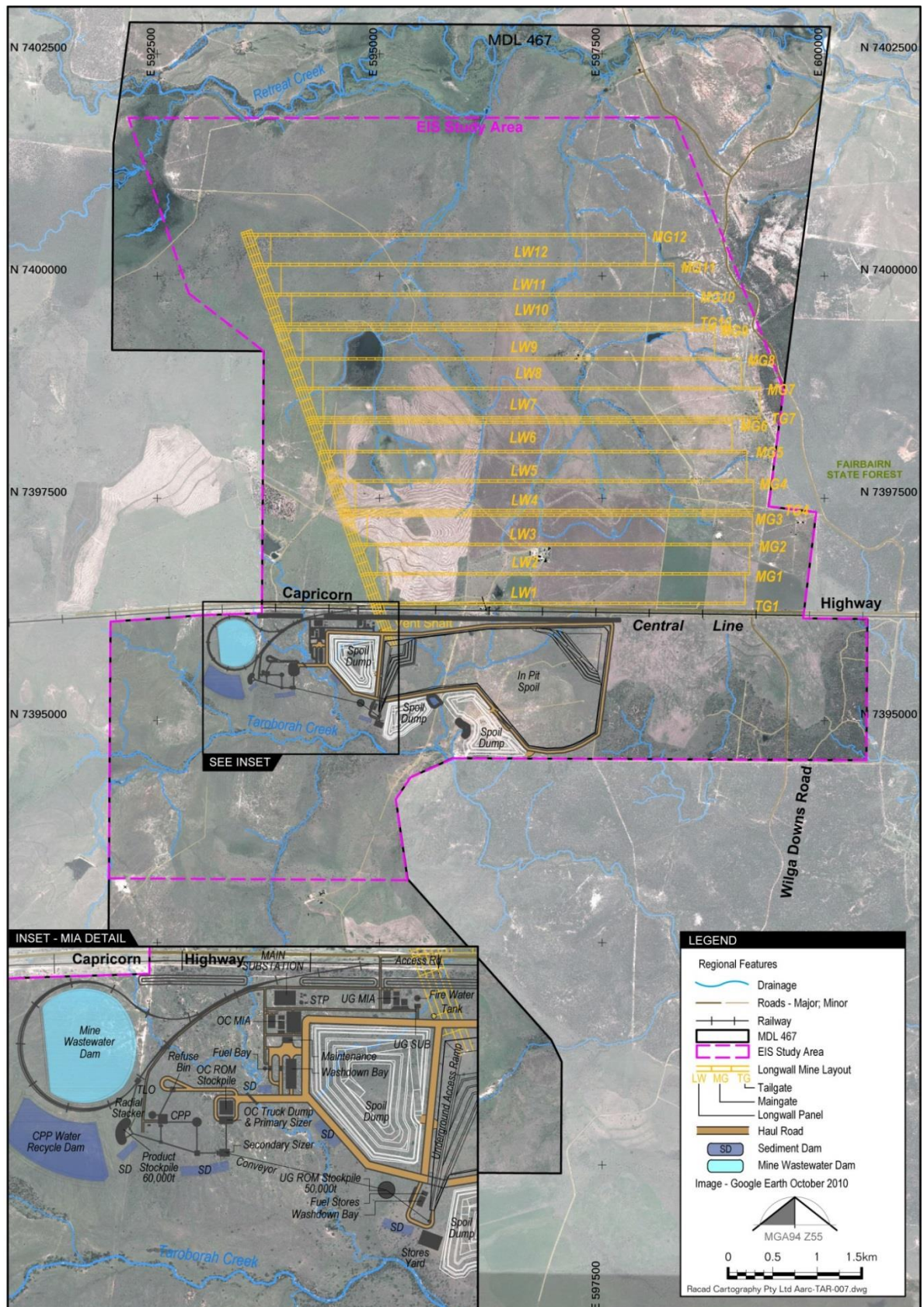


Figure 1.4 Proposed Project Mine Infrastructure Layout

The combined opencut and underground mining operations are expected to produce up to 5.75 Million tonnes per annum (Mtpa) of ROM coal and 5.73 Mtpa of product coal for export. The mine life is estimated at approximately 22 years, including a 12-month construction period. Due to variations in both coal seam quality and depth, a combination of opencut and underground longwall mining operations has been planned.

Mining activities will be conducted 24 hours a day, seven days a week. A Bus-In Bus-Out (BIBO) workforce of up to approximately 350 mining staff will be transported from Emerald and employed on the Project site during operations.

For the opencut mine, excavator and truck operations are proposed. Overburden and interburden will be removed by hydraulic excavators, transferred to trucks and hauled initially to out-of-pit spoil dumps adjacent to the opencut pit. Once mining of the pit sufficiently progresses, in-pit dumping of spoil will be employed.

Underground operations will be conducted via longwall mining. The transport of underground ROM coal to the Coal Handling and Preparation Plant (CHPP) will be via conveyors from the opencut highwall. Three entries to the underground mine are planned, providing access for staff, materials, equipment, belt conveyors and ventilation.

Data supplied from exploration drilling and hydrogeological studies have indicated that the aquifers below the Project site possess sufficient groundwater to meet the Project's needs. A large dam also exists on the Project site, which can be used as a supply of water for mine operations and processes if necessary. The site's total estimated water consumption is 400 to 1000 megalitres per annum. Since all of the Project's water will be supplied by necessarily extracted groundwater, connections to existing water mains or pipelines will not be required.

The water management strategy will incorporate separation of clean water and site water. Clean water management will include diversion drains around the site infrastructure area to intercept and transport the clean water away from the disturbed areas of the Project site. The clean water catchment will not be harvested and will be diverted away from the Project site, connecting to the natural downstream tributaries. The site water management objective relating to the proposed infrastructure and mining areas which include the ROM pad, CHPP, Mine Infrastructure Area (MIA), out of pit waste rock dump area and opencut pit, is for the capture and containment of runoff from these surfaces. It is proposed to contain this stormwater in a storage dam or a sediment pond and reuse as part of the mining and processing water circuits. Based on the proposed site layout, with particular consideration to separating clean water from mine-impacted water, the following infrastructure requirements are proposed:

- Clean water drains and protection bunds along the north of the site adjacent to Capricorn Highway;
- Two sumps, east sump and west sump to capture clean water and pump the clean water downstream of the Project site into Taraborah Creek system;
- Site water collection drains around the perimeter of the infrastructure area which discharges to a sediment dam;
- A discharge pump and sump system in each pit which transfers water from each pit to a mine wastewater dam (as required); and
- Site water collection drains around the perimeter of the out of pit spoil dumps with flow



discharged into associated sediment dams.

Clean water diversion drains and bunds capture runoff from undisturbed land and divert the flow around mining operations to minimise mixing with any mine impacted water and thereby reducing the total amount of runoff requiring containment within the site water management system. Although not considered as regulated structures, clean water diversion drains and bunds are designed to accommodate a 1 in 1,000 year peak flow event. This criterion has been adopted as clean water diversion drains are required to protect the open pit and associated underground mine works from local flood inundation. The mine water dam has been designed to contain contaminated water for a 1 in 20 Annual Exceedance Probability (AEP), while the CPP water recycle dam has been designed to contain contaminated water for a 1 in 100 AEP event.

Discussion with Ergon has indicated there will be sufficient capacity available from the Emerald sub-station to supply the estimated 25 megawatt (MW) per annum power requirement for the Project. It is anticipated that the construction of an approximate 22 km long power line running along the Capricorn Highway from the Emerald sub-station to the mine site, together with a substation in the MIA, would deliver the necessary electrical supply infrastructure for the Project.

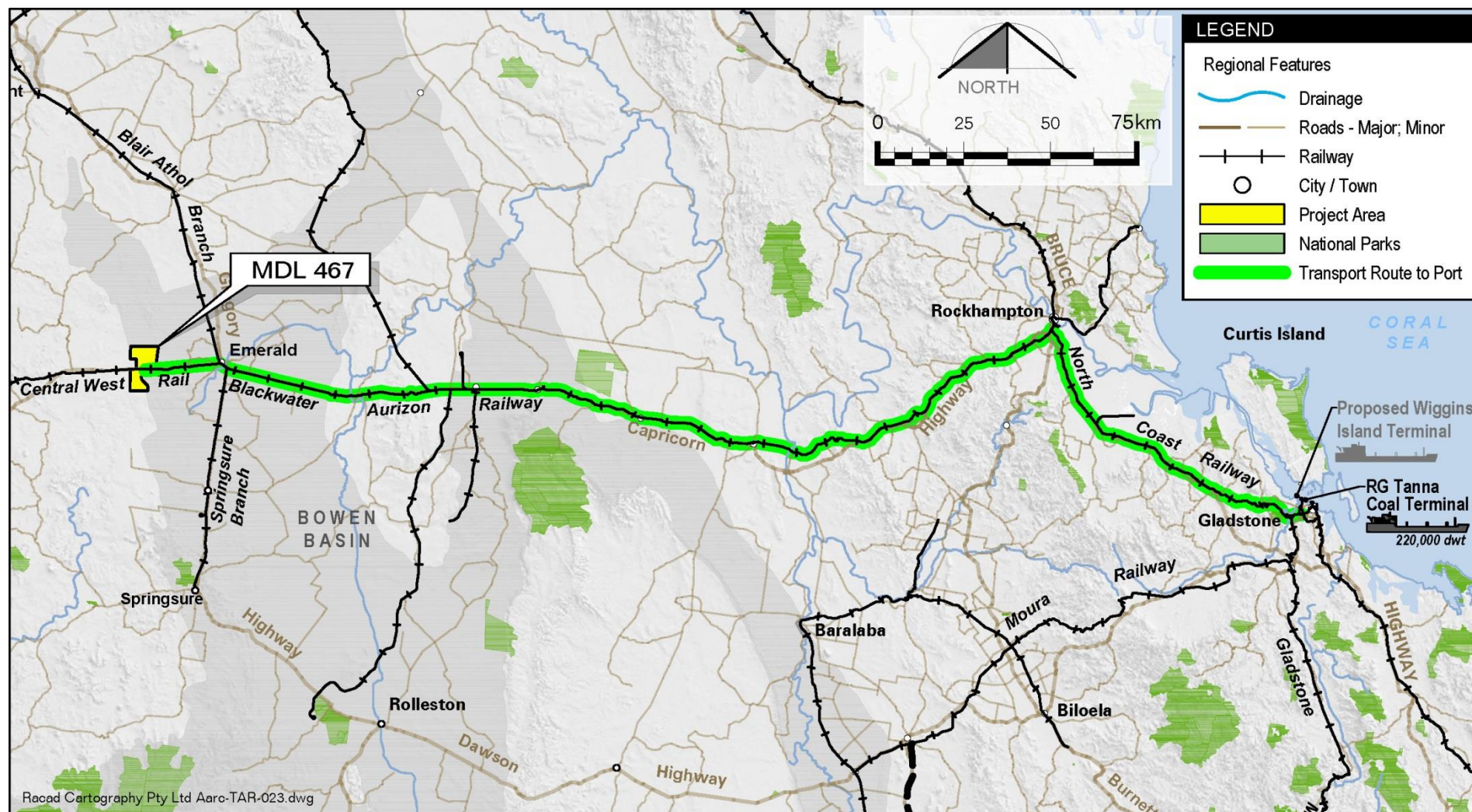
Coal processing will involve ROM crushing, screening and washing in order to separate product coal from waste materials. Rejects produced by the CHPP will be managed via a co-disposal system whereby fine rejects will be partially dewatered and mixed with coarse rejects prior to being hauled and disposed of in the mine spoil dumps. Coal handling activities will be conducted on a 24-hour per day basis to suit the mine operations schedule, whilst coal washing is expected to be required only on a single shift per day.

Product coal will then be transported via the QR Central West rail system until Nogoa Junction, where it joins the Aurizon Blackwater rail system to the Port of Gladstone (at the Wiggins Island Coal Export Terminal (WICET)) (refer to Figure 1.5). A rail transport study has been conducted in order to determine the best rail transport option (in terms of train and wagon configurations) and has identified certain modifications that will be required to the rail system between Taraborah and Burngrove, in order to accommodate the additional rail traffic that arises due to the transport of product coal to port.

The following major infrastructure modifications are required for this Project:

- Capricorn Highway – construction of a highway deceleration lane in order to connect the mine site to the highway;
- QR Central West rail system – connection of the rail spur line and balloon loop to the Central West rail system, upgrade of the railway line west of Burngrove, upgrade of the Nogoa River bridge, level crossing protection; and
- Electrical power – construction of a 66 kilovolt (kV) power supply line along the Capricorn Highway from the Emerald sub-station to the mine infrastructure area.

A process of progressive rehabilitation will be employed for the Project site, in order to minimise the total disturbance area that is created at any one time, followed by a final rehabilitation phase once the mine site has been decommissioned.



1.3 PROJECT OBJECTIVES AND SCOPE

The Project site is located within the Bowen Basin, a central inland Queensland (QLD) geological region. The Bowen Basin represents one of the largest and most important coal producing basins in the world, contributing 5% of the world's coal product in the seaborne export market. The Taraborah Coal Project will be developed to supply export demands for thermal coal. World consumption of thermal coal has continued to grow and maintain a stable share of the electricity generation market.

Coal is one of Australia's top exports; contributing a significant amount to the nation's economic growth. The International Energy Agency (IEA) predicts that world coal demand will increase at an average annual rate of 1.9% between 2007 and 2030 (Geosciences Australia & ABARE 2010). In lesser developed countries, this demand is likely to increase by 2.8%.

Australia is one of the world's largest producers of seaborne coal; with coal distributed to over 30 different countries. With the fourth largest reserves of coal in the world, Australia is well positioned to capitalise on increasing international demands for coal. The Taraborah Project aims to develop some of Queensland's high quality, black coal resources to supply this growing international demand. Australia's thermal coal exports grew by 4% in 2011 compared with 2010 (148 million tonnes of thermal coal were exported in 2011). It is projected that Australian thermal coal exports will grow at an average annual rate of 11% between 2013 and 2017, with a total of 271 million tonnes exported by the end of 2017 (Australian Coal Association 2013).

1.3.1 Alternatives

The Taraborah mining tenement originally formed part of Exploration Permit for Coal 1011 (EPC1011) and was granted to Shenhua in 2006 following a tender process by the Queensland Government. Shenhua committed to exploration between 2006 and 2011 when an application was made for MDL467.

Feasibility and environmental studies commenced with a view to developing the Project and seeking approval for up to 7.4 Mtpa ROM coal with a number of mine layout, equipment, process and transport alternatives considered.

As the Project progressed, specific Project alternatives were selected and modified in order to minimise the Project's impacts upon the environment.

Originally, EPC1011 encompassed a portion of the Fairbairn State Forest (which also encompasses Fairbairn Dam, and Lake Maraboon – a nationally important wetland system). Upon deliberation, Shenhua resolved to excise this proportion of EPC1011 when formulating MDL467, thereby reducing the overall size of the tenement and encouraging conservation of the environmental values associated with Fairbairn State Forest.

The presence of Priority Agricultural Area (PAA) and Strategic Cropping Area (SCA) within MDL467 (as identified by the QLD Government SCL Trigger Map, December 2012), meant that further modifications might be required to the mine plan in order to minimise Project impacts upon Priority Agricultural Land Uses (PALUs) and SCA.

While there is a small area of PAA within the northeast portion of MDL467, it is considered that this area is incorrectly mapped in the Government's database. The northwest boundary of the Central Queensland PAA is located so as to coincide with a physical feature (Fork Lagoons Road) rather than land use capability. The PAA existing within the MDL boundary is an extension of the EIS mapped



Rolleston/Glengallen soil management unit (SMU) and contains sandstone outcropping, steep slopes and heavy timber. This SMU has a land suitability classification for cattle grazing and broadacre cropping of 4, which is considered marginal with severe limitations (see Section 6.4 of Appendix 7 of this EIS), and has not previously supported a PALU.

To determine the extent of SCA, cropping history and zonal site assessments were conducted for the Project site in order to ground-truth the initial QLD Government SCL Trigger Mapping within MDL467 and produce revised SCA validation areas for submission to the QLD Government. This ground-truthing resulted in Project modifications allowing for a smaller footprint and a significant reduction in the area of SCA and Brigalow Woodland that would have also been impacted by the original mine plan.

Project impacts upon riparian corridors were also minimised by moving the MIA away from Taroborah Creek and removing the rejects impoundment dam that would have impacted the Brigalow / Belah Open Woodland vegetation community which lies to the north of Taroborah Creek.

Initial Project designs were based on two coal extraction scenarios formulated during the Project's pre-feasibility phase, including opencut mining and underground coal extraction. Due to the limited opencut resource area, drag line operations were not considered an appropriate alternative to traditional opencut truck and shovel methods, which are to be employed south of the Capricorn Highway. Two underground mining scenarios were considered including longwall extraction, with an operational mine life of approximately 17 years, and a bord and pillar technique, which would have extended the operational mine life to approximately 27 years. Considering the principles of Ecologically Sustainable Development (ESD), longwall underground extraction was identified as the preferred alternative to bord and pillar underground coal extraction to minimise the economically-marginal opencut operations and maximise coal production, streamlining coal extraction, processing and handling procedures.

Further details of the alternatives considered for the Project are provided in Section 2.2 of this EIS.

1.3.2 Envisaged Time Scale and Establishment Costs

The approximate approval timeframes for the Project are presented in Table 1.1. This timeline is based upon statutory timeframes where they apply or estimates where no timeframe is applicable. The Project Mining Lease (ML) and Environmental Authority (EA) are estimated to be granted in 2017. The main objective of the Project is to generate the first batch of product coal by mid to late 2018 and export this coal via the Central West and Blackwater rail systems and Phase 2 of the WICET at Gladstone.

Table 1.1 Approximate Project Approval Timetable

Project Approval Milestone	Expected Delivery Date
Submission of Draft EIS to the Department of Environment and Heritage Protection (EHP)	December 2013
EIS submission period - Public and departmental Comment Period on draft EIS, EHP provides comments to the proponent.	April 2014
EIS amended in response to EHP EIS Assessment Report	December 2014



Project Approval Milestone	Expected Delivery Date
ML application submitted	June 2016
EA and ML granted	June 2017
Opencut Construction Period	September 2017 – September 2018
Underground Construction Period	January 2022 – June 2022
Duration of Opencut and Underground Operations	July 2018 – June 2038

Mine Construction Costs

Capital costs associated with preproduction engineering, surface infrastructure, opencut mining and underground mining are estimated to be approximately \$638 million in present value terms.

Operating Costs

The present value of operating costs is estimated to be \$2.7 billion.

Infrastructure Costs

To the extent that the Project creates additional demand for infrastructure, then the costs should be included in the Project Cost Benefit Analysis. However, there are no major infrastructure requirements for government directly triggered by the Project. Moreover, the rail and port services will not impose any infrastructure costs on Government as the contracting will occur with private sector entities. These costs are included in the Project costs.

In addition, there are no road construction costs from the Project that have to be met by government. The costs of roads to be upgraded and / or maintained as a result of the Project are included in the Project construction costs.

1.3.3 Actions Undertaken in the Project Area

1.3.3.1 Exploration

Exploration in the general area has been ongoing since the discovery of coal in the 1920's, with more comprehensive and detailed exploration being undertaken by the Geological Survey of Queensland over the period 1985-1987 and 1992-1995. No mining has previously taken place within the Project area.

Exploration Permit for Coal 1011 (EPC1011) was first awarded to Shenelia Holdings Pty Ltd. (a subsidiary of the Henan Shenhua Group Corp Ltd) by the QLD government in 2005. Tenure was set at four years with exploration beginning in February 2006. A tenement ownership dispute between Shenelia and Shenhua resulted in the temporary cessation of exploration operations and ownership of the EPC being transferred by court order to Shenhua in November 2006.

In 2008, an exploration program over EPC1011 was undertaken to identify both opencut and underground mining targets. Previous exploration over the opencut area was undertaken by Resolve Geo Pty Ltd during 2006. The 2008 exploration initially focused on additional drilling and coal quality



testing over the potential opencut area (south of the Capricorn Highway) to define the seam(s) sub-crop and bring the resource to “Measured” status as defined by the Joint Ore Reserves Committee (JORC) code. Following completion of the potential opencut resource drilling, exploration in 2008 focused on drilling the underground area (north of the Capricorn Highway) at 1 km centres to delineate an “Indicated” resource as defined by JORC.

Thickness and coal quality data recorded from cored holes and limit of oxidation drilling was modelled to provide a three dimensional understanding of the potential opencut and underground mining areas.

A second, extensive drilling program was conducted in 2009 to better define the underground mining target, including geotechnical, coal quality and seam gas characteristics and bring this resource area up to measured status. A number of the exploration holes were also converted into piezometers to begin monitoring the groundwater system in the area.

In 2010, a 2D seismic survey and structural drilling were undertaken in the underground area to define the bounding faults and identify any potential internal faults.

Additional drilling will take place in advance of mining operations to redefine the resource where necessary and verify the findings of the above exploration drilling.

1.3.3.2 Other Developments in the Region

The Bowen Basin is the largest reserve of coal resources in Australia and is subject to 34 operational coal mining activities, generating 83% of QLD’s annual coal production. Within this basin several, proposed, resource development operations are currently under application or have recently been approved and are awaiting construction (refer to Figure 1.6 for a summary of the Bowen Basin coal mines and projects).

Locally, within a 25 km radius of the Project, several development projects have been identified:

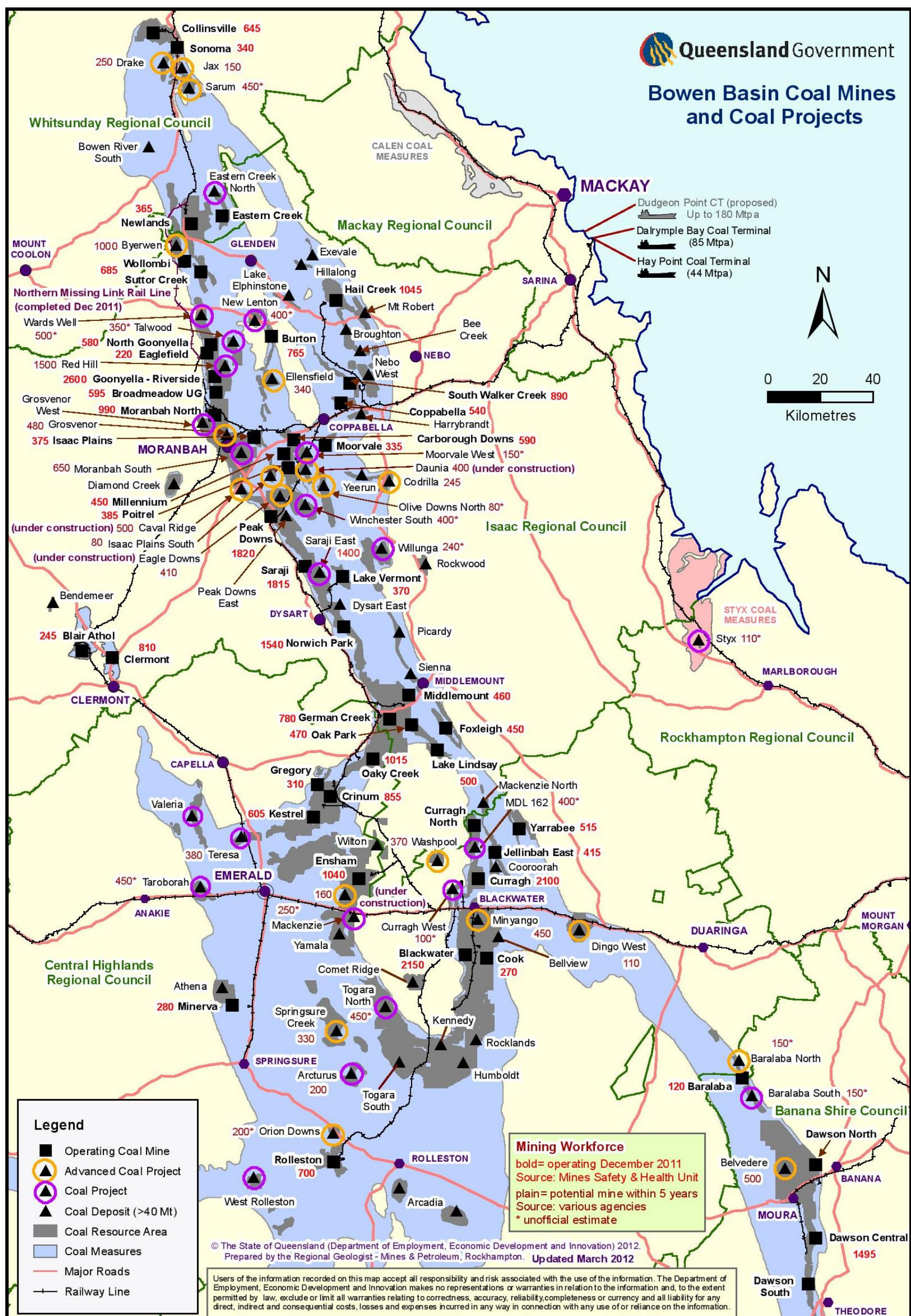
- Valeria – pre-operational thermal coal project managed by Rio Tinto Coal Australia;
- Teresa – pre-operational pulverised coal injection coal project managed by Linc Energy; and
- West Emerald – exploration project operated by Cuesta Coal for export quality thermal / PCI coal.

In addition, the following projects have been identified within a 50 km radius of the Project:

- Athena – prospective underground thermal coal project run by Yancoal;
- Kestrel – operating coking and thermal coal mine run by Rio Tinto Coal Australia;
- Kestrel Mine West - pre-operational semi-soft coking and thermal coal project managed by Rio Tinto Coal Australia; and
- Minerva - operating thermal coal mine run by Sojitz Coal Mining.

All EPC tenements adjacent to MDL467 are held by Cuesta Coal.





Source: Queensland Government 2013

Figure 1.6 Bowen Basin Resource Operations and Developments

1.3.3.3 Interrelated Developments

Rail Infrastructure

Regional developments of direct significance to the Taraborah Project include the Wiggins Island Rail Project (WIRP), which aims to deliver rail infrastructure to service to the new Wiggins Island Coal Export Terminal (WICET) and provide a link to mines in the Bowen and Surat Basins. The WIRP involves the construction of new lines and upgrades to existing lines, with two of these sub-projects planned along the Blackwater rail system including the following new rail infrastructure:

- Balloon loop to be constructed near Yarwun to facilitate the unloading of coal for the new port facility; and
- Duplication of 23.9 km of track between Dingo and Bluff.

Electrical Power Supply

Emerald's power supply is currently provided by two 66 kV powerlines, one from Lilyvale and the other from Blackwater. The powerline between Blackwater and Emerald is approximately 50 years old and cannot supply Emerald with adequate power if there is an issue with the Lilyvale powerline. Therefore, Ergon Energy has identified the need to develop a new dual-circuit high-voltage powerline between Blackwater and Emerald to ensure reliable and secure power to Emerald.

Since the Project's electricity supply will be sourced from the Emerald sub-station via a new 66 kV power supply line constructed along the Capricorn Highway, the Blackwater / Emerald powerline development project will be critical to ensure a stable supply of power to the mine site.

1.3.3.4 Consequences for Not Proceeding with the Project

The consequence of not proceeding with the Project would result in a significant coal resource being undeveloped and income via Project taxation and royalties would not be realised for the State of Queensland. If the Project remained as a future development option, the income and benefits associated with the Project could well be deferred.

A "Do-Nothing" approach for the Project would see valuable, local coal resources effectively sterilised for the Commonwealth, the State of Queensland and the local communities. In addition, the direct and indirect employment associated with the Project will not occur.

By not undertaking the Project, the temporary disturbance of approximately 452 ha of Class 3 and Class 4 grazing land and permanent disturbance of 44 ha of Class 4 grazing land and 3 ha of endangered brigalow woodland will be avoided.

1.4 THE ENVIRONMENTAL IMPACT STATEMENT PROCESS

The *EP Act 1994* provides the framework for the EIS process and related processes associated with mining activities. An EIS is the standard environmental approval pathway for mining projects the size and nature of the Taroborah Project.

Under s37 of the *EP Act 1994*, the EIS process is undertaken when:

1. An EIS requirement has been determined as part of the assessment level decision in relation to an application for an EA (Mining Activities); or
2. The voluntary preparation of an EIS for the Project has been approved by Department of Environment and Heritage Protection (EHP).

An application to prepare a voluntary EIS for a Non-code Compliant Level 1 mining project was submitted to the Department of Environment and Resource Management (now the Department of Environment and Heritage Protection) in December 2011.

1.4.1 Methodology of the Environmental Impact Statement

1.4.1.1 EIS Process

The EIS process for the Taroborah Project is described in *Environmental Impact Statements - Triggers for environmental impact statements under the Environmental Protection Act 1994 for mining, petroleum and gas activities* (EHP 2013). A flowchart of the EIS process (including EIS development steps which occur both before and following submission of the Draft EIS) is presented in Figure 1.7.

The EIS process commences when the proponent submits a Draft Terms of Reference (TOR) to EHP. The Draft TOR is advertised and made available to the public for review and comment for at least 30 business days. Submissions received during the comment period are considered by the proponent and relevant amendments made to the Draft TOR. A Final TOR is then issued by EHP, which forms the scope of the EIS. The EIS must be submitted to EHP within two years of receiving the Final TOR, unless a longer timeframe is agreed upon between EHP and the proponent. Baseline studies and investigations are undertaken in preparing the EIS document and associated reports.

Following submission of the Draft EIS, EHP then determines whether or not the EIS is acceptable and may proceed. This decision is based upon whether the EIS addresses the Final TOR and is in the appropriate form. The Minister has an ability to decide not to proceed with the process if the EIS is deemed not to have addressed the TOR. If allowed to proceed, the EIS is advertised and made available to the public for at least 30 business days for review and comment.

Submissions received during this period are provided to the proponent, who then amends the EIS where relevant. Once the amendments have been made, the proponent resubmits the EIS to EHP, who then prepares and provides to the proponent an assessment report on the submitted EIS.

Following the provision of the EIS assessment report, a draft EA is issued by EHP for the Project (refer to Figure 1.7 for EA approvals timeline). The draft EA is advertised and made available to the public for a period of time, during which anyone can lodge an objection to the draft EA.



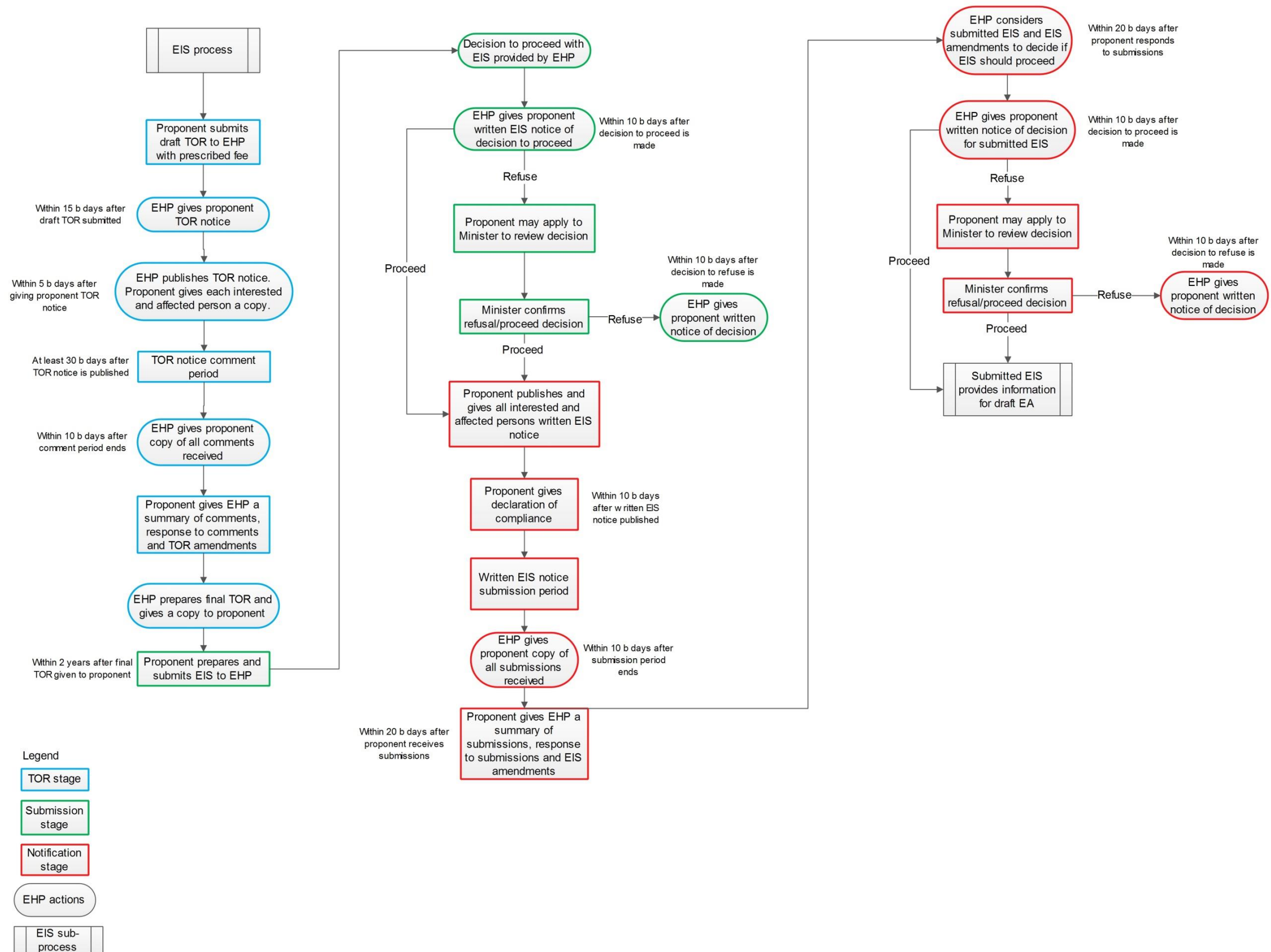


Figure 1.7 Flow Diagram of the EIS Process

1.4.1.2 Environmental Studies

The following environmental studies and assessments that were undertaken for the Project and incorporated into this EIS include:

- Economic Impact Assessment;
- Social Impact Assessment and Social Impact Management Plan;
- Community Consultation Report;
- Terrestrial Flora and Fauna Assessment;
- Noise and Vibration Assessment;
- Surface Water Impact Assessment (including flooding) and Surface Water Management Strategy;
- Aquatic Ecology and Waterway Morphology Assessment;
- Soil and Land Suitability Assessment;
- Strategic Cropping Land Assessment;
- Groundwater Assessment;
- Environmental Risk Assessment;
- Geochemical Assessment of Mine Waste Material;
- Transport Impact Assessment;
- Non-Indigenous Cultural Heritage Assessment;
- Air Quality and Greenhouse Gas Assessment;
- Greenhouse Gas Management Plan;
- Climate Change Adaptation Assessment;
- Contaminated Land – Preliminary Site Assessment;
- Stygofauna (Subterranean Fauna) Assessment; and
- Visual Amenity Assessment.

Apart from the Project Pre-Feasibility Study that was conducted in 2009 by IMC Mining Group Pty Ltd (IMC) and previous exploration drilling, no other baseline studies or investigations were conducted before the EIS process was initiated.

1.4.2 Objectives of the Environmental Impact Statement

The primary objective of an EIS is to assess and address both the beneficial and adverse impacts of a proposed Project upon its natural, social and economic environment. In addition to this primary objective, it is the aim of the EIS to satisfy the information requirements of the general public, Affected and Interested parties and Advisory Bodies.

The EIS process also encompasses the following objectives and functions:

- Aims to be the key environmental document providing advice to decision makers considering approvals for the Project;
- Designed to be flexible to allow for unseen or newly relevant information that warrants inclusion in the EIS document;
- Addresses all relevant matters concerning environmental values, impacts upon those values and proposed mitigation measures;
- Project options and alternatives are presented in the EIS, including their likely relative environmental management outcomes;
- The potential impacts presented by the Project and their significance are addressed in the EIS, taking into account both the intensity of that impact and the context in which it may occur;
- Management measures that can be carried over into conditions in the draft EM Plan. These conditions will attach to any approval(s), environmental authorities and permits for the Project; and
- The EIS document will be written in plain English and will avoid jargon as much as possible.

1.4.3 Structure of the Environmental Impact Statement

The EIS document consists of the following sections:

1. Project Introduction –provides a brief outline of the EIS Process, the Project, the relevant legislation and guidelines.
2. Project Needs and Alternatives –outlines alternatives to the Project itself and alternatives within the Project. The alternatives are discussed in relation to the framework of decision making, including various factors such as financial viability, practicality, materials, Ecologically Sustainable Development and Environmental Best Practice.
3. Description of the Project – details all facets of Project construction, operation and decommissioning in the form of a detailed discussion.
4. Environmental Values and Management of Impacts –presents the environmental, social and economic baseline data that has been produced for the Project along with mitigation and control strategies for any identified impacts.
5. Matters of National Environmental Significance–assesses relevant Project impacts upon the EPBC controlling provisions which apply to this Project. The information provided in this section of the EIS will be sufficient to allow the Commonwealth Minister to make an informed



decision as to whether or not the Project should be approved under the EPBC Act.

6. Environmental Management Commitments – this section proposes acceptable environmental standards / control strategies and provides information to the EHP for drafting of the EA and any permits that would apply to this Project.
7. Project Commitments—any commitments made by the proponent are detailed in this section, stating how and when the commitments will be fulfilled.
8. References – lists the entire source documents used to produce the EIS.
9. Appendices – A collection of raw data and baseline studies used to develop the EIS.

Within the EIS document, each Project impact is discussed and assessed in the following manner:

- Local impacts are discussed in terms of their nature, significance and where appropriate, relevance to statutory requirements;
- Appropriate targets or criteria are proposed as benchmarks for each impact;
- Proposed control methods or strategies for maintaining impacts within their proposed benchmarks are described;
- Where applicable, the control methods or strategies are related to statutory requirements; and
- Methods for validating performance and for mitigating potential impacts are described typically in the form of monitoring and auditing regimes.

1.4.4 Submissions

After being notified by EHP that the EIS may proceed, Shenhua must publish the EIS Notice and give a copy of the EIS Notice to each Affected and Interested party. The EIS Notice will state, amongst other things, where the Draft EIS may be inspected, how copies of the Draft EIS may be obtained, how to make a submission and the length of the submission period. The EHP sets the length of the submission period, which must be at least 30 business days. The approximate timing for when public submissions can be made concerning the Draft EIS is presented in Table 1.1

Anyone may make a submission to EHP on the Draft EIS within the submission period. The submission does not need to be prepared by an expert and may relate to one or more aspects of the EIS. The only requirements of a submission to be accepted by EHP are that it must be received within the submission period and must be a “properly made submission”. A submission is considered to be properly made if it complies with the following criteria:

- It is written;
- It is signed by each person who made the submission;
- It states the name and address of each signatory;
- It is made to the chief executive of EHP; and
- It is received on or before the last day of the submission period.

Submissions on the Draft EIS should be addressed to:

The Chief Executive

Attention: The EIS Coordinator – Taraborah Project

Department of Environment and Heritage Protection

GPO Box 2454

Brisbane QLD 4001

For further information regarding the EIS process for this Proposal, contact the EIS Coordinator on 1300 130 372.

1.5 PUBLIC CONSULTATION PROCESS

A programme of community consultation has been conducted for the Project, in preparation for this EIS, in order to provide the local community with the opportunity to:

- Become fully informed of the Project status and the likely impacts of any development prior to approval;
- Express any concerns regarding current or planned Project activities and their environmental impacts; and
- Discuss, review and contribute to the formulation of the Project impact mitigation strategies.

The programme also provided the local community with an opportunity to raise any social and cultural issues and concerns that they may have in response to the proposed Project, thereby facilitating the analysis of these issues in terms of their impacts upon the local community.

A key component of the EIS preparation process has been the involvement of various Advisory Bodies and other stakeholders. The Advisory Body and stakeholder consultation process included one-on-one meetings with key stakeholders and affected persons. This process has included Traditional Owners, those parties identified as *Affected Persons* under Section 38 of the EP Act, the Department of Communities and other relevant government bodies and interested groups and persons.

The Bidjara # 7 people submitted a native title determination application over the Project site which was registered by the National Native Title Tribunal in January 2013. In addition, the Western Kangoulu People also submitted a native title determination application in April 2013 and had that application registered by the Tribunal in June 2013. The Western Kangoulu People held a Native Title Claim over the area prior to extinguishment in 2003, and they have been consulted directly on cultural heritage issues throughout the exploration phase at Taraborah. The Cultural Heritage body for the Western Kangoulu People (comprising Kangoulu People #1 and #2) is Lumburra Bimbi Pty Ltd, and consultation is ongoing with them in order to conduct further Indigenous cultural heritage assessments of the Project site and infrastructure areas.

In addition to Traditional Owner groups, consultation was undertaken with a broader range of local Indigenous stakeholders, including the Queensland Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA), the Central Highlands Aboriginal Corporation and local health service providers, to understand Indigenous health, education and employment issues across the region. As a result of this consultation, an Indigenous Participation Plan was developed for the



Taroborah Project.

A list of affected and interested persons, as well as a statement of how Shenhua proposed to consult with those persons was provided to EHP on 9 December 2011 in the Initial Advice Statement accompanying the Voluntary EIS application. Notice was given to all interested and affected parties of publication of the Draft Terms of Reference and Initial Advice Statement via the EHP website prior to their publication on April 2, 2012. Effective consultation with affected and interested persons is a statutory requirement of the EIS process under section 41 of the EP Act.

The following mechanisms were employed to consult with members of the public:

- Stakeholder engagement – Conducted between 6th November 2012 and 6th December 2012. Involved discussions and interviews with landholders, key community members and local government representatives;
- Information package – sent to local stakeholders which included a fact sheet concerning the Project and a reply-paid questionnaire;
- Face-to-face consultation with directly affected landholders in November 2012;
- Face to face consultation with Central Highlands Regional Council members in May 2013;
- A community information session held in Emerald on 17 May 2013;
- Production and circulation of a quarterly Project Newsletter;
- Creation of a Project-specific E mail and 1800 telephone contact number; and
- Engagement with DATSIMA's Rockhampton office in September 2014.

The main aim of this consultation process was to identify Project issues that were of concern to the local community and interest groups and maintain such consultation throughout Project planning, commissioning, operations and decommissioning.

A summary of the stakeholders who were consulted throughout the Project is presented in Table 1.2.

For local community engagement sessions, accessible venues were selected to ensure that all community members were able to participate, including those with a disability. No requirement was encountered during these sessions for the development of alternative communication mediums or to assist people for whom English is a second language. The consultation process also included Aboriginal people who reside in the relevant communities.

The final methodology used for consultation throughout the preparation of this EIS, including details of all stakeholders consulted, is presented in Appendix 23. Appendix 23 also includes a consultation database, which presents a comprehensive list of groups or individuals consulted, method of consultation, the issues raised, Shenhua's response to the issues and follow-up action to address the issues.

Furthermore, a specific engagement strategy to keep the local community informed about key developments and timelines associated with the proposed Project has been developed and is provided in Section 4.10.2 of the EIS and Appendix 23.



Table 1.2 Stakeholder Consultation Summary Register

Stakeholder	Position	Date of Contact	Subject
David Thompson	Program Manager, DATSIMA	28 Aug 2014	Discussed that the key issue for Central Queensland Indigenous communities was employment. Advised that there were many opportunities to source labour (both Indigenous and non-Indigenous) from communities such as Woorabinda, Alpha, Winton and Blackall. DATSIMA can support Taraborah by recruiting and training local Indigenous candidates. There are also opportunities to support local Indigenous businesses – projects can work with DATSIMA and ICN to identify and realise these business opportunities
Simon Ross	Program Delivery and Operations, Department of Transport and Main Roads	Nov 2013	Advice from Rockhampton DTMR concerning the Fitzroy Region Transport Assessment Guidelines
Olivia Gourley	Department of Environment and Heritage Protection, Environmental Standards and Compliance, North Region	Oct 2013	Watercourse offsets in the Emerald region, buffer zones around each watercourse and triggers
Tory Shenstone	Formerly Arrow Energy	Oct 2013	Broad-ranging discussions re Community Reference Groups Projects in Queensland
Tony Reibelt	Department of Transport and Main Roads - Road Information Systems	Oct 2013	Acquisition of AADT report data for the Project's proposed transport routes
Kent Beasley	Head of Community Affairs, Wesfarmers Resources	Sep 2013	Broad discussions re Community Relations and Community Reference Groups
Sandra Hobbs	CHDC	August 2013	Interview for Taraborah Newsletter



Stakeholder	Position	Date of Contact	Subject
Various	Local landholders, business owners and Central Highlands Regional Council Managers	May 2013	Emerald Community Information Session held on 16 May 2013 at Central Highlands Regional Council Town Hall facilities
Ann Joubert	Local photographer	May 2013	Expressed interest in providing photography services for the Project
John Stains	Local resident	May 2013	Positive response to Taroborah Newsletter
Louise Dufty	Operations Manager, Queensland Health, Emerald Hospital	April 2013	Interview for Taroborah Newsletter
Councillor Peter Maundrell	Central Highlands Regional Council Councillor	April 2013	Discussion re Taroborah Project impacts upon local community: FIFO workforces, housing impacts, rail crossings, local schools.
Councillor Kevin Cracknell	Central Highlands Regional Council Councillor	April 2013	Discussion re Taroborah Project impacts upon local community: potential pool of local workers, housing prices, community investment.
Councillor Gail Nixon	Central Highlands Regional Council Councillor	April 2013	Discussion re Taroborah Project impacts upon local community: flood issues, housing availability, childcare, education.
Councillor Kevin Pickersgill	Central Highlands Regional Council Councillor	April 2013	Discussion re Taroborah Project impacts upon local community: FIFO workforces, housing impacts, rail crossings, local schools.
Vaughan Johnson MP	State Member of Parliament	March 2013	Taroborah Project discussions re coal dust emissions, workforce supply, road traffic flows, flooding and housing issues.

Stakeholder	Position	Date of Contact	Subject
Landholder A	Local landholders	November 2012	Concerned about underground mine subsidence, noise, dust, night-time lighting and groundwater drawdown as a result of mining activities
Landholder B	Local landholder	November 2012	Issues such as land purchase, noise, dust, night-time lighting and groundwater drawdown were discussed
Landholder C	Local landholder	November 2012	Concerned with land purchase and groundwater drawdown
Landholder D	Local landholders	November 2012	Expressed an interest to sell his land
Landholder E	Local landholder	November 2012	Expressed concerns re increase in traffic volumes, noise, dust and groundwater drawdown as a result of mining activities
Landholder F	Local landholders	November 2012	Groundwater drawdown was a major concern, in addition to noise, dust, increased traffic volumes, flooding, loss of social amenity and cost / availability of engineering maintenance services due to service demand from mining companies
Landholder G	Local landholders	November 2012	Discussed land sale / leasing and provision of earthmoving equipment for mine construction
Landholder H	Local landholders	November 2012	Discussed land leaseback opportunities
Landholder I	Local landholders	November 2012	Raised issues with groundwater drawdown, noise and dust impacting livestock and increased traffic volumes on the Capricorn Highway
Landholder J	Local landholders	November 2012	Concerned about groundwater drawdown, surface water quality, increased traffic flows, impacts from mine noise, dust, lighting and reductions in land values

Stakeholder	Position	Date of Contact	Subject
Landholder K	Local landholder	November 2012	Discussed potential for land purchase / leaseback and impact of groundwater drawdown upon supply of livestock drinking water
Brian Ottone, Peter Maguire, Paul Bell and local councillors	CEO, Mayor and Local Councillors, Regional Council Members, Central Highlands Regional Council (CHRC)	November 2012	The main Project issues for CHRC were groundwater drawdowns, council flood study, transport of coal via rail through the town of Emerald and housing availability and affordability.
Alexis Aylward	Strategic Planning Manager, Central Highlands Regional Council	November 2012	The main Project issues for CHRC were groundwater drawdowns, transport of coal via rail through the town of Emerald and housing availability and affordability.
Janice Moriarty	Manager Community Engagement, Central Highlands Regional Council	November 2012	
Sandra Hobbs	Central Highlands Development Corporation	November 2012	Local development issues were discussed such as accommodation availability and affordability, lack of child care facilities, limited number of GPs available and number of passengers using Emerald airport
Louisa Dufty	Operations Manager, Queensland Health, Emerald Hospital	November 2012	Recommended that the provision of Workcover appointments and medical certificates be provided by the mine employees own General Practitioners (GP's) and not Emerald GPs. Also stated that Emerald Hospital should not be used non-emergency situations
Peter Warrener	Emerald Ambulance Service	November 2012	Discussed staffing of the ambulance service and relocation of the ambulance centre

Stakeholder	Position	Date of Contact	Subject
Rex Gowan	District Director, Queensland Department of Transport and Main Roads (DTMR)	November 2012	DTMR highlighted the need to construct a suitable deceleration lane for access to the Taraborah mine site. The impacts of underground mining subsidence upon the Capricorn Highway and the volume of busses currently employed to transport mining employees and contractors to mine sites were discussed. DTMR was also concerned about the potential impacts of coal trains upon traffic flow at level crossings
Jason Hoolihan	Area Manager, DTMR	November 2012	
Mary Herwin	Principal, Emerald Real Estate	November 2012	Discussed current state of house / unit rental and purchase markets and recent downturn in coal industry with Mr Campbell. House prices have flattened and rental incomes declined.
Shelley Clarke	Principal Advisor Education Services, Qld Department of Education Training and Employment, Emerald	November 2012	Discussed the current limitations on the local education system, the main issue was affordability of housing for both parents and teachers and the fact that this drives some families away from the larger population centres
Steve Murray	Qld Fire & Rescue Service (Central Region) (QFRS)	November 2012	The QFRS summarised the services available in the local area and advised that it expects that Shenhua would maintain fire mitigation measures on the Project site
Elizabeth McIlroy	Central Highlands Aboriginal Corporation	November 2012	Discussed the issues with obtaining suitable local housing for the 70 to 80 indigenous people who live locally
Tegan	Indigenous Child and Youth Health Coordinator, Central Highlands Community Health Centre	November 2012	The provision of healthcare to the local Aboriginal community was discussed and the current limitations on providing access to these services

Stakeholder	Position	Date of Contact	Subject
Senior Sergeant Peter McFarlane	Officer in Charge, Emerald Police Station	November 2012	Discussed the issue of coal trains passing through Emerald potentially restricting traffic flows. The Project would be the only coal mine in the Emerald Police jurisdiction. Also concerned about location of construction workforce and use of private vehicles to travel to and from the Project site
Fiona Murdoch and Rob McNamara	AMCI	August-September 2012	Discussions regarding rail corridors for Galilee Basin coal projects, and upgrades to the Emerald-Longreach line.
Rick Williams	Director, Department of Communities, Child Safety and Disability Services	May 2012	Response to draft Terms of Reference
Sarah Davies	Department of Community Safety	May 2012	
Mark Kahler and Wayne Smith	Queensland Fire and Rescue Service	May 2012	
Peter Warrener	Queensland Ambulance Service	May 2012	
Mark Allen	Department of Housing and Public Works	April 2012	
Joe Willis	Director, Infrastructure Strategy (Schools)	Apr 2012	
Tom Orr	Principal Planner, Integrated Transport Planning, Department of Transport and Main Roads	May 2012	

Stakeholder	Position	Date of Contact	Subject
Andrew Broadbent	Manager, Project Facilitation, Department of State Development, Infrastructure and Planning	May 2012	
Rebecca Gorton	Executive Officer, Department of Tourism, Major Events, Small Business and the Commonwealth Games	May 2012	
Kate Paull	Environment Assessment and Compliance Division, Department of Sustainability, Environment, Water, Population and Communities	May 2012	
Bruce Moy	Executive Director, Queensland Police Service	May 2012	
Jared Hutchinson	Resources and Economic Development, Queensland Treasury	May 2012	
Thalia Allsop	Strategic Planning Unit, Central Highlands Regional Council	May 2012	
Brian Ottone	Chief Executive, Central Highlands Regional Council	May 2012	
Chantelle James	Capricorn Conservation Council	May 2012	
R. J. Koener	Principal Associate, Asia Pacific Strategy	May 2012	



Stakeholder	Position	Date of Contact	Subject
Gordon Delaney	Manager, Water, Planning and Environment, Sunwater	May 2012	
Elyse Riethmuller	Business Manager, Fitzroy Basin Association	May 2012	
Michael and Ann-Marie Walther	Local Landholder	May 2012	
William Crowther	Local Landholder	April 2012	
Lester Matheson	Local Landholder	May 2012	
Cameron and Louisa Backus	Local Landholder	May 2012	
Amy-Rose West	Member of the Public	May 2012	
Various landholders	Interested and Affected Parties	April 2012	Circulation of Public Notice - Draft Terms of Reference to Interested and Affected Parties
QR National (now Aurizon)	Local Management	November 2011	Response to Orion Advisory queries from QR National re train configurations and rail charges and potential capital expenditure charges

1.6 PROJECT APPROVALS

This Project will be assessed by EHP and involves the preparation of an EIS under the administration of the EP Act.

In addition, the Project has been determined to be a Controlled Action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), which is administered by the Department of the Environment. Under the Bilateral Agreement that has been reached between the Queensland State Government and the Commonwealth Government, the EIS process has been accredited by the Commonwealth and therefore, separate assessment documentation for each government will not be required. The Project has also been determined to be a Controlled Action for water resources and therefore, will also be assessed by the Commonwealth Government for impacts upon water resources.

For tenure and approval purposes, the Project includes applications for a ML and EA. Due to the complexity and size of the Project, there is a broad network of legislation and regulations which govern its development and operations.

The summary of Project approvals and legislation presented in this section is supported by the information included in Appendix 2, which details the necessary approvals associated with the development and operation of the Project.

1.6.1 Relevant Legislation and Policy Requirements

The relevant legislation identified for the Project at the time of preparing the EIS is presented in Table 1.3, the applicable key and subordinate legislation is discussed in the following sections.

Table 1.3 Relevant Commonwealth and State Legislation and Associated Subordinate Legislation

Commonwealth Legislation and Associated Subordinate Legislation
<i>Environment Protection and Biodiversity Conservation Act 1999</i>
Environment Protection and Biodiversity Conservation Regulation 2000
Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy 2012
<i>National Greenhouse and Energy Reporting Act 2007</i>
National Pollutant Inventory National Environment Protection Measure
<i>Energy Efficiency Opportunities Act 2006</i>
<i>Native Title Act 1993</i>
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i>

Queensland Legislation and Associated Subordinate Legislation

Environment (including flora, fauna and water)	<i>Environmental Protection Act 1994</i>
	Environmental Protection Regulation 2008
	Environmental Protection (Air) Policy 2008
	Environmental Protection (Noise) Policy 2008
	Environmental Protection (Water) Policy 2009
	Environmental Protection (Waste Management) Regulation 2000
	<i>Environmental Offsets Act 2014</i>
	Environmental Offsets Regulation 2014
	Queensland Environmental Offset Policy 2014
	<i>Environmental Protection and Other Legislation Amendments Act 2000</i>
	<i>Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012</i>
	<i>Waste Reduction and Recycling Act 2011</i>
	Waste Reduction and Recycling Regulation 2011
	<i>Water Act 2000</i>
	Water Regulation 2002
	Water Resource (Fitzroy Basin) Plan 2011
	<i>Nature Conservation Act 1992</i>
	Nature Conservation (Wildlife) Regulation 2006
	<i>Vegetation Management Act 1999</i>
	Vegetation Management Regulation 2012
	<i>Land Protection (Pest and Stock Route Management) Act 2002</i>
	Land Protection (Pest and Stock Route Management) Regulation 2003

	<i>Fisheries Act 1994</i>
	<i>Soil Conservation Act 1986</i>
Queensland Legislation and Associated Subordinate Legislation	
Resources	<i>Mineral Resources Act 1989</i>
	Mineral Resources Regulation 2013
	<i>Forestry Act 1959</i>
Cultural Heritage	<i>Aboriginal Cultural Heritage Act 2003</i>
	<i>Queensland Heritage Act 1992</i>
Development and Operations	<i>Regional Planning Interests Act 2014</i>
	Regional Planning Interests Regulation 2014
	Central Queensland Regional Plan
	<i>Sustainable Planning Act 2009</i>
	Sustainable Planning Regulation 2009
	<i>Local Government Act 2009</i>
Land, Roads and Rail	<i>Transport Infrastructure Act 1994</i>
	Transport Operations (Road Use Management: Mass, Dimensions and Loading) Regulation 2005
	<i>State Development and Public Works Organisation Act 1971</i>
	<i>Land Act 1994</i>
Dangerous Goods	<i>Work Health and Safety Act 2011</i>
	<i>Explosives Act 1999</i>
	Explosives Regulation 2003

1.6.2 Commonwealth Legislation

The following Commonwealth legislation is applicable to the Project.

1.6.2.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) identifies and provides protection for Matters of National Environmental Significance. It streamlines national environmental assessment and approval processes, protects Australian biodiversity and integrates management of important natural and cultural places.

Under the EPBC Act an action will require approval from the Commonwealth Minister for the Environment if the action has, will have, or is likely to have a significant impact on a Matter of National Environmental Significance, where a Matter of National Environmental Significance is:

- World heritage properties;
- National heritage Places;
- RAMSAR wetlands of international importance;
- Listed threatened species and ecological communities;
- Migratory species protected under international agreements;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park;
- Nuclear Actions (including uranium mines); and
- A water resource, in relation to coal seam gas development and large coal mining development.

The Project was referred to the Department for the Environment in January 2012. In February 2012 the Department advised that the proposed action (Project) was determined to be a controlled action with the following controlling provisions:

- Listed threatened species and communities (sections 18 & 18A); and
- Listed migratory species (sections 20 & 20A).

Further correspondence was received on the 24th September 2013 concerning additional controlling provisions following amendments to legislation. In accordance with the EPBC Act, it was determined by the Minister for the Environment that the following controlling provision is also applicable to the Project:

- Water Resources (sections 24D & 24E).

It was determined that the Project may potentially affect, directly or indirectly, the hydrology and water quality of water resources in the area in addition to threatened and migratory species and therefore an

assessment of the impacts is warranted.

1.6.2.2 Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy 2012

The aims of the *EPBC Act Environmental Offsets Policy 2012* (EPBC Act Environmental Offsets Policy) are as follows:

- a) ensure the efficient, effective, timely, transparent, proportionate, scientifically robust and reasonable use of offsets under the EPBC Act;
- b) provide proponents, the community and other stakeholders with greater certainty and guidance on how offsets are determined and when they may be considered under the EPBC Act;
- c) deliver improved environmental outcomes by consistently applying the policy;
- d) outline the appropriate nature and scale of offsets and how they are determined; and
- e) provide guidance on acceptable delivery mechanisms for offsets.

The EPBC Act Environmental Offsets Policy applies to all matters protected under the EPBC Act ('protected matters'). It is designed to protect national environmental assets, known as matters of national environmental significance. EPBC Act environmental offsets apply to the Project as listed threatened species and ecological communities will be potentially affected by residual impacts from mining activities.

1.6.2.3 National Greenhouse and Energy Reporting Act 2007

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) establishes a national framework for Australian corporations to report greenhouse gas emissions, reductions, removals and offsets and energy consumption and production as of 1 July 2008.

Under the NGER Act, corporations are required to register and report if they emit greenhouse gases, produce energy or consume energy at or above the following annual thresholds:

- They control facilities that emit 25 kilotonnes (kt) or more of greenhouse gas, or produce / consume 100 terajoules (TJ) or more of energy; or
- Their corporate group emits 50 kt or more of greenhouse gas, or produce / consume 200 TJ or more of energy by 2010 / 2011.

The Project will emit more than 25 kt of greenhouse gas per annum within its first year of operations and / or consume more than 100 TJ of energy; as such the NGER Act applies to this Project.

1.6.2.4 National Pollutant Inventory National Environment Protection Measure

The first Australian National Environment Protection Measure (NEPM), the National Pollutant Inventory (NPI) NEPM was developed to acquire a broad range of information concerning pollutant emissions and the toxic substances transferred to the local environment. The NEPM was also produced to disseminate pollutant emission information to all sectors of the community in a useful,



accessible and understandable form.

Greenhouse gas (GHG) emissions which arise as a result of Project activities are one example of pollutant releases to which the NPI NEPM applies.

1.6.2.5 Energy Efficiency Opportunities Act 2006

The *Energy Efficiency Opportunities Act 2006* (EEO Act) aims to improve the identification and evaluation of energy-efficiency opportunities by large energy-consuming businesses, thereby encouraging the implementation of cost-effective energy-efficiency opportunities.

This process is achieved by requiring such businesses to assess their energy efficiency opportunities (to a minimum standard) therefore, improving the way in which such opportunities are identified and evaluated.

These businesses are also required to publicly report on the assessment outcomes in order to demonstrate to the community that their energy consumption is being effectively managed.

Since the Project's estimated annual energy consumption was found to be above the EEO Act threshold by the second year of operation, Shenhua will be required to assess and report upon cost-effective energy-efficiency opportunities for the Project.

1.6.2.6 Native Title Act 1993

The main aim of this Act is to recognise and protect native title. The Act provides a mechanism to determine whether or not native title exists, sets the standards for determination of native title claims, establishes procedures for claim compensation, facilitates the development of an Indigenous Land Use Agreement (ILUA) and provides for the establishment of National Aboriginal and Torres Strait Islanders Land Funds.

Since a number of Lots underlying MDL467 are freehold, native title is extinguished for these areas of land. However, other Lots are leasehold and therefore, the existence of native title for these areas needs to be determined.

1.6.3 Queensland State Legislation

The following Queensland State legislation is applicable to the Project.

1.6.3.1 Environmental Protection Act 1994

The *Environmental Protection Act 1994* (EP Act) was established in order to protect Queensland's environment, but at the same time, allowing for development which improves the total quality of life, both now and in the future. However, development must be conducted in a way that maintains the ecological processes on which life depends.

The main objective of the legislation is to provide EHP with the powers to assess and make decisions on applications for environmental authorities (mining activities) and enforcement of the conditions of such authorities.

In order to achieve its objectives, the EP Act utilises a number of mechanisms which include the



following elements:

- Licensing or approving all Environmentally Relevant Activities (ERAs);
- Issuing Environmental Protection Policies (EPPs);
- Allowing for improvement through Environmental Management Programs; and
- Creating a General Environmental Duty.

Under the EP Act, the EHP has assumed responsibility for environmental impact assessment, administration of environmental authorities, as well as compliance, auditing and monitoring of the environmental management of mining.

Under the EP Act, a proponent is required to prepare an EIS, if EHP or the Minister decides an EIS is appropriate for the mining project. The EP Act also provides for the proponent to prepare a voluntary EIS, if it is considered the project may require an EIS. The proponent must apply to EHP for approval to do so.

Schedule 3 of the EP Act details Notifiable activities, which have the potential to cause land contamination. The following Notifiable activities will be conducted on the Project site:

- **24 Mine wastes** - a) storing hazardous mine or exploration wastes, including, for example, tailings dams, overburden or waste rock dumps containing hazardous contaminants; or (b) exploring for, or mining or processing, minerals in a way that exposes faces, or releases groundwater, containing hazardous contaminants; and
- **29 Petroleum product or oil storage** – storing petroleum products or oil; (a) in underground tanks with more than 200 litre (L) capacity; or (b) in above ground tanks with (i) for petroleum products or oil in class 3 in packaging groups 1 and 2 of the dangerous goods code - more than 2,500 L capacity; or (ii) for petroleum products or oil in class 3 in packaging groups 3 of the dangerous goods code - more than 5,000 L capacity; or (iii) for petroleum products that are combustible liquids in class C1 or C2 in Australian Standard AS 1940, 'The storage and handling of flammable and combustible liquids' published by Standards Australia - more than 25,000 L capacity.

Section 319 of the EP Act established a duty for a person to take all reasonable and practicable measures for protecting the environment from harm when carrying out an activity that causes, or is likely to cause, environmental harm. The general environmental duty places a clear onus on operators of industrial sites to develop and implement measures for preventing environmental harm.

The EP Act is the main legislation which governs the environmental performance of this Project.

1.6.3.2 Environmental Protection Regulation 2008

The objective of the *Environmental Protection Regulation 2008* (EP Regulation) is to provide the basis for effective and efficient administration and enforcement of the object and provisions of the EP Act.

The EP Regulation prescribes the criteria that are employed to define level 1 and level 2 mining activities. Level 2 mining activities are lower-risk activities that possess comparatively less potential to cause environmental harm. In contrast, Level 1 mining activities have a potentially greater risk of causing environmental harm.



Schedule 2 of the EP Regulation describes activities that would otherwise be Environmentally Relevant Activities (ERA) and their associated Aggregate Environmental Score (AES). This score is emissions-based and is used to calculate the annual fees for each threshold of an ERA, based upon the environmental risk associated with that ERA.

Resource activities (such as the Project) are covered separately under Schedule 2A of the EP Regulation. The annual fee relevant to the Project is calculated from the highest AES from information provided within the EHP information sheet for ERAs *Summary of fees for environmentally relevant activities* (2013).

Since the Project will operate a variety of ERAs, this Regulation applies to a number of Project activities.

Table 1.4 summarises the proposed Project activities to be conducted on site, which are defined as ERAs in accordance with Schedule 2 of the EP Regulation.

Resource activities are covered separately under Schedule 2A of the EP Regulation and the AES for the Project is presented in Table 1.5.

Table 1.4 ERAs associated with the Project

Environmentally Relevant Activity	Threshold	Aggregate Environmental Score
Chemical storage (ERA 8 (1) (a))	Storing a total of 50 tonnes (t) or more of chemicals of dangerous goods class 1 or class 2, division 2.3 under subsection (1)(a)	51
Fuel Burning (ERA 15 (1))	Using fuel burning equipment that is capable of burning at least 500 kilograms (kg) of fuel in an hour	35
Extracting and Screening (ERA 16 (1))	Extracting, other than by dredging, more than 1,000,000 t of material in a year	57
Crushing, milling, grinding or screening (ERA 33 (1))	Crushing, grinding, milling or screening more than 5,000t of material in a year	0
Sewage Treatment Plant (ERA 63 (1) (b)i)	Treatment Plant for >100-1500 Equivalent Persons	27

Table 1.5 Resource Activity and the Associated AES

Environmentally Relevant Activity	Aggregate Environmental Score
13. Mining Black Coal	128

Under the EP Regulation, a mining activity requires an EA under the EP Act. The holder of a mining tenement cannot carry out any mining activities on site, unless those activities are authorised by an EA for the related tenement. Therefore, the applicant for the mining tenement must also apply for an EA.

If the Project is approved, the EA will be issued with specific conditions relating to matters such as emissions control, maximum emissions levels, waste management, monitoring and reporting.

EA applications are assessed against the 'Standard Criteria' listed in the EP Act. The 'Standard Criteria' can also be found in Appendix 3 of this EIS.

1.6.3.3 Environmental Protection (Air) Policy 2008

The *Environmental Protection (Air) Policy 2008* (EPP (Air)) was developed to identify and protect environmental values of the atmosphere that are conducive to the health and well-being of humans and biological integrity.

The administering authority must consider the requirements of the EPP (Air) when it decides an application for an EA, amendment of a licence or approval of a draft environmental management plan. Schedule 1 of the EPP (Air) specifies air quality indicators and goals for Queensland.

This policy applies to the Project since emissions to air will occur during Project operations.

1.6.3.4 Environmental Protection (Noise) Policy 2008

The *Environmental Protection (Noise) Policy 2008* (EPP (Noise)) provides the framework for the administration and enforcement that aims to meet the objectives of the EP Act with respect to acoustic environmental values.

Section 7 of the EPP (Noise) states:

The environmental values to be enhanced or protected under this policy are—

- (a) the qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems; and*
- (b) the qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following—*
 - (i) sleep;*
 - (ii) study or learn;*
 - (iii) be involved in recreation, including relaxation and conversation; and*

- (c) *the qualities of the acoustic environment that are conducive to protecting the amenity of the community.*

This particular policy applies to the Project, since noise will be produced on site from rock blasting, material excavation, transport and dumping, vehicle movements and CHPP plant operations.

1.6.3.5 Environmental Protection (Water) Policy 2009

Environmental Protection (Water) Policy 2009 (EPP (Water)) provides the basis for the effective administration and enforcement of the EP Act in relation to Queensland waters.

Part 2 section 5 of the EPP (Water) states that the document's purpose is to provide a framework for:

- (a) *identifying environmental values and management goals for Queensland waters; and*
- (b) *stating water quality guidelines and water quality objectives to enhance or protect the environmental values; and*
- (c) *providing a framework for making consistent, equitable and informed decisions about Queensland waters; and*
- (d) *monitoring and reporting on the condition of Queensland waters.*

Coal mine operations (both opencut and underground) will be conducted in the vicinity of two main creeks and a number of other drainage lines, therefore this policy applies to the Project.

1.6.3.6 Environmental Protection (Waste Management) Regulation 2000

The *Environmental Protection (Waste Management) Regulation 2000* (EPR (Waste Management)) aims to protect the environment through minimising the impact of waste on the environment and establishing an integrated framework for minimising and managing waste under the principles of ecologically sustainable development. Of relevance to the Project, Part 2A of the EPR (Waste Management) includes provisions regarding general waste management.

Since a number of different wastes will be generated on site (e.g. tyres, oil filters and sump oil) the EPR (Waste Management) applies to this Project.

1.6.3.7 Queensland Environmental Offsets Policy 2014

Under a number of existing Queensland laws, offsets may be required for certain developments where there is a significant residual impact on prescribed environmental matters. To counterbalance this loss, offset actions, which can include improvement and protection of alternative sites and/or actions that improve environmental viability, aim to provide a conservation outcome that is equivalent to the value being lost.

An 'avoid, mitigate, offset' framework applies to development. This means that in designing the development, impacts on prescribed environmental matters should be avoided wherever possible in the first instance. If impacts cannot be avoided in the area, then the extent of the impacts should be carefully managed and minimised (mitigated). These measures can reduce and, in some cases, remove the need for offsets. However, if a significant residual impact to the environmental values remains, then an offset may be applied.

Offsets are to be delivered in accordance with the Queensland Environmental Offsets Policy 2014 (QEOP), established under the *Environmental Offsets Act 2014* and *Environmental Offsets*



Regulation 2014. The QEOP provides a single, streamlined framework for environment-related offsets in Queensland, and replaces a number of earlier offset policies. However, the QEOP does not limit the functions or powers under the State Development Public Works Organisation Act 1971 (State Development Act) of the Coordinator-General.

Residual impacts requiring offset under the Policy were determined for the Project and include *Vegetation Management Act 1999* (VM Act) Endangered Regional Ecosystems (REs), and REs occurring within a defined distance of a relevant watercourse.

The extent to which the QEOP applies to the Project has been assessed and is further described in Section 4.8.3.8 of the EIS.

1.6.3.8 Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012

The *Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012* (the Greentape Reduction Act) primarily amends the licensing framework under the EP Act. It introduces a staged application process for environmental authorities for all ERAs including prescribed ERAs and resource activities.

The considerations that related to the protection of environmental values have now been separated into two assessment tables specified under the new Schedule 5 of the EP Regulation. These are environmental objectives and performance outcomes.

Table 1 in Schedule 5 will be used for the operational considerations required for the relevant decisions that relate to the environmental values under the aspects of air, water, wetlands, groundwater, noise, waste and land.

Table 2 in Schedule 5 will be used to assess the land use aspects including site suitability, location on site and critical design requirements.

The administering authority will use the regulatory requirements to assess how the Project will impact on the environment.

In addition, the Greentape Reduction Act also amended the EP Act by removing the requirement for environmental management plans for resource activities, with key aspects instead included in the application requirements.

1.6.3.9 Waste Reduction and Recycling Act 2011

The *Waste Reduction and Recycling Act 2011* (Waste Reduction and Recycling Act) has been designed to encourage the proper use of resources by improving ways of reducing and dealing with waste.

This Act applies to the Project, because the proponent will seek to reduce and recycle wastes that are generated on site during both the mine construction and operations phases.

1.6.3.10 Waste Reduction and Recycling Regulation 2011

This regulation defines the various types of waste (including used packaging materials) and regulated



waste addressed by the Act, prescribes the weight measurement criteria, fees and reporting requirements associated with waste reduction and recycling.

As the proponent intends to reduce and recycle wastes that are generated on site, this regulation applies to the Project.

1.6.3.11 Water Act 2000

The purpose of the *Water Act 2000* is to provide for the sustainable management of water (both groundwater and surface water) and other resources, the establishment and operation of water authorities and for other purposes. This Act governs the construction, management and control of water in the following areas:

- Water supply, irrigation and drainage;
- Flood control and prevention;
- Water conservation and protection; and
- Safety and monitoring of dams.

Since the Project will source the majority of its water from both groundwater and surface water (local dam) the works will be conducted in the vicinity of both Taraborah Creek (in the south of the Project site) and Retreat Creek (in the north of the Project site), the Project will be subjected to the provisions of the *Water Act 2000* (Qld).

1.6.3.12 Water Regulation 2002

The *Water Regulation 2002* identifies watercourses and outer bank locations and provides explanations of watercourse valley reaches and terraces. The various processes available for granting unallocated water resources are also defined in this regulation.

This regulation applies to the Project, since the extraction of both groundwater and surface water will be required by the mine for coal washing, dust suppression, ablution and potable water purposes.

1.6.3.13 Water Resource (Fitzroy Basin) Plan 2011

Section 38 of the *Water Act 2000* provides for the Minister to prepare a water resource plan for any part of Queensland to advance the sustainable management of water. The *Water Resource (Fitzroy Basin) Plan 1999* was first released as a Water Allocation Management Plan prior to the act in December 1999.

The objective of the current Water Allocation Management Plan is to provide a framework for the allocation and sustainable management of surface water (including overland flow water) and groundwater (sub-artesian water) in the plan area to meet future water requirements, including the protection of natural ecosystems and security of supply to water users. The plan area includes the Comet, Nogoia, Mackenzie, Isaac, Connors, Dawson and Fitzroy rivers. The plan area also includes the Callide, Carnarvon, Highlands, Isaac Connors and Fitzroy groundwater management areas.

The provisions of the Fitzroy Basin Plan will apply to the Project, where water is taken from any groundwater or surface water body (including any overland flow).



1.6.3.14 Nature Conservation Act 1992

The most relevant sections of the *Nature Conservation Act 1992* (NC Act) to the Project are those which pertain to Wildlife and Habitat Conservation. Wildlife¹ that is protected by the NC Act includes the following classes of wildlife:

- Extinct in the wild wildlife;
- Endangered wildlife;
- Vulnerable wildlife;
- Near threatened wildlife; and
- Least concern wildlife.

Protected species listed under the above classes are published in the associated *Nature Conservation Wildlife Regulation 2006* (NCWR) and are also known as species of conservation significance.

The NC Act 1992 defines 'threatening processes' as:

- (a) Threatening the survival of any protected area, area of major interest, protected wildlife, community of native wildlife or native wildlife habitat; or
- (b) Affecting the capacity of any protected area, area of major interest, protected wildlife, community of native wildlife or native wildlife habitat to sustain natural processes.

Only one species of conservation significance, the Little Pied Bat listed as Near Threatened under the NCWR, has been observed on the Project site. This species will be managed in accordance with the NC Act.

1.6.3.15 Nature Conservation (Wildlife) Regulation 2006

The main purpose of this regulation is to prescribe native Australian wildlife via the following classes:

- (i) Extinct in the wild wildlife;
- (ii) Endangered wildlife;
- (iii) Vulnerable wildlife;
- (iv) Near threatened wildlife; and
- (v) Least concern wildlife.

For other species, categorise them as either international or prohibited wildlife and to state the declared management intent for each of the classes of wildlife.

¹Under the Nature Conservation Act 1992, Wildlife is defined to be any taxon of an animal, plant, protista, procaryote or virus.

1.6.3.16 Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) was proclaimed as part of a planning framework for the management of native vegetation across Queensland. The *Vegetation Management Regulation 2012* (VMR) prescribes the status of each of the Regional Ecosystems identified to occur within Queensland.

Although the VM Act does not apply to the clearing of vegetation on a mining tenement, the scientific basis for biodiversity conservation is still valid and can be used to assess the conservation significance of the vegetation communities on the Project. This Act is further discussed in Appendix 18.

1.6.3.17 Vegetation Management Regulation 2012

This regulation prescribes Endangered Regional Ecosystems for bioregions across Queensland.

Since the VM Act does not apply to vegetation clearance on a mining tenement, the main application of this Regulation to the Project is to identify the conservation significance of local bioregions.

1.6.3.18 Land Protection (Pest and Stock Route Management) Act 2002

The objectives of the *Land Protection (Pest and Stock Route Management) Act 2002* (LP Act) are to consolidate, amend and provide laws for the management, control, prohibition, and regulation of the introduction, spread and keeping of certain plants and animals declared under the Act.

Additionally, under the LP Act, the integrity of stock routes must also be maintained. Under the LP Act, the administration of the stock route network (SRN) is shared between local government and the Department of Natural Resources and Mines (DNRM). Local government is responsible for day-to-day management, while DNRM is responsible for providing the framework of legislation and policy for stock route management and support for local governments.

The LP Act is relevant to the Project with regard to the control and management of declared pest plant (weed) and animal species and also to the SRN which traverses the Project site.

1.6.3.19 Land Protection (Pest and Stock Route Management) Regulation 2003

This regulation provides details of declared pests for category class 1, 2 and 3, as well as the development of Stock Route Network Management Plans. This regulation applies to the Project, since both declared plant and animal pests have been recorded on site, in addition to the presence of stock routes across the Project site.

1.6.3.20 Fisheries Act 1994

The main purpose of the *Fisheries Act 1994* is to provide for the use, conservation and enhancement of the community fisheries resources and fish habitats as a way to apply and promote the principles of ecologically sustainable development. This means using, conserving and enhancing the community's fisheries so that ecological processes on which life depends are maintained and the total quality of life, both now and in the future can be enhanced.

The *Fisheries Act 1994* is relevant to the Project, since fish have been identified on the Project site



and both Taroborah Creek and Retreat Creek provide suitable habitats for fish.

1.6.3.21 Mineral Resources Act 1989

The *Mineral Resources Act 1989* (MR Act) provides for the authorisation of mining tenures in the form of Prospecting Permits, Mining Claims, Exploration Permits, Mineral Development Licenses and Mining Leases. 'Mining' itself is defined in Section 6A of the MR Act.

The principal objectives of this Act are as follows:

- (a) encourage and facilitate prospecting and exploring for and mining of minerals;
- (b) enhance knowledge of the mineral resources of the State;
- (c) minimise land use conflict with respect to prospecting, exploring and mining;
- (d) encourage environmental responsibility in prospecting, exploring and mining;
- (e) ensure an appropriate financial return to the State from mining;
- (f) provide an administrative framework to expedite and regulate prospecting and exploring for and mining of minerals; and
- (g) encourage responsible land care management in prospecting, exploring and mining.

Following the assessment process the Project will apply for a mining tenure (ML), in accordance with the MR Act, in order to undertake resources activities on site.

1.6.3.22 Mineral Resources Regulation 2013

This Regulation defines administrative details of prospecting claims, mining claims, exploration permits, mineral development licenses and mining leases.

Administration of the Project's mining lease will be addressed by this Regulation.

1.6.3.23 Forestry Act 1959

The purpose of the *Forestry Act 1959* (Forestry Act) is 'to provide for forest reservations, the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry material, the property of the Crown on State forests, timber reserves and on other lands'.

Although Fairbairn State forest is located directly adjacent to the north-east, east and south-east of MDL467, in terms of Section 39 of the Forestry Act, the Project will not interfere with any forest products within these State forests and the surrounding leased State owned lands, and note the statutory obligations in event they do.

The taking and use of quarry material from the Project site will occur as a necessary consequence of removing overburden in the opencut mining operation, and a Forestry Act authorisation will be obtained prior to undertaking these operations.

Currently, there are no operational quarries within or immediately surrounding the Project site and the



Proponent is not aware of any known occurrences of commercial quarry materials within the Project site. Prior to final design of the mine, the Proponent will liaise with DAFF to ensure that any potential future quarry operations are not extracted or sterilized through the location of mine infrastructure or offset areas, and seek appropriate approvals.

1.6.3.24 Aboriginal Cultural Heritage Act 2003

The main purpose of the *Aboriginal and Cultural Heritage Act 2003* is to provide effective recognition, protection and conservation of Aboriginal Cultural Heritage.

The *Aboriginal and Cultural Heritage Act 2003* prescribes Duty of Care provisions as:

“A person who carries out an activity must take all reasonable and practicable measures to ensure that the activity does not harm Aboriginal cultural heritage”.

The *Aboriginal and Cultural Heritage Act 2003* requires a Cultural Heritage Management Plan or another approved agreement to be prepared for any project undertaking an EIS.

In order to protect any items of Aboriginal cultural heritage that may be encountered on the Project site during Project development, this Act applies to the Project.

1.6.3.25 Queensland Heritage Act 1992

The Queensland Heritage Act 1992 (QH Act) exists for the protection of Queensland's historical Cultural Heritage since the time of non-indigenous settlement. It provides for the maintenance of a Queensland Heritage Register that records places of significance. Criteria for such places of significance are listed in the Act. The main objectives of the Act are to:

- Provide for the establishment of Queensland heritage council;
- Provide maintenance of a register of places of significance;
- Regulate development of registered places;
- Provide heritage agreements to encourage conservation of regulated places;
- Regulate excavation of sites that contain or may contain objects of significance to Queensland's Cultural Heritage; and
- Provide appropriate powers of protection enforcement.

In accordance with the requirements of section 89 of the QH Act, where 'an archaeological artefact that is an important source of information about an aspect of Queensland's history' is uncovered, and then the Proponent will contact the EHP for direction.

The Act applies to any objects of significance to Queensland's Cultural Heritage that may be encountered on the Project site during both mine construction and operations.

A cultural heritage assessment was conducted on the Project site which indicated one non-indigenous site of moderate local cultural heritage significance and several sites of low local cultural heritage significance. These sites will be managed in accordance with the Historic Heritage Management Plan



(refer to Appendix 22) developed by Converge Heritage and Community consultants for the Project.

1.6.3.26 Regional Planning Interests Act 2014

The *Regional Planning Interests Act 2014* (RPI Act) commenced on 13 June 2014. The RPI Act identifies and protects areas of regional interest within Queensland by managing the impacts and supporting the coexistence of resource activities and other regulated activities in these areas. The RPI Act is supported by the *Regional Planning Interests Regulation 2014* (RPI Regulation).

The RPI Act and RPI Regulation seek to achieve an appropriate balance between protecting priority land uses and delivering a diverse and prosperous economic future for Queensland. The RPI Act provides the framework for implementing the policies of the government's new generation statutory regional plans, of which the Central Queensland Regional Plan 2013 (CQRP) is relevant to the Project.

The RPI Act protects areas of regional interest, which include:

- Priority Living Areas (PLA) – living areas in regional communities;
- Priority Agricultural Areas (PAA) – high-quality agricultural areas from dislocation;
- Strategic Cropping Areas (SCA); and
- Strategic Environmental Areas (SEA) – regionally important environmental areas.

A regional interests development approval (RIDA) may be required when a resource or regulated activity is proposed to be located in an area of regional interest. To obtain a RIDA, an assessment application must be made to the Chief Executive of the Department of State Development Infrastructure and Planning (DSDIP).

The Queensland government recognises that PAAs and SCAs are subject to competing land uses from the mining and urban development sectors and must therefore be conserved and managed for the long-term benefit of the State.

An SCA validation process (under the previous SCL Act legislation) has been undertaken to confirm the SCA area within the Project site.

Since Project development will be conducted within SCA, which is an area of regional interest in the CQRP, the RPI Act legislation applies to this Project and a RIDA may need to be obtained.

1.6.3.27 Sustainable Planning Act 2009

The Sustainable Planning Act 2009 (SP Act) aims to achieve ecological sustainability via the following mechanisms:

- a) Ensuring that the development in question is delivered in an accountable, effective and efficient manner, with sustainable outcomes;
- b) Managing environmental impacts of both the Project's development and premises; and



- c) Planning co-ordination and integration at local, regional and State levels.

Project developments within a mining lease do not fall under the SP Act (s232 (2)) and the SP Regulation (Schedule 4 Table 5), for activities that are authorised under the MR Act or the EP Act. However, off-lease developments are assessable under s232 of the SP Act and Schedule 3 of the SP Regulation, or the appropriate regional planning scheme.

Since a new power transmission line corridor may be required for the Project, the designation of land for such a community infrastructure corridor may be required under Chapter 5 of the SP Act.

1.6.3.28 Local Government Act 2009

The *Local Government Act 2009* (LG Act) was devised to provide a system for local government in Queensland, prescribing the ways in which local government is constituted and the nature and extent of its responsibilities and powers. The Act aims to develop a system of local government that is accountable, effective, efficient and sustainable.

Under the LG Act, the CHRC has created a number of Local Laws, with *Local Law No. 3 (Community and Environment Management) 2011* and *Subordinate Local Law No. 3 (Community and Environment Management) 2011* being applicable to the Project in terms of declaration and management of local pests, vegetation overgrowth, fire hazard management (not regulated by State law) and excessive noise.

1.6.3.29 Transport Infrastructure Act 1994

The *Transport Infrastructure Act 1994* (TI Act) was established to allow for and encourage effective integrated planning and efficient transport infrastructure management. The TI Act provides for the planning and management of road, rail and air infrastructure.

The main objectives of this Act are as follows:

- Provide government with a strategic overview of the State's transport system;
- Facilitate effective planning and management of the State and National road networks;
- Provide influence over the total road network, in order to ensure transport efficiency across the system;
- Provision of a suitable level of safety for and effective community access to transport networks; and
- Encompasses all transport systems, including road, rail, bus ways, ports, air, marine and light rail.

Development of the Project rail loop, connection of the rail loop to the Central West rail line and upgrading this line, constitute activities which are dealt with by the TI Act. Connecting the Project's main access road to the Capricorn Highway will be administered by the TI Act.

1.6.3.30 Transport Operations (Road Use Management Mass, Dimensions and Loading) Regulation 2005

This regulation defines the mass limits for vehicle tyres, wheels and axles of various configurations,



vehicle loading requirements, vehicle loading requirements, guidelines and permits of oversize vehicles and protection of the road transport infrastructure.

This regulation applies to the transport of large and oversized consignments of supplies and equipment for both the construction and operational phase of the Project.

1.6.3.31 State Development and Public Works Organisation Act 1971

The *State Development and Public Works Organisation Act 1971* (State Development and Public Works Organisation Act) provides for State planning and development through a coordinated system of public works organisation, for environmental coordination and for related purposes.

Since this Project has not been declared to be of State significance (and therefore not a prescribed development), this Act does not apply to the Project.

1.6.3.32 Land Act 1994

The *Land Act 1994* (Land Act) provides a framework for the allocation of State land as leasehold, freehold or other tenure and their subsequent management. Under Chapter 4, part 4 of the Land Act, Permits to Occupy are required for the occupation of a reserve, road or unallocated State land. In reference to the Project, where electricity, water, or other infrastructure is to be developed on unallocated State land, reserves or roads, a Permit to Occupy will be required.

Additionally, the Land Act is relevant to the development of the Project through its designation of reserves. A 'reserve for travelling stock' is a reserve under the Land Act designated for travelling stock purposes. Reserves for travelling stock include:

- camping and water reserves;
- pasture reserves; and
- trucking reserves.

Reserves for travelling stock are managed as part of the SRN under the Land Protection Act, with most under the trusteeship of local government. The Taraborah Project site includes stock routes which run both north-south and east-west through MDL467 and therefore, will need to consider Project impacts upon the SRN (refer to Section 4.3 of the EIS for details of the SRN).

Since the Project will require both road and rail connections to the Capricorn Highway and Central West rail line, as well as relocation of a stock route, the Land Act will apply to this Project.

1.6.3.33 Work Health and Safety Act 2011

The *Work Health and Safety Act 2011* (Work Health and Safety Act) has been designed to provide a comprehensive work health and safety environment, to provide for a new definition of asbestos in particular legislation and for a work health and safety levy, to amend other legislation as a consequence and to amend the Workers' Compensation and Rehabilitation Act 2003 for particular purposes.

Note that the Work Health and Safety Act repealed the Dangerous Goods Safety Management Act 2001 and as of 1 January 2012 regulates dangerous goods in Queensland.



Since both petroleum hydrocarbons and explosives will be stored and used on the Project site (as a source of vehicle fuel and for rock blasting, respectively), the Work Health and Safety Act applies to the Project.

1.6.3.34 Explosives Act 1999

The *Explosives Act 1999* (Explosives Act) assists the Department of Natural Resources and Mines (DNRM) in its role in ensuring that the community is safe from the hazards of explosives.

Accordingly, under the Explosives Act, various licences and/or permits are required for the use, storage, transportation, manufacture, and possession of explosives.

Since rock blasting will be conducted on the Project site, a Licence to Use Explosives (section 53 of the Explosives Act) will be required and therefore this Act applies to the Project.

1.6.3.35 Explosives Regulation 2003

The *Explosives Regulation 2003* (Explosives Regulation) defines authorised and prohibited explosives, and provides advice on the possession, use, import / export, manufacturing, selling and storing of explosives.

Under section 29 of the Explosives Regulation, a License to Use Explosives permits the use, possession, storage and transportation of explosives in the manner stated in the licence.

The Explosives Regulation is applicable to this Project since rock blasting will need to be conducted on site.

1.6.3.36 Other Potentially Relevant Legislation and Policy

Legislation that may apply to this Project either during the mine construction or operations phases, but has not been listed as key legislation or described in this section, is presented in Table 1.6.

Table 1.6 Other Potentially Relevant Queensland State Legislation

Other Potentially Relevant Queensland State Legislation
<i>Aboriginal Land Act 1991</i>
<i>Coal Mining Safety and Health Act 1999</i>
<i>Coal Mining Safety and Health Regulation 2001</i>
<i>Electricity Act 1994</i>
<i>Local Government Act 2009</i>
<i>Plumbing and Drainage Act 2002</i>
<i>Subcontractors Charges Act 1974</i>
<i>Transport Operations (Road Use Management) Act 1995</i>
<i>Transport Operations (Road Use Management – Dangerous Goods) Regulation 2008</i>
<i>Water Supply (Safety and Reliability) Act 2008</i>

1.6.4 Required Approvals

The Key Project approvals and permits that will be required for the Project are presented in Table 1.7.

Table 1.7 Key Project Approvals

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Mining Approvals				
Mining Lease (ML)	Required to undertake of specified mining activities within the defined lease location.	<i>Mineral Resources Act 1989, s245</i>	Department of Natural Resources and Mines (DNRM)	It is expected that the required ML will be granted in 2017
Transport, storage and use of hazardous substances	To manage and minimise the risks associated with the transport, storage and use of hazardous substances	<i>Work Health and Safety Act 2011</i> <i>Work Health and Safety Regulation 2011</i> <i>Transport Operations (Road Use Management—Dangerous Goods) Regulation 2008</i> <i>Coal Mining, Safety and Health Act 1999</i>	Department of Justice and Attorney General (DJAG)	Approvals for the transport, storage and use of hazardous substances will be sought in 2017
License to transport, store and use explosives	Applicable to the transport, storage and use of explosives	<i>Explosives Act 1999</i> <i>Explosives Regulation 2003</i>	DNRM	Explosives license will be applied for once the main Project approvals (ML and EA) have been obtained in 2017

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Blasting Notification Form	Notification is required if blasting is to be conducted on the Project site	<i>Explosives Regulation 2003</i>	DNRM	Submit form one day prior to commencement of blasting activities
Land Approvals				
Landowner Compensation Agreement	Landowner compensation must be agreed before an ML is granted, either by agreement with the landowner or via the Land Court	<i>Mineral Resources Act 1989</i>	DNRM Land Court	Landowner negotiations are currently in progress, but will need to be completed by 2016, when the ML application will be submitted
Regional Interests Development Approval	A Regional Interests Development Approval (RIDA) will be required as an area of regional interest (Strategic Cropping Area) is impacted by the project.	<i>Regional Planning Interests Act 2014</i>	Department of State Development and Infrastructure Planning	Required before any resource activities can commence, so expected to be sought in 2017.

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Environmental Approvals				
Level 1 EA (Mining Activities)	Imposes conditions upon mining operations to reduce or avoid potential environmental impacts	<i>Environmental Protection Act 1994</i> <i>Environmental Protection Regulation 2008</i>	EHP	An EA for this Project is expected to be granted in 2017
Commonwealth Approvals				
Assessment of Matters of National Environmental Significance (MNES).	The Department of the Environment must review the adequacy of the assessment of MNES in accordance with the Bilateral Agreement between the Commonwealth of Australia and the State of Queensland	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Department of the Environment	<p>The Project was determined to be a controlled action under the EPBC Act in February 2012 under sections 18 and 18A (listed threatened species and communities) and sections 20 and 20A (listed migratory species) of the EPBC Act</p> <p>The Department of the Environment also advised in September 2013 that sections 24D and 24E of the EPBC Act are also controlling provisions for the proposed action since it is likely to have a significant impact on a water resource</p> <p>Federal approval for the Project under this Act is anticipated in 2015. The EPBC assessment decision must be made within 40 business days of receiving finalised EIS documentation</p>

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Water Approvals				
Water Licenses and/or Permits	A water license is required to take or interfere with water, including that from a water course, overland flow or groundwater. This license is used to manage local water resources. If the taking or interfering is temporary, a water permit may be required.	<i>Water Act 2000</i> <i>Water Regulation 2002</i> <i>Water Resource (Fitzroy Basin) Plan 2011</i>	DNRM	A water license and/or permit will be applied for during the EA approval process in 2015, prior to any water taking
Native Title and Cultural Heritage Approvals				
Development of a Cultural Heritage Management Plan (CHMP) with claimants	In order to protect Aboriginal Cultural Heritage, a CHMP will be required in consultation with the Project site Traditional Owner claimants – Bidjara #7 and Western Kangoulu People. The CHMP will be augmented by a Duty of Care Statement.	<i>Aboriginal Cultural Heritage Act (ACHA) 2003</i>	EHP	<p>Two competing Native Title Claims have been submitted and accepted for registration over an area that includes MDL467, one with the Bidjara # 7 People, initiated in January 2013, and another with the Western Kangoulu People which was initiated on April 2013.</p> <p>A CHMP is being negotiated with the relevant Aboriginal management body.</p>

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Infrastructure Approval				
Connection Enquiry and application to connect to an electricity network	<p>The Project's power requirements will be met by connecting to the existing national electricity grid (66 kilovolt (kV) / 11 Kv, 25 mega volt amp (Mva) substation).</p> <p>An emergency generator will also be located on the Project site, in order to provide continuity of electricity supply</p>	<i>National Electricity Code, chapter 5</i>	Ergon Energy (Ergon)	A Connection Enquiry will likely be made during the EA application process in 2015. Within 2 weeks, the Network Service Provider must reply to a Connection Enquiry
Alteration or Improvement of Roads – Section 33 Approval for Works	Construction of road intersection at Taroborah to permit movement traffic between the Capricorn Highway and the Project site	<i>Transport Infrastructure Act 1994</i>	DTMR	<p>Road construction will be negotiated and resolved between Shenhua and the DTMR</p> <p>Approval for road construction will be sought prior to the beginning of opencut construction in 2017</p>
Road Corridor Permit	Permit required to undertake works, activities or erect a structure on a State Controlled Road corridor	<i>Transport Infrastructure Act 1994</i>	DTMR	<p>Road construction will be negotiated and resolved between Shenhua and the DTMR</p> <p>Approval for road construction will be sought prior to the beginning of opencut construction in 2017</p>

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Traffic Control Permit and Traffic Management Plan	A plan is required for controlling traffic on a State Controlled Road as part of the road intersection construction	<i>Transport Infrastructure Act 1994</i>	DTMR	Traffic control will be required during mine construction in 2017-18. A traffic control permit can only be issued (seven business days are required for permit issue) once approval to occupy a State Controlled Road has been obtained. A Traffic Management Plan must be submitted to the department 14 days prior to the traffic control activity
Permit for safe movement of vehicles	Permit required for the transport of large items of mining equipment	<i>Transport Operations (Road Use Management: Mass, Dimensions and Loading) Regulation 2005</i>	DTMR	It is anticipated that the transport of large items of mining equipment will commence in 2018
Approval to interfere with a railway line	Construction of a rail loop to connect the train-load-out facility with the Central West rail line. Upgrading the Central West rail line	<i>Transport Infrastructure Act 1994</i>	DTMR	Rail loop construction will take place during mine construction in 2018
Acquisition / Reconfiguration of a Lot (Development Permit) or Permit to Occupy (if tenure is to be temporary (Permit))	Creation of an easement / corridor; Required only where located off ML(s). May be required for pipeline improvements or construction for release of water	<i>Sustainable Planning Act 2009</i> <i>Land Act 1994, Chapter 4, Part 4</i>	DNRM	Statutory approval within 40 – 80 business days, however, detailed plans are to be confirmed and will be submitted if required following approval. Release of water not expected to be required until 2022.

Requirement	Purpose	Legislation	Administering Authority / Parties	Approval Timing
Local Government				
Local Law Permit	Project construction and operational activities are anticipated to fall under Local Law No. 3 (Community and Environmental Management) in terms of pest management, vegetation overgrowth, fires and fire hazards and production of noise which exceeds agreed standards	<i>Local Government Act 2009; Local Law No 3 (Community and Environment Management) 2011 Subordinate Local Law No. 3 (Community and Environment Management) 2011</i>	Local Government	At least one week prior to commencing activity

1.6.4.1 Environmental Offsets

Additionally, the Queensland Government's Environmental Offset Policy has been considered for the Project. The QEOP provides an opportunity for a development proponent to propose offsets as a way of preserving the extent of environmentally and ecologically relevant habitats. Offsets can be proposed where impact avoidance and mitigation have already been demonstrated.

Specifically, offsets may be required for ecologically important or threatened vegetation communities, marine fish habitat and koala habitat. Offset should consider the protection of alternate and comparable habitat. The policy has been developed to be a last resort for environmental preservation and ensures consistency among offset proposals. The Queensland Environmental Offset Policy can be applied to Level 1 mining activities to impose environmental offsets conditions under section 209 of the EP Act.

The outcomes of this Environmental Offset Policy assessment are presented in Section 4.8 of the EIS.

1.6.5 Planning Processes and Standards

Queensland's framework for assessing Project planning and development is governed by the SP Act. However section 232(2) of the SP Act and Schedule 4 of the SP Regulation declare that activities authorised under the MR Act and all aspects of development for a mining activity (to which an EA (mining activities) applies under the EP Act), do not have to be assessed against a planning scheme.

Even though generally, mining activities are exempt from the SP Act, an assessment of the Project has been undertaken against the State Planning Policies and the Central Highlands Regional Council Planning Scheme (former Emerald Shire Planning Scheme). A summary of this assessment is provided in the following sections, in order to identify relevant land-use planning issues. Furthermore, the key codes, standards and guidelines that are relevant to the monitoring and control of the Project's on-site operations are identified in Section 1.6.5.3.

1.6.5.1 State Planning Policy

The State Planning Policy (SPP) is a new statutory planning instrument that relates to matters of State interest as currently applicable under the SP Act. This policy incorporates the Central Queensland Regional Plan (CQRP) and provides a framework that simplifies and clarifies the State's interests in relation to planning and development by amalgamating a number of previous state planning policies under one umbrella. These policies need to be considered in the assessment of relevant development applications lodged under the SP Act.

Under the CQRP, a number of the former SPPs that have been incorporated and are considered to be relevant to the Project are presented in Table 1.8.

Table 1.8 Central Queensland Regional Plan Policies Relevant to the Project

State Planning Policy	Response
<i>Priority Agriculture Areas and Priority Agricultural Land Uses</i>	The CQRP framework is designed to protect Priority Agricultural Areas (PAAs) and Priority Agricultural Land Uses (PALUs) from projects which result in permanent impacts or diminished productivity within these former Protection Zone areas. Further, Strategic Cropping Areas (SCA) must also be considered when assessing a project.
<i>Infrastructure</i>	The CQRP framework prioritises the minimisation of impacts on the region's infrastructure that supports economic growth, including transport networks and water supplies.
<i>Priority Living Areas</i>	The CQRP aims to protect communities and individuals from the impacts of air, noise and odour emissions, and the impacts from hazardous materials. In addition this policy aims to protect industrial land uses from unreasonable encroachment.
<i>Healthy Waters</i>	The CQRP ensures that development is planned, designed, constructed and operated to manage stormwater and waste water in ways that protect the environmental values prescribed in the Environmental Protection (Water) Policy 2009.

1.6.5.2 Central Highlands Regional Council

The Central Highlands Regional Council (CHRC) was formed in 2008 during the QLD local government amalgamations and consists of the former local government areas of Bauhinia, Duaringa, Emerald and Peak Downs Shires.

The CHRC does not currently have its own planning scheme but operates under the planning schemes of each of the former shire councils. The Project lies within the former Emerald Shire and the planning scheme for this shire (*Planning Scheme for Emerald Shire (Amendment No 2) 2011*) is discussed in Section 1.6.5.3 below.

1.6.5.3 Emerald Shire

Planning Schemes

The Project area lies within the former Emerald Shire and the Emerald Shire Planning Scheme (the Planning Scheme) came into effect on 22 January, 2007. This scheme has since undergone amendments in 2008 and the most recent version was adopted on 12 December 2011, is dated 10 January 2012 and represents the current authority. Note that the Project area lies within the Planning Scheme's Rural Zone.

Part 3 of the document defines the foundations of the Planning Scheme and desired environmental



outcomes via the following three key areas:

- Social elements;
- Environment elements; and
- Economic elements.

Local Laws

A local law is a law adopted by a local government that reflects community needs and ensures the good rule and government of the local government area. Local laws are created via the process set out in the *Local Government Act 1993*.

Prior to local government amalgamations in March 2008, the Project area was formerly within the Emerald Shire local government area. CHRC has developed and adopted local laws following a period of consultation, which concluded on 23 December, 2011.

Project construction and operational activities are anticipated to fall under Local Law No. 3 (Community and Environmental Management) and have a potential impact upon the following relevant parts of this local law:

- Part 2 – Declared local pests;
- Part 4 – Fires and fire hazards;
- Part 5 – Community Safety Standards; and
- Part 6 – Noise Standards.

Since the Capricorn Highway is by managed by the State (DTMR), Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) will not apply to the Project.

Codes, Standards and Guidelines

The following Codes, Standards and Guidelines apply to this Project:

- EHP Guideline –*Guideline (EM1128) Environmental Impact Statements - Triggers for environmental impact statements under the Environmental Protection Act 1994 for mining, petroleum and gas activities* - EM1128. v.2 (2013);
- EHP Guideline - *Guideline (EM1122) Rehabilitation Requirements for Mining Projects* (EHP 2011);
- EHP Guideline - *Guideline for contaminated land professionals*(2012);
- EHP Guideline–*Guideline (EM112) Technical guideline—Waste water release to Queensland waters. v. 1* (2012);
- EHP Guideline - *Application requirements for activities with noise impacts*. EM962. v.1;
- *EHP Guideline - Guideline (EM610) Final and Progressive Rehabilitation Reports and Audit Statements for Level 1 Mining Lease Projects* (EHP 2012);



- EHP Guideline–*Guideline (EM1010) Financial assurance under the Environmental Protection Act 1994. v.1 (2013)*;
- *Queensland Government Environmental Offsets Policy (Environmental Protection Agency 2008)*;
- EHP Guideline – *Resource Assessment: Establishing draft environmental values, management goals and water quality objectives (2013)*;
- *Department of Environment and Heritage Protection (2009) Queensland Water Quality Guidelines, v.3 (2013)*;
- *Guidelines for Assessment of Road Impacts of Development (Department of Main Roads 2006)*;
- *Technical Guidelines for Open Pit Rehabilitation (DME 1995a)*;
- *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland (DME 1995b)*;
- Australian Standard 1940-2004/Amdt 2-2006: *The storage and handling of flammable and combustible liquids*;
- Australian Standard AS 3780-2008/Amdt 1-2009: *The storage and handling of corrosive substances*;
- Australian Standard 4804-2001: *Occupational Health and Safety Management Systems*;
- Australian / New Zealand Standard ISO 31000-2009: *Risk Management – Principles and guidelines*;
- Standards Australia / Standards New Zealand Handbook - HB 203:2012 *Managing environment-related risk*;
- Australian Standard 1269-2005: *Occupational noise management*;
- JORC Code: *Australasian Code for Reporting of Mineral Resources and Ore Reserves*(2012) (the JORC Code);
- Department of Primary Industries Planning Guideline: *The Identification of Good Quality Agricultural Land (DPI & DHLGP 1993)*;
- Australia and New Zealand Environment and Conservation Council (2000) *Guideline: National Water Quality Management Strategy: An introduction to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*; and
- *National Environmental Protection Measure (NEPM) for Ambient Air Quality (1998)*.

1.6.5.4 Central Queensland Strategy for Sustainability – 2004 and Beyond

A regional plan for management of the natural resources and environments of the Central Queensland region river catchments has been developed by the people of Central Queensland via



the Fitzroy Basin Association (FBA). This plan is titled *The Central Queensland Strategy for Sustainability – 2004 and Beyond (CQSS2)* (updated August 2005) and seeks to protect the region's assets through addressing key pressures.

Where applicable, potential Project impacts (both positive and negative) upon the condition of local resources for each of the assets addressed by this plan have been assessed, summarised and presented in Table 1.9.

Table 1.9 Summary of Potential Project Impacts Upon Local Resources

Resource		
Resource Condition Target	Indicators	Potential Project Impacts and Management
1. Land salinity. 2. Soil condition.	Area of land threatened by shallow or rising water tables. Soil condition.	Increases in land salinity as a result of Project activities are not considered to be a risk. The condition of soil on the Project site will be managed in order to avoid any significant decline in soil condition during Project activities
3. Native vegetation communities 'integrity.	Native vegetation extent and distribution. Native vegetation condition	Native vegetation will be cleared in particular areas of the Project site in order to develop the mine. However, these areas will be progressively rehabilitated in order to return the site to pre-mining land uses where possible
4. Inland aquatic ecosystems integrity (rivers and other wetlands).	River condition. Wetland ecosystem extent and distribution. Wetland ecosystem condition	Project impacts upon wetland ecosystems will be avoided where possible. However, land subsidence created by underground mining will have some minor impact upon local drainage paths and a wetland system in the northern sector of the Project site
5. Estuarine, coastal and marine habitats integrity.	Estuarine, coastal and marine habitat extent and distribution. Estuarine, coastal and marine habitat condition.	Not applicable – the Project site lies approximately 220 km from the nearest coastline. Site surface water that has been impacted by Project activities will be managed to avoid potential impacts upon downstream catchment areas

Resource		
Resource Condition Target	Indicators	Potential Project Impacts and Management
6. Nutrients in aquatic environments.	Nitrogen in aquatic environments. Phosphorus in aquatic environments.	The most common effects of increased nitrogen and phosphorus levels in aquatic ecosystems are increases in the abundance of algae and aquatic plants which can lead to eutrophication. Management strategies include surface water management, restricting phosphate detergents, sewage treatment and monitoring.
7. Turbidity / suspended particulate matter in aquatic environments.	Turbidity / suspended solids.	Surface water on the Project site will be managed in order to avoid potential impacts upon local and regional downstream catchment areas
8. Surface water salinity in freshwater aquatic environments.	In-stream salinity.	Not applicable – the Project site lies approximately 220 km from the nearest coastline. Site surface water that has been impacted by Project activities will be managed to avoid potential impacts upon local and regional downstream catchment areas
9. Significant native species and ecological communities.	Selected significant native species and ecological communities extent and conservation status	Native vegetation will be cleared in particular areas of the Project site in order to develop the mine. However, these areas will be progressively rehabilitated in order to return the site to pre-mining land uses where possible
10. Ecologically significant invasive species.	Selected ecologically significant invasive species extent and impact.	Invasive species which persist on site following site clearance will be managed in order to minimise their impact upon local habitats

Management Action		
Management Action Target	Management Action Target	Management Action Target
1. Critical assets identified and protected.	Critical Assets Register	The Project site critical assets of land, ecosystems, groundwater, surface water, air, cultural heritage, local and regional economic and social values are described in the EIS, potential Project impacts identified and impact mitigation strategies outlined
2. Water allocation plans developed and implemented.	Water Allocation Plans	Water consumption by the Project will be managed within the confines of local water allocation plans. It is anticipated that sufficient groundwater will be available to supply more than the Project water requirements
3. Improved land and water management practices adopted.	Adoption of sustainable Management Practices	Sustainable land and water management practices will be employed on site in order to minimise the impact of Project operations upon the local environment

1.7 ACCREDITED PROCESS FOR CONTROLLED ACTIONS UNDER COMMONWEALTH LEGISLATION

The Project was referred to the Commonwealth Minister for the Department of Sustainability Environment, Water, Population and Communities (now Minister for the Department of the Environment) on 18 January 2012 (EPBC Referral Number: 2012/6262) for consideration of the Project's potential impacts upon matters of national environmental significance which are protected under the *EPBC Act 1999*.

The proposed Project was declared to be a Controlled Action under Section 75 of this Commonwealth legislation on 20 February 2012, the controlling provisions being the Project's potential impacts upon the following matters of national environmental significance:

- Listed threatened species and communities (sections 18 and 18A); and
- Listed migratory species (sections 20 and 20A).

Further correspondence was received on the 24th September 2013 concerning additional controlling provisions following amendments to legislation. In accordance with the EPBC Act, it was determined by the Minister for the Environment that the following controlling provision is also applicable to the Project:



- Water Resources (sections 24D & 24E).

It was determined that the Project may potentially affect, directly or indirectly, the hydrology and water quality of water resources in the area in addition to threatened and migratory species and therefore an assessment of the impacts is warranted.

The Project is to be assessed and approved under the *EPBC Act 1999*, before it may proceed. The matters to be addressed in the EIS are set out in section 6 and Schedule 1 of the *Environmental Protection Regulation 2008*, which mirrors Schedule 4 of the Commonwealth's *Environment Protection and Biodiversity Conservation Regulations 2000*.

The QLD State EIS process has been accredited under An Agreement between the Commonwealth and the State of Queensland under Section 45 of the *EPBC Act 1999* concerning Environmental Assessment for the purposes of the Commonwealth's assessment of the project under Part 8 Section 87 of this Act (the Bilateral Agreement).

Section 5 of this EIS assesses the Project's relevant impacts upon matters of national environmental significance that are covered by the controlling provisions. This information was generated in order to provide the Commonwealth Minister with enough Project information and relevant impacts to approve the Project under the *EPBC Act 1999*.