



Elimatta

Initial Advice Statement

Prepared for:
Taroom Coal Proprietary Limited

October 2009



Document History and Status

Issue	Rev.	Issued To	Qty	Date	Reviewed	Approved
1	0	NEC	1	08.08.08	FT	FT
1	1	NEC	1	25.09.08	GB	GB
2	0	NEC	1	19.05.09	PI	GB
3	1	NEC	1	14.10.09	AGP	GB
3	2	DERM	1	20.10.09	PI	GB
4	1	DERM	1	28.10.09	PI	GB

Author: Gareth Bramston
Project Manager: Gareth Bramston
Name of Client : Northern Energy Corporation Limited
Name of Project: Elimatta
Title of Document: Initial Advice Statement
Document Version: Final

This controlled document is the property of AustralAsian Resource Consultants Pty Ltd and all rights are reserved in respect of it. This document may not be reproduced or disclosed in any manner whatsoever, in whole or in part, without the prior written consent of AustralAsian Resource Consultants Pty Ltd. AustralAsian Resource Consultants Pty Ltd expressly disclaims any responsibility for or liability arising from the use of this document by any third party.



TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	THE PROPONENT	1
1.2	PROJECT OVERVIEW.....	1
1.3	PROJECT LOCATION	2
1.4	PROJECT TENEMENTS AND OWNERS	4
2.0	PROPOSED PROJECT ACTIVITIES	6
2.1	EXPLORATION.....	6
2.2	LAND DISTURBANCE	6
2.3	MINE INFRASTRUCTURE	8
2.4	RESOURCES DESCRIPTION	8
2.5	COAL MINING.....	9
2.6	COAL PROCESSING	9
2.7	COAL TRANSPORT	9
2.8	SITE AND ACCESS ROADS.....	10
2.9	WATER REQUIREMENTS	10
2.10	POWER SUPPLY	10
2.11	STAFFING AND ACCOMMODATION	10
2.12	REHABILITATION.....	11
2.12.1	Exploration	11
2.12.2	Overburden Dumps	11
2.12.3	Final Voids.....	11
2.12.4	CHPP and Infrastructure.....	11
2.12.5	Access Roads.....	12
2.12.6	Revegetation Methods	12
2.13	ENVIRONMENTALLY RELEVANT ACTIVITIES	12
3.0	DESCRIPTION OF THE EXISTING ENVIRONMENT	14
3.1	REGIONAL CLIMATE	14
3.2	CURRENT LAND USE	14
3.3	LOCAL GEOLOGY AND TOPOGRAPHY	14
3.4	ENVIRONMENTALLY SENSITIVE AREAS	15
3.5	LOCAL WATER RESOURCES	17
3.6	SOIL AND LAND SUITABILITY	17
3.7	NATURE CONSERVATION	17
3.7.1	Flora.....	18
3.7.2	Fauna.....	19
3.8	NOISE AND AIR.....	25
3.9	GROUNDWATER.....	25
3.10	INDIGENOUS CULTURAL HERITAGE	25
3.11	EUROPEAN CULTURAL HERITAGE	25
4.0	COMMUNITY CONSULTATION	26

4.1	CONSULTATION PROCESS	26
5.0	ASSESSMENT OF EIS TRIGGER CRITERIA	28
6.0	BIBLIOGRAPHY	29

LIST OF FIGURES

Figure 1:	Regional Location of the Project Site.....	3
Figure 2:	Elimatta Mining Tenements Map.....	5
Figure 3:	Conceptual Layout Plan of the Proposed Mining and Processing Areas.	7
Figure 4:	Taroom Climate Data.....	14
Figure 5:	Category B Environmentally Sensitive Areas underlying the Elimatta Project.....	16

LIST OF TABLES

Table 1:	Elimatta Coal Resource	9
Table 2:	Workforce Requirement	10
Table 3:	ERAs Associated with the Project	13
Table 4:	Amphibian Species Observed on the Project Sites	20
Table 5:	Fish Species Observed on the Project Sites.....	20
Table 6:	Reptile Species Observed on the Project Sites.....	20
Table 7:	Mammal Species Observed on the Project Sites	21
Table 8:	Bird Species Observed on the Project Sites	22
Table 9:	EIS Trigger Criteria	28

LIST OF ABBREVIATIONS

AARC	-	AustralAsian Resource Consultants Pty Ltd
CHPP	-	Coal Handling and Preparation Plant
DERM	-	Department of Environment and Resource Management
EIS	-	Environmental Impact Statement
EM Plan	-	Environmental Management Plan
EP Act	-	<i>Environmental Protection Act 1994</i>
EPBC Act	-	<i>Environment Protection and Biodiversity Conservation Act 1999</i>



ERE	-	Endangered Regional Ecosystem
EPC	-	Exploration Permit for Coal
ha	-	hectares
IAS	-	Initial Advice Statement
km	-	kilometres
LP Act	-	Land Protection (Pest and Stock Route Management) Act 2002
m	-	meters
mm	-	millimetres
MDL	-	Mineral Development Licence
ML	-	Mining Lease
Mt	-	Million Tonnes
NCWR	-	<i>Nature Conservation Wildlife Regulation 2006</i>
NEC	-	Northern Energy Corporation
pa	-	per annum
RE	-	Regional Ecosystem
ROM	-	Run of Mine
Taroom Coal	-	Taroom Coal Proprietary Limited
t	-	tonnes

1.0 INTRODUCTION

AustralAsian Resource Consultants Pty Ltd (AARC) has been commissioned by Northern Energy Corporation Limited (NEC) to prepare an Initial Advice Statement (IAS) for the development of the Elimatta Project.

The proposed Elimatta Project (The Project) is located within the Western Downs Regional Council, approximately 35 kilometres (km) west of the Wandoan township on the Darling Downs in southern Queensland. The Project will involve mining and beneficiation of coal at the project area and transport of product coal to link to the Surat Basin Rail line. Coal will be railed to Gladstone for export through the Wiggins Island Coal Terminal.

An IAS for the Project was previously submitted (June 2009) as supporting documentation for a Mining Lease (ML) application over the proposed mining area (Exploration Permit for Coal (EPC) 650). An application for an Environmental Authority (EA) was also submitted with the ML application. The Project was determined to constitute a Level 1 mining project with an Environmental Impact Statement (EIS) required.

This IAS accompanies the draft Terms of Reference (TOR) for the EIS and includes some minor updates to the proposed mine layout.

1.1 THE PROPONENT

The Project proponent is Taroom Coal Proprietary Limited (Taroom Coal), ACN 079 251 443. Taroom Coal is a wholly owned subsidiary of Northern Energy Corporation Limited (NEC), ABN 90 081 244 395. The Project's exploration tenements are held in the name of Taroom Coal but all business with the tenements is carried out by NEC on Taroom Coal's behalf.

NEC is a Brisbane based coal exploration and development company which listed on the Australian Stock Exchange in February 2005. NEC has, either directly or through wholly owned subsidiaries, numerous granted exploration tenements in Queensland and northern New South Wales which contain both thermal and coking coals. Elimatta is one of four active projects NEC is progressing from resource identification and proving through to mine development and operation.

NEC's office is located at:

Level 5
60 Edward Street
Brisbane, Qld.
GPO Box 5283
Phone: (61) 7 3303 0695
Facsimile: (61) 7 3303 0601

Website; www.northernenergy.com.au

1.2 PROJECT OVERVIEW

The Elimatta Project consists of the development of an estimated 250 Million tonne (Mt) thermal coal resource of the Juandah formation in the Surat Basin, south east Queensland. The Project is planned



to mine up to 8.0 Mt of Run of Mine (ROM) coal per annum (pa) to produce on average 5.0 Mtpa of product coal for export. The target commencement date for production is mid 2013 with this timing dependent on the availability of services and infrastructure required for product coal transportation and shipping. The mine life is estimated at 25+ years.

The Project will involve open cut mining using truck and excavator methods. A Coal Handling and Preparation Plant (CHPP) and associated mine infrastructure will be required on site. Topsoil will be segregated for later use in rehabilitation, and overburden disposed of both in-pit, and in out-of-pit spoil dumps located on site and contiguous with the pit excavation. Processing will involve crushing, screening and washing to separate coal from waste materials. Waste rejects will be dried, with water recycled to the processing plant and solids disposed of within spoil dumps.

Product coal will be transported via rail approximately 42 km to join the Surat Basin Rail to the north east of Wandoan township. Product coal will be railed to the planned Wiggins Island Coal Terminal at Gladstone for export.

1.3 PROJECT LOCATION

The Project site is located in southern inland Queensland, approximately 35 km west of the Wandoan township and 380 km north-west of Brisbane, as shown in Figure 1. Access is via the Yuleba Taroom Road west of the Leichhardt Highway. The Proposed Mining Leases (ML) for both mine operations and transport will cover an area of approximately 4,280 hectares (ha).



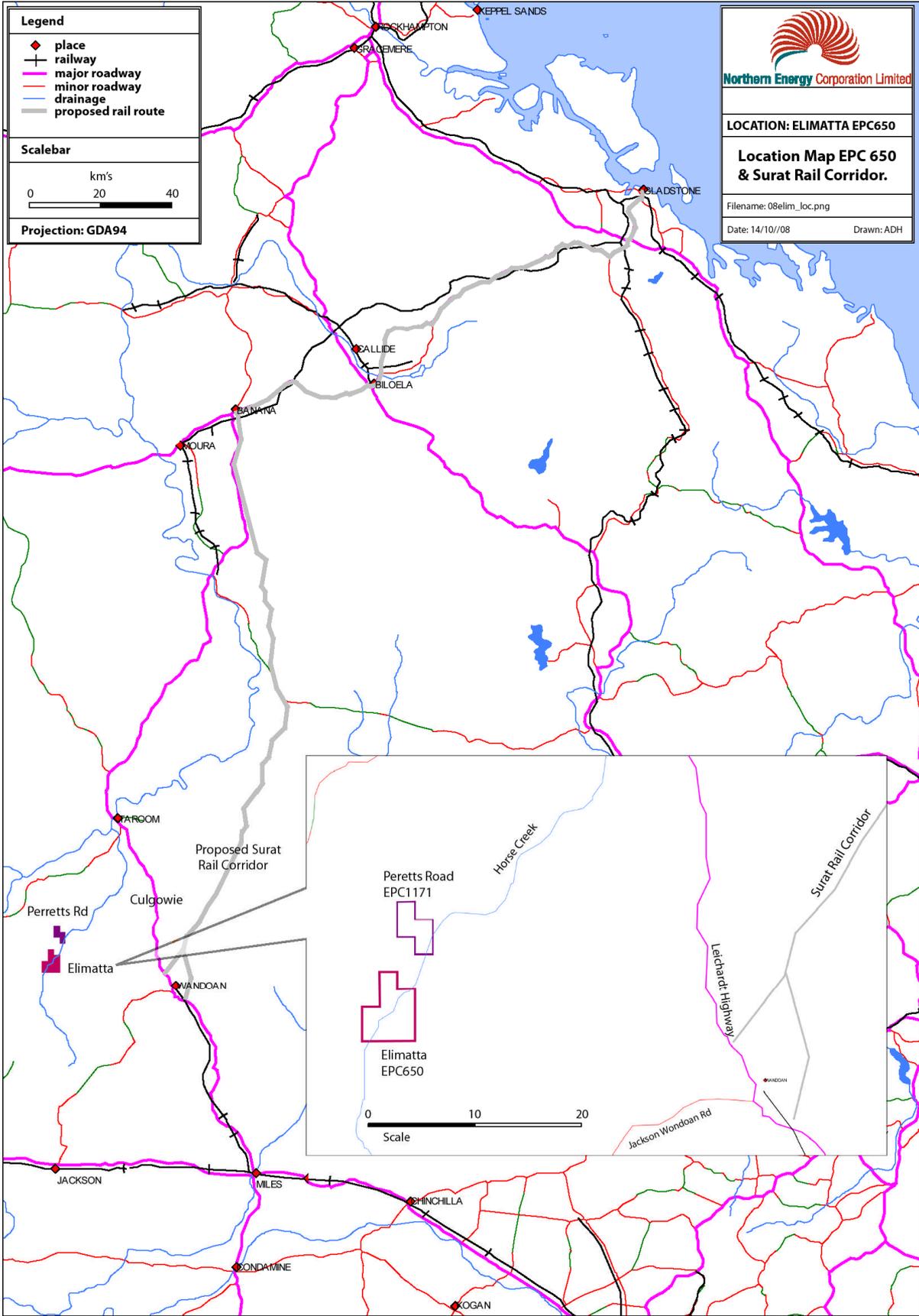


Figure 1: Regional Location of the Project Site



1.4 PROJECT TENEMENTS AND OWNERS

Taroom Coal holds the following mining tenements associated with the Elimatta Project:

- EPC 650 (2,777 ha);
- EPC 1171 (1,235 ha);
- MDL Application 373 (over EPC 650); and
- ML Application 50254 (over EPC 650).

The Project mining area will be located within EPC 650. A Mineral Development Licence (MDL) application was submitted in February 2007 over EPC 650 and a ML application for the same area was submitted in June 2009.

It is planned to locate the CHPP and related infrastructure on a ML to be applied for over EPC 1171. A transportation corridor to link the mining and the processing sites would be required. A Mining Lease for transportation will be sought over a narrow corridor (60 m in width). Figure 2 describes the broad area within which this narrow corridor would be located.

A ML is also proposed for the rail transfer of product coal from the CHPP to the Surat Basin Rail connection, approximately 42 km east. The transport ML will be a narrow corridor of approximately 60 metres (m) in width. The route for this corridor will be finalised as detailed planning is completed, taking into account land access issues, terrain and construction and operating cost.

The final alignment of the Project's transportation corridors is subject to Taroom Coal being granted a Mining Lease over land currently held by Xstrata Coal Queensland under EPC 1143, EPC 787 and EPC 859. The consent of Xstrata Coal Queensland will be required for this lease. A larger investigation area, within which this ML for transportation will be sought, is shown in Figure 2.

Additional ML applications for transport corridors and EPC 1171 will be made at a later date when their requirement and location are determined. This decision is dependant on the final alignment of the Surat Rail Connection and negotiations with underlying land tenure and mining tenement holders.

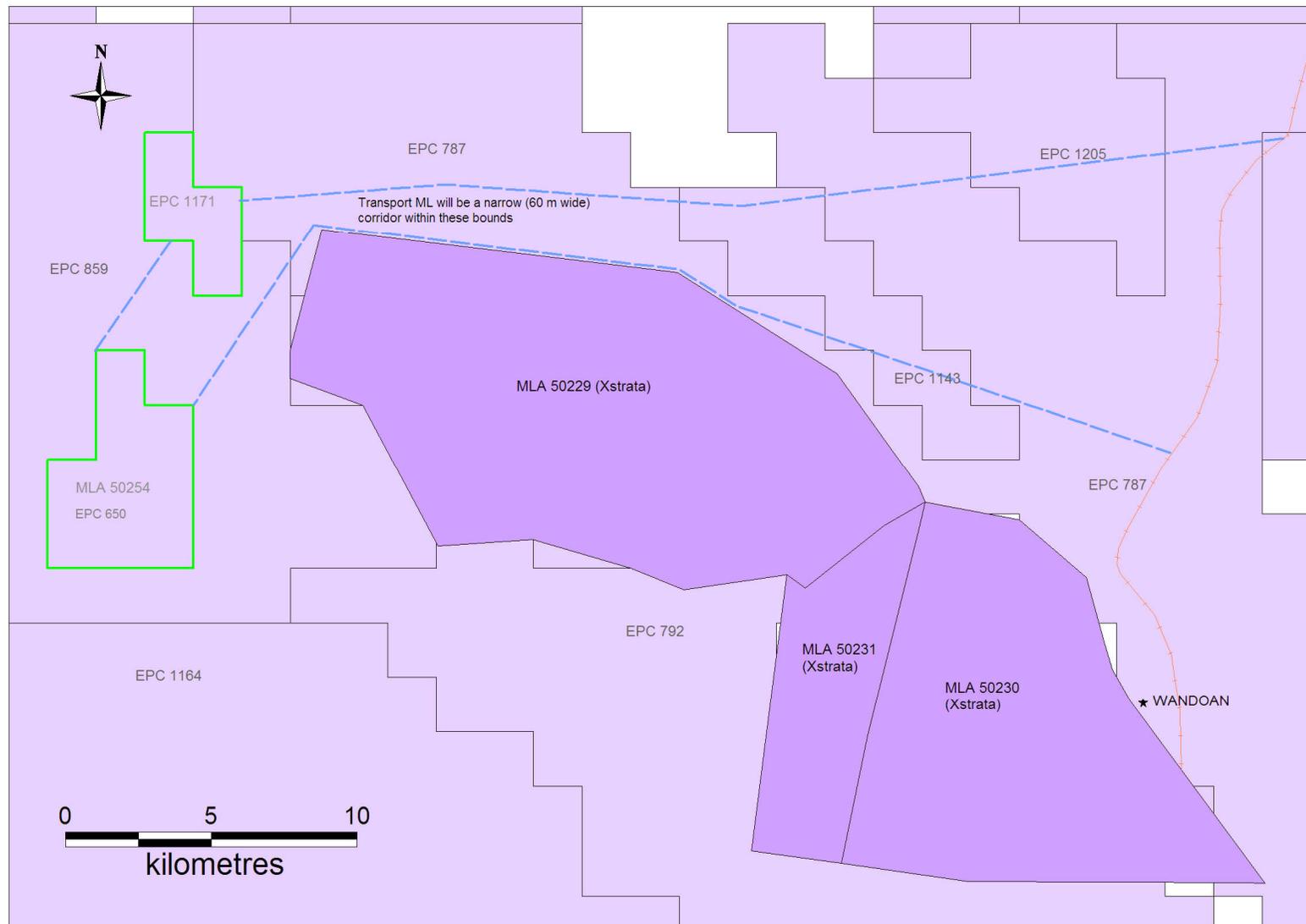


Figure 2: Elimatta Mining Tenements Map



2.0 PROPOSED PROJECT ACTIVITIES

2.1 EXPLORATION

Exploration and other investigation activities will continue to be undertaken on EPC 650 and EPC 1171 to provide data to be used in developing the Project. EPC 650 has been extensively explored since Taroom Coal was granted the tenure. The latest Resource Statement for the tenement was published in September 2008 and showed it contained a Measured Resource (determined to JORC Guideline standard) of 129 Mt, within a total resource of 244 Mt (including 40 Mt at Inferred status).

2.2 LAND DISTURBANCE

Prior to the development of any open cut pits, overburden stockpiles, processing areas, or infrastructure, vegetation and topsoil will be removed from the footprint area and stockpiled. The preferred option to dispose of large vegetation is to appoint a contractor to clear and use the timber for milling, wood-chipping or other economically viable uses. If this is not possible, large vegetation will be windrowed and burnt under controlled conditions. Smaller vegetation and grasses will be removed with the topsoil and where necessary, stockpiles will be seeded to establish vegetation growth, increase water infiltration, encourage microbial activity and prevent erosion. Topsoil will be respread over required areas as soon as possible to benefit from the viability of the topsoil seed bank.

At the current stage of Project development, land disturbance will include, but is not limited to:

- A mining footprint of approximately 1500 – 2000 ha;
- A CHPP and related infrastructure (approximately 100 ha);
- Overburden dumps, surface water management dams, workshops and offices, and roads and tracks (approximately 500 ha).

Areas of land disturbance are based on an early conceptual mine design and are provided as a broad indication of disturbance only.

A conceptual site layout of the proposed mining and processing area is provided in Figure 3. The final size and location of infrastructure and mining boundaries is dependant on continued exploration, Project investigation and design, and identification of environmental issues. The location of roads, and surface water management dams are yet to be determined.

Depending on the area available to place mine overburden material, a facility to store coarse and fine rejects material may be located near the CHPP. The need for this facility is yet to be determined and as a result it has not been included in Figure 3 below.



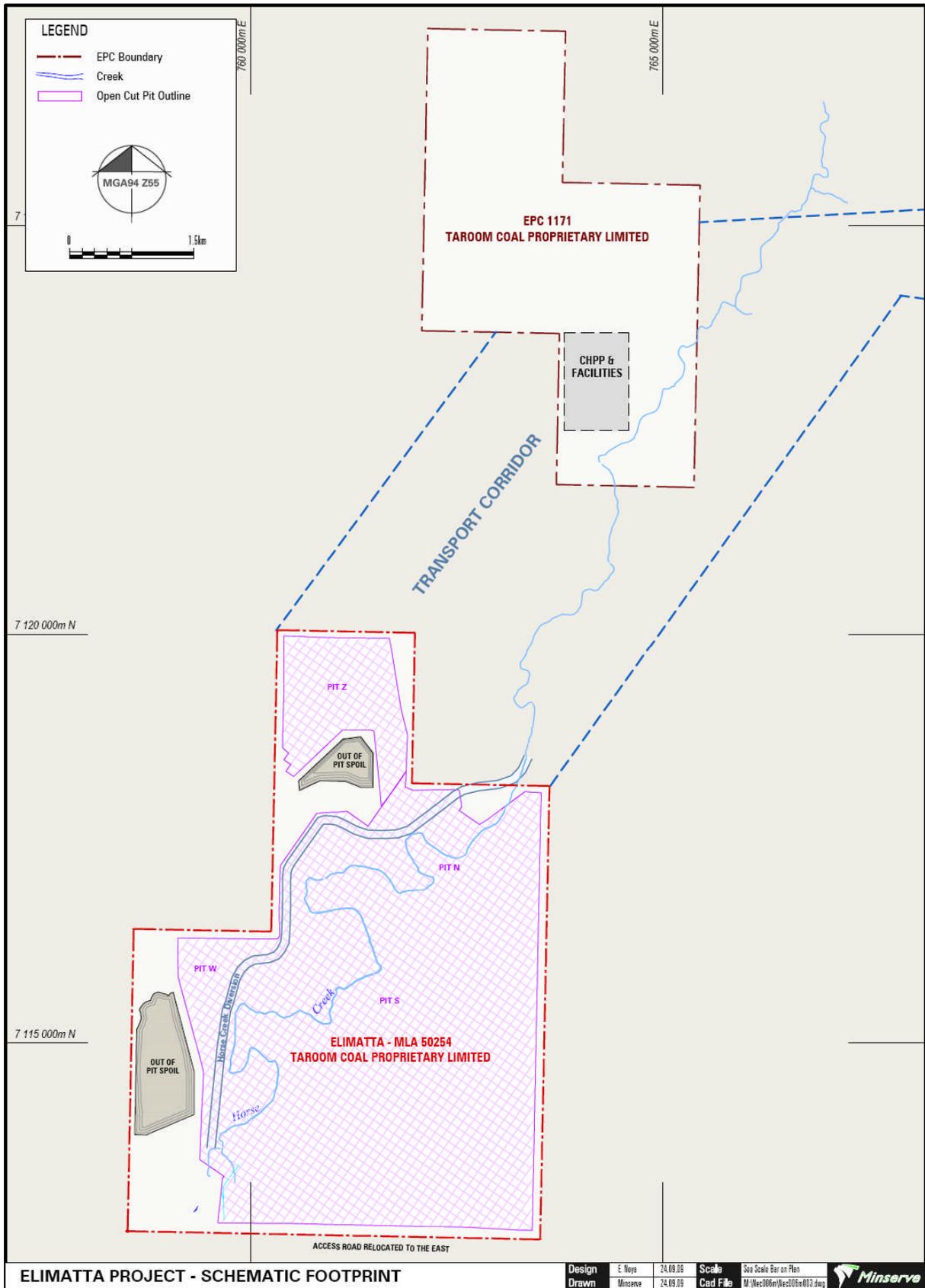


Figure 3: Conceptual Layout Plan of the Proposed Mining and Processing Areas.

2.3 MINE INFRASTRUCTURE

The following mine infrastructure is envisaged for the Project:

- Access and haul roads;
- Offices, workshops and ablutions facilities;
- Coal Handling and Preparation Plant (CHPP);
- ROM pads and lay-down areas;
- Surface water management dams;
- Raw water storage dam;
- Water pipelines;
- Fuel, oil and chemical storages;
- Transmission lines and power supply infrastructure;
- Train loading facility; and
- Explosives magazines.

Approvals for off-lease transmission lines and water pipelines (expected to be provided by external service providers) will be undertaken separately to the Project EIS. In the early years, depending on area available to place mine overburden material, coarse and fine rejects material may be stored in a purpose built facility near the CHPP.

2.4 RESOURCES DESCRIPTION

The Elimatta Project is located in the Surat Coal Basin. The target sequence for mining is the Juandah Coal Measures, which form part of the Injune Creek Group. The Juandah and underlying Taroom Coal Measures combined form a comparable section to the Walloon Coal Measures of the Moreton Basin to the east. The Juandah Coal Measures are middle Jurassic in age.

Resource Description

Based on current estimates (September 2008) 129 Mt of Measured Resource, 75 Mt Indicated Resource plus 44 Mt of Inferred Resource occurs within EPC 650. A breakdown of coal resource to coal seams within EPC 650 is provided in Table 1.



Table 1: Elimatta Coal Resource

Horizon	Total Resource Area (ha)	In situ Density (g/cc)	Thickness Range (m)	Measured Tonnage (x 10 ⁶)	Indicated Tonnage (x 10 ⁶)	Inferred Tonnage (x 10 ⁶)
UG	1800	1.47	1.2-2.2	11	20	5
Y	2090	1.43	0.5-2.0	15	15	5
A	2535	1.41	1.0-3.0	55	20	5
B	2550	1.38	1.8-2.9	48	20	10
C	490	1.42	2.5-3.5	0	0	20
Total				129	75	45

Coal quality testing has confirmed the presence of a high volatile, low sulphur thermal coal suitable for export.

2.5 COAL MINING

The deposit comprises two major seams of economic interest; the A and B Seams. Typically the overburden above the A Seam averages about 40 m in thickness and varies between 20 m and 60 m. Also present in the overburden are two smaller upper seams, the UG and the Y seams. The typical depth of overburden above the UG Seam is 15 m to 20 m, the interburden down to the Y Seam is 7 m to 8 m and the typical interburden to the A Seam is 7 m to 8 m. The configuration of seams favours shovel/excavator and truck mining methods. The suitability of a dragline for overburden/interburden removal is currently under consideration and remains an option for the Project.

Spoil will initially be placed out of pit beside the first excavation and thereafter backfilled to the mining void. The Project plan proposes two open pit areas which are separated by a fault zone within the deposit.

2.6 COAL PROCESSING

The ~8.0 Mtpa ROM mining rate is based on a CHPP operating for 7,000 hours per year. To minimise raw water requirements, fine reject materials are to be dewatered and then mixed with coarse reject rock for transport back into cells in the mine overburden. In the early years, depending on area available to place mine overburden material, coarse and fine rejects material may be stored in a purpose built facility near the CHPP.

2.7 COAL TRANSPORT

ROM coal is expected to be hauled from the mining area to the processing plant using mining trucks or truck road trains.

Transport of Elimatta product coal will be by heavy freight rail to Gladstone. A new rail link – the Surat Basin Rail Project, will be an extension to the Moura Rail System south to the Wandoan area. The Elimatta Project is centered approximately 42 km west of the likely connection location to this new rail. Taroom Coal will therefore require a transport connection to the new rail link. A rail spur line has been proposed for the transfer of product coal to the Surat rail line.

2.8 SITE AND ACCESS ROADS

One public road will be relocated around the mining area with this road also being the main access to the Project. Consultation with the Western Downs Regional Council and the Queensland Department of Transport and Main Roads will be undertaken regarding the use, maintenance and upgrading, if necessary, of existing roads.

2.9 WATER REQUIREMENTS

The water supply requirement for the mining and processing activities, including water required for dust suppression and domestic use, is estimated to be 1,500 Megalitres per annum. The potential for using coal seam gas extraction water as the primary supply is currently under investigation. A significant coal seam gas extraction industry is being developed over areas to the west and south of the Elimatta Project. The supply of waste water from these developments is expected to be a viable source for the Project. Approval of water transport infrastructure, outside of the proposed MLs, will be undertaken separately to the Project EIS. Groundwater from the Project Site may be utilised as an alternate water source particularly during the construction stage of the Project.

2.10 POWER SUPPLY

The estimated installed electrical energy load for the Project is 12 Megawatts which covers the operation of mining equipment, the CHPP and domestic use. A supply connection to the area power grid is under investigation through discussions with the Powerlink Queensland and Ergon Energy Limited. Approval of transmission lines and related power supply infrastructure, outside of the proposed MLs, will be undertaken separately to the Project EIS. Diesel generators may be located on site for use as a power source during the construction stage and as a back up supply when connection to the power grid is established.

2.11 STAFFING AND ACCOMMODATION

The Project is estimated to employ a total of approximately 300 full time staff at full production with additional staff required for periodic large maintenance tasks and for special projects. The personnel required for each area is shown in Table 2.

Table 2: Workforce Requirement

Unit	Personnel
Owners Site Workforce	
<i>Total</i>	10
Contractors Site Workforce	
Maintenance	80
Operations	180
Management and Support	30
<i>Total</i>	290
Total Site Workforce	300

The majority of mine staff and contractors are expected to stay in accommodation camps. Accommodation camps will either be sought from local service providers in Wandoan and Taroom, or will be developed on or near to the Project site.

2.12 REHABILITATION

2.12.1 Exploration

Exploration disturbances will be rehabilitated as per the following steps:

- Capping drill holes;
- A drying out period to allow water to evaporate from the drilling muds in the sumps;
- Backfilling of drilling sumps;
- Scarifying the surface; and
- Should natural regeneration not be successful after the first year, seed from suitable pasture species will be sown before the following wet season to enhance revegetation.

2.12.2 Overburden Dumps

The final rehabilitation plan for overburden dumps will be detailed in the EIS and Environmental Management Plan (EM Plan). Conceptual planning has assumed the final slope of the overburden dump face to be between 14 and 17 percent depending on the competency of the waste material. Where necessary, berms will be constructed on the outer faces and graded to slope back towards the dump to act as a water control structure for any stormwater flowing from the overburden above.

The slopes and top of the dumps will be topsoiled and deep ripped to bind in the material. Revegetation will use species suitable for the final land use.

2.12.3 Final Voids

The final pit voids after spoil re-contouring of the excavation will be protected by constructing an exclusion bund wall around the perimeter from competent rock and/or by fencing, depending on the parameters of the final void.

The exclusion bund wall will be constructed as described in *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland*. This guideline states that the bund wall should be of a minimum height of 2 m, with a minimum base width of 4 m and be located at least 10 m beyond the area potentially affected by any instability of the pit edge.

Where water quality within the void is suitable for stock, a safe access to the water shall be provided for stock, or the water will be pumped to a stock watering point. Consultation with the land holder will be undertaken to determine the best means of pumping or access. Where water in voids is not suitable for stock then the voids will be bunded or fenced to prevent stock access.

2.12.4 CHPP and Infrastructure

The CHPP and associated buildings and equipment will be dismantled and removed upon the cessation of mining operations or by agreement, left for the land holder.



2.12.5 Access Roads

Access roads required for pastoral activities will not be rehabilitated. Roads that can be rehabilitated will be deep ripped and where appropriate seeded with a mix of species suitable for the intended land use.

2.12.6 Revegetation Methods

Surface preparation before revegetation will include surface contouring, ripping and topsoil spreading. Surface contouring will occur to minimise soil erosion. Contour ripping to a depth of 200-500 millimetres (mm) will then take place by dragging tines behind a bulldozer to break up the compacted soils after mining activities. Topsoil will be stockpiled for use in rehabilitation as it contains organic material and local seed banks. Preserved topsoil will be spread to a thickness similar to the original topsoil or an average of 0.2m (where possible).

After appropriate surface preparation has occurred as outlined above, disturbed land will be revegetated as follows:

- Spread fertiliser and/or other ameliorates, such as gypsum at an appropriate rate, if required;
- Native species occurring naturally in the local area will be chosen for areas requiring the re-establishment of local native habitat;
- Where an agricultural land use is planned, the species planted will be those commonly used for pasture known to be successful on soils of similar texture; and
- Where practicable, revegetation will occur through direct seeding of selected species. Where direct seeding is not possible (e.g. small areas with limited access), seeds will be manually broadcast.

2.13 ENVIRONMENTALLY RELEVANT ACTIVITIES

Table 3 describes the Environmentally Relevant Activities (ERAs) proposed to be conducted on the Project, which would otherwise be ERAs as per Schedule 2 of the *Environmental Protection Regulation 2008* if the Project was not a mining project.

The process of mining mineral ore (Mining Activities) is not covered by an ERA in Schedule 2 of the Regulation; it is covered separately by Schedule 6, of the *Environmental Protection Regulation, 2008*.



Table 3: ERAs Associated with the Project

Item (ERA Schedule No.)	Threshold	Aggregate Environmental Score
8 Chemical Storage	Storing >50t of chemicals of dangerous goods class 1 or 2	51
15 Fuel Burning	500kg or more of fuel per hour	35
17 Abrasive Blasting	Itinerant activity	16
18 Boilermaking or engineering	Boilermaking or engineering, assembling, building or manufacturing metal products 200t-10,000t	0
21 Motor Vehicle Workshop	Motor Vehicle Workshop	7
33 Crushing, Milling or Grinding	>5000 tpa	0
38 Surface Coating	Surface coating: anodising, electroplating, enamelling or galvanizing using > 1,000 but <10,000 t/yr of surface coating materials	41
43 Concrete Batching	200t or more / year	30
56 Regulated Waste Storage	Receiving and storing regulated waste (other than tyres)	21
60 Waste Disposal	Waste disposal facility regulated waste, general waste and limited regulated waste – and <5t untreated clinical wastes <50,000 t/yr	50
63 Sewage Treatment Plant	Treatment Plant for 100-1500 Equivalent Persons	53
Level 1 Mining Project	5. Mining Black Coal	128

3.0 DESCRIPTION OF THE EXISTING ENVIRONMENT

3.1 REGIONAL CLIMATE

Information from the Bureau of Meteorology (www.bom.gov.au) indicates that the average annual rainfall for the region (based on data for the Taroom Post Office weather station) is approximately 671.8 millimetres (mm). Rainfall is typically seasonal, with the dry season peaking from April to September (average 34.2 mm per month) and the wet season peaking between November and February (average 87.3 mm per month).

The coldest period of the year occurs in July (average minimum 5.1 degrees Celsius (°C), average maximum 20.9 °C) and the warmest month of the year is January (average minimum 20.6 °C, average maximum 33.7 °C).

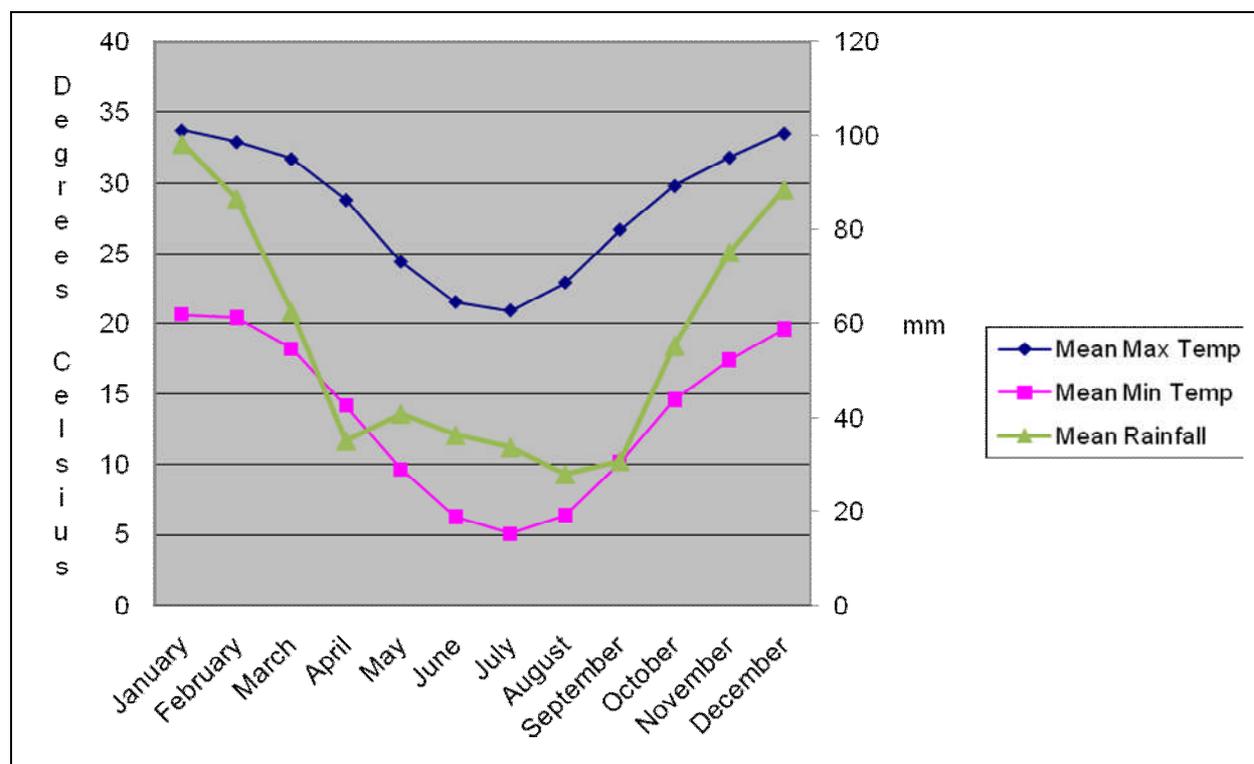


Figure 4: Taroom Climate Data

3.2 CURRENT LAND USE

Low intensity cattle grazing is the dominant land use and associated infrastructure on the site includes cattle yards, windmills, dams and water storage tanks. There is a disused cattle dip within the proposed mining area.

3.3 LOCAL GEOLOGY AND TOPOGRAPHY

The region is generally undulating, formed on the argillaceous sediments of the Great Artesian Basin (Sattler and Williams 1999).



Geology of the site can be split into two predominant categories:

- Quaternary alluvial sediments associated with Horse Creek and its major tributaries; and
- Middle to upper Jurassic mudstone, labile sandstone, siltstone and some calcareous formations of the undulating plains covering the remainder of the Site.

Horse Creek forms the dominant waterway flowing south to north through the middle of EPC 650 and across the south eastern corner of EPC 1171. The diversion of Horse Creek around mining and infrastructure within EPC 650 is a requirement of the Project. A specialist consultant has commenced surface water modelling studies addressing creek diversions, hydrology, geomorphology, water quality and flood assessments.

3.4 ENVIRONMENTALLY SENSITIVE AREAS

A search of the Department of Environment and Resource Mngement (DERM) Ecoaccess database (<http://www.epa.qld.gov.au/ecoaccess/ecomaps>) for Environmentally Sensitive Areas shows that a Category B Endangered Regional Ecosystem (ERE) exists in narrow corridors on the Project (Figure 5). This ERE corresponds to Brigalow dominant vegetation and is discussed further in Section 3.7.1 of this report. No other Environmentally Sensitive Areas have been identified for the Project.



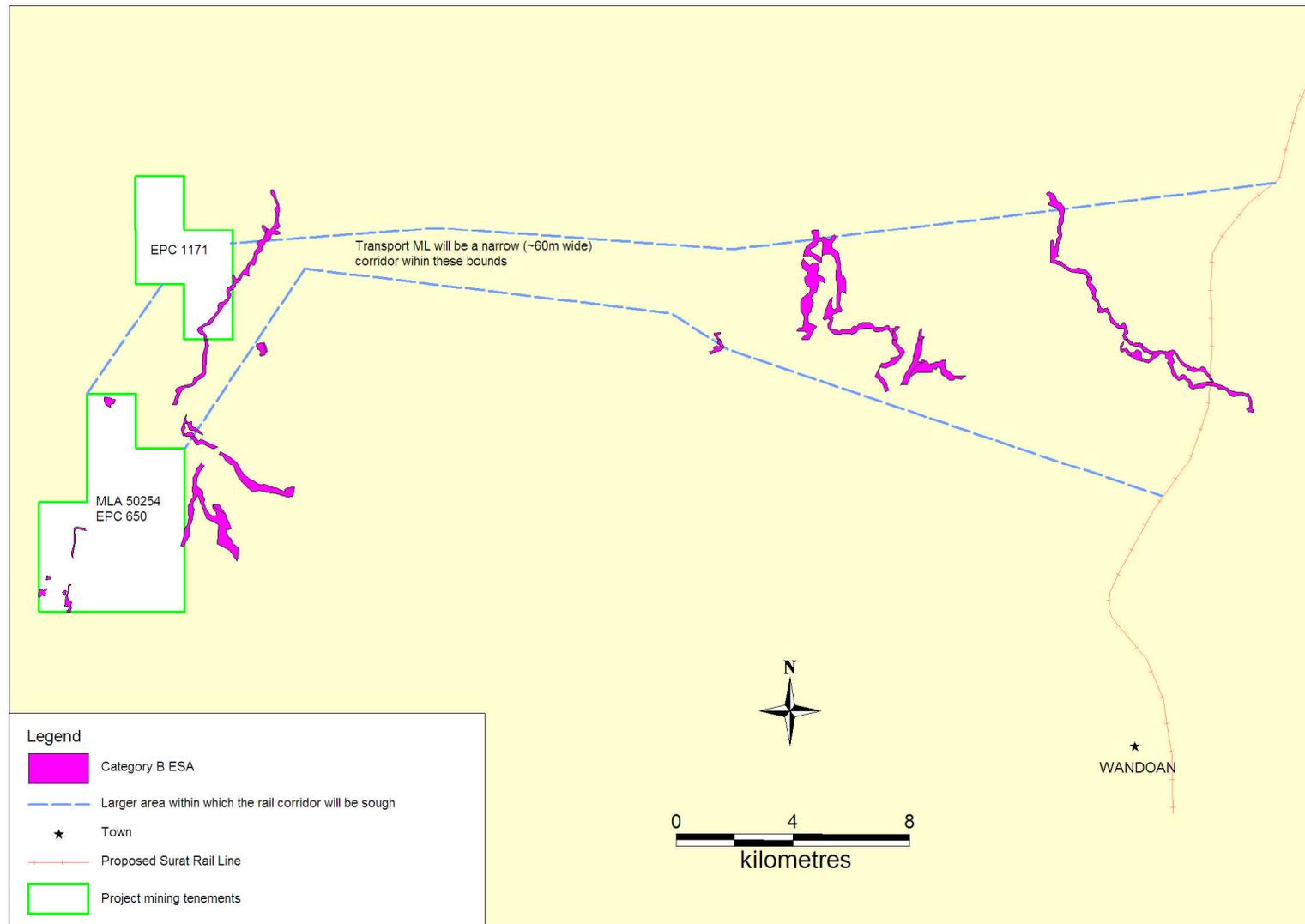


Figure 5: Category B Environmentally Sensitive Areas underlying the Elimatta Project



3.5 LOCAL WATER RESOURCES

The Project Site is located within the Fitzroy River Basin. Horse Creek forms the dominant waterway of the Project flowing north-east into Juandah Creek which itself flows into the Dawson River. The Dawson River continues to flow north-east joining with the Fitzroy River which eventually drains into Keppel Bay south of Rockhampton.

The flow of ephemeral waterways within, and surrounding the Project Site, is restricted to heavy rainfall events, which typically occur between November and February. Due to their ephemeral nature, the use of watercourses within the vicinity of the Project is generally limited to stock watering, when water is available. A surface water management plan and a detailed diversion study for Horse Creek have been commissioned as part of the Elimatta Project EIS.

A Hydrogeological Study will identify groundwater values of the Project site and recommend suitable management strategies.

3.6 SOIL AND LAND SUITABILITY

Soil sampling was undertaken as part of a soil and land suitability assessment, in accordance with the *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland – Land Suitability Assessment Techniques* (DME, 1995). In following the procedures outlined in this guideline, the objectives of the study are to:

- Compile a land resource inventory through classification, testing and mapping of soils, and description of the terrain; and
- Determine and report on the pre-mining land suitability through the process of land resource evaluation.

3.7 NATURE CONSERVATION

Flora and Fauna seasonal surveys have commenced on the Project site (August 2007 & February 2008). Baseline nature conservation studies will form part of the Project EIS and aim to document and assess the current state of the environment, highlight any areas of potential environmental impact from the Project and propose mitigation strategies where required. The flora and fauna study includes the following scope of works:

- A literature and database search to identify species of State and National conservation significance known from the region. This enabled these species to be targeted during the field survey component of the study; and
- A field survey employing standard methodologies to determine the composition of flora and fauna species inhabiting the Project Sites, particularly species of conservation significance. This included:
 - Regional Ecosystem mapping;
 - Identification of flora species at representative transects;
 - Pitfall trapping with drift fences;



- Elliott trapping;
- Ultrasonic bat call detection using the ANABAT II bat detector;
- Bird census;
- Track, scat and scratch searches;
- Habitat searches for reptiles and amphibians; and
- Recording of opportunistic flora and fauna sightings outside transects.

3.7.1 Flora

No plant species of conservation significance, under the *Nature Conservation Wildlife Regulation 2006* (NCWR) or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) have been recorded on the Project site.

Four vegetation communities have been described on the Project. Three of these communities are classed as remnant vegetation.

The four vegetation communities include:

- **Community 1** – Blue Gum Riparian Woodland (with Interspersed Poplar Box) (196 ha, 4.8%);
- **Community 2** – Brigalow Open Forest (43 ha, 1%);
- **Community 3** – Non-Remnant grassland (3762 ha, 94%); and
- **Community 4** – White Cypress Pine Woodland (6 ha, 0.1 %).

Community 1 – Blue Gum Riparian Woodland

Blue Gum Riparian Woodland forms a linear stand of remnant vegetation fringing Horse Creek. Its distribution is restricted to the primary waterway and extends only to the major tributaries of Horse Creek within the Project Site. Small patches of Poplar Box are interspersed within the Blue Gum Woodland.

The community corresponds to Regional Ecosystem (RE) 11.3.25 (90%) and 11.9.7 (10%) and is a common feature of watercourses in the region. RE 11.3.25 is listed as 'Of Concern' (DERM Biodiversity Status).

Community 2 – Brigalow Open Forest

Remnant vegetation areas of Brigalow Open Forest occur on fine grained sediments. The community exists as isolated and interspersed patches throughout the Project site.

Brigalow Open Forest corresponds to REs 11.9.5 and 11.9.10 in varying proportions and is well represented in the local area. RE 11.9.5, Brigalow and or Belah Open Forest is listed as an Endangered Regional Ecosystem (ERE) under the VM Act and the DERM biodiversity status due to



<10% of the community's pre-clearing area remaining in Queensland. The community is also listed as Endangered under the EPBC Act.

RE 11.9.10, Brigalow Open Forest with a discontinuous canopy of Poplar Box is Of Concern under the VM Act and Endangered under the DERM biodiversity status due to only 30% of the community's pre-clearing area remaining in Queensland. The community is also listed as Endangered under the EPBC Act.

Community 3 – Non-remnant Grassland

Non-remnant Grassland occurs over a large portion of the Project Site. The community results from a history of clearing and ongoing cattle grazing practices.

The community does not correspond to any Regional Ecosystem.

Community 4 – White Cypress Pine Woodland

White Cypress Pine Woodland occurs in two small isolated patches in the centre of EPC 650, near Horse Creek.

The community corresponds to RE 11.10.11 and is defined by a dense tree layer dominated by White Cypress Pine. This RE is listed as not of concern under both the VM Act and the NC Act.

Weed Species

One weed species, *Opuntia tomentosa* (Velvety Tree Pear), is listed under the LP Act and was recorded during the survey. Velvety Tree Pear is listed as a Class 2 weed under the LP Act. The species can form dense, impenetrable, thickets that can take over native bushland, reducing the biodiversity of ecological communities and the productivity of pastures.

Eight other exotic species were observed on site including, *Acacia farnesiana* (Mimosa Bush), *Malva parviflora* (Small Flowered Mallow), *Sonchus oleraceus* (Common Sowthistle), *Argemone sp.*, *Rapistrum rugosum* (Turnip Weed), *Solanum nigrum subsp. nigrum* (Blackberry Nightshade), *Verbena aristigera* (Mayne's Pest) and *Lepidium bonariense*.

EPBC Act Referral

The Elimatta Project requires clearing of small areas of Endangered (EPBC Act) Brigalow vegetation and, as such, was referred to the Commonwealth Department of Environment, Water, Heritage and the Arts. In May 2008 the Department of Environment, Water, Heritage and the Arts determined that the Project is not a controlled action, and therefore does not require assessment by the Federal Minister for the Environment, Heritage and the Arts.

3.7.2 Fauna

A total of 3 amphibian species, 8 reptile species, 1 fish species, 14 mammal species and 49 bird species were identified on or immediately adjacent to the Project Site during field surveys.

These species are shown in Tables 4-8.



Table 4: Amphibian Species Observed on the Project Sites

<i>Scientific Name</i>	Common Name	Status	Dry Survey	Wet Survey
BUFONIDAE				
<i>Bufo marinus</i>	Cane Toad	Introduced	X	X
HYLIDAE				
<i>Litoria caerulea</i>	Green Tree Frog	C		X
MYOBATRACHIDAE				
<i>Limnodynastes ornatus</i>	Ornate Burrowing Frog	C		X

Table 5: Fish Species Observed on the Project Sites

<i>Scientific Name</i>	Common Name	Status	Dry Survey	Wet Survey
TERAPONTIDAE				
<i>Leiopotherapon unicolor</i>	Spangled Perch	C		X

Table 6: Reptile Species Observed on the Project Sites

<i>Scientific Name</i>	Common Name	Status	Dry Survey	Wet Survey
AGAMIDAE				
<i>Pogona barbata</i>	Eastern Bearded Dragon	C	X	
CHELUIDAE				
<i>Chelodina longicollis</i>	Snake-necked Turtle	C	X	
COLUBRIDAE				
<i>Tropidonophis mairii</i>	Keelback	C		X
GEKKONIDAE				
<i>Gehyra variegata</i>	Varigated Dtella	C	X	
SCINCIDAE				
<i>Ctenotus robustus</i>	Eastern Striped Skink	C		X
<i>Tiliqua rugosa</i>	Shingleback	C	X	
TYPHLOPIDAE				
<i>Ramphotyphlops sp. (Prob R.proximus)</i>	(Blind Snake)	C		X
VARANIDAE				
<i>Varanus panoptes</i>	Yellow-spotted Monitor	C	X	X

Table 7: Mammal Species Observed on the Project Sites

<i>Scientific Name</i>	Common Name	Status	Dry Survey	Wet Survey
BOVIDAE				
<i>Bos taurus</i>	Cattle	C1	X	X
CANIDAE				
<i>Canis familiaris dingo</i>	Dingo	C2	X	X
<i>Vulpes vulpes</i>	Red Fox	C2	X	
DASYURIDAE				
<i>Planigale tenuirostris</i>	Narrow-nosed Planigale	C		X
EQUIDAE				
<i>Equus caballus</i>	Horse	C1	X	X
FELIDAE				
<i>Felis catus</i>	Feral Cat	C2		X
LEPORIDAE				
<i>Oryctolagus cuniculus</i>	European Rabbit	C2	X	X
MACROPODIDAE				
<i>Macropus giganteus</i>	Eastern Grey Kangaroo	C	X	X
<i>Macropus parryi</i>	Whiptail Wallaby	C	X	X
<i>Macropus rufogriseus</i>	Red-necked Wallaby	C	X	X
MURIDAE				
<i>Mus musculus</i>	House Mouse	C1	X	X
POTOROIDAE				
<i>Aepyprymnus rufescens</i>	Rufous Bettong	C	X	X
SUIDAE				
<i>Sus scrofa</i>	Pig	C1	X	X
TACHYGLOSSIDAE				
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	C	X	

Table 8: Bird Species Observed on the Project Sites

Scientific Name	Common Name	Status	Dry Survey	Wet Survey
ACCIPITRIDAE				
<i>Aquila audax</i>	Wedge-tailed Eagle	C	X	X
<i>Elanus axillaris</i>	Black-shouldered Kite			X
ANATIDAE				
<i>Chenonetta jubata</i>	Australian Wood Duck	C	X	X
<i>Anas superciliosa</i>	Pacific Black Duck	C	X	X
<i>Dendrocygna eytoni</i>	Plumed Whistling Duck	C		X
ANHINGIDAE				
<i>Anhinga melanogaster</i>	Darter			X
ARDEIDAE				
<i>Ardea pacifica</i>	White-necked Heron	C	X	
<i>Egretta novaehollandiae</i>	White-faced Heron			X
ARTAMIDAE				
<i>Cracticus torquatus</i>	Grey Butcherbird	C	X	
<i>Cracticus nigrogularis</i>	Pied Butcherbird	C	X	X
<i>Gymnorhina tibicen</i>	Australian Magpie	C	X	X
CACATUIDAE				
<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	C	X	X
<i>Cacatua roseicapilla</i>	Galah	C	X	X
CAMPEPHAGIDAE				
<i>Coracina novehollandiae</i>	Black-faced Cuckoo-shrike	C	X	X
CASUARIIDAE				
<i>Dromaius novaehollandiae</i>	Emu	C	X	X
CHARADRIIDAE				
<i>Vanellus miles</i>	Masked Lapwing	C	X	X
<i>Vanellus tricolor</i>	Banded Lapwing	C	X	
COLUMBIDAE				
<i>Geopelia humeralis</i>	Bar-Shouldered Dove			X
<i>Ocyphaps lophotes</i>	Crested Pigeon	C	X	X
<i>Phaps chalcoptera</i>	Common Bronzewing	C	X	

Scientific Name	Common Name	Status	Dry Survey	Wet Survey
CORCORACIDAE				
<i>Struthidea cinerea</i>	Apostlebird	C	X	X
CORVIDAE				
<i>Corvus coronoides</i>	Australian Raven	C	X	
<i>Corvus orru</i>	Torresian Crow	C	X	X
DICRURIDAE				
<i>Grallina cyanoleuca</i>	Magpie-Lark	C	X	X
<i>Rhipidura leucophrys</i>	Willie Wagtail	C	X	X
FRINGILLIDAE				
<i>Taeniopygia guttata</i>	Zebra Finch	C	X	
HALCYONIDAE				
<i>Dacelo novaeguineae</i>	Laughing Kookaburra	C	X	X
<i>Todiramphus sanctus</i>	Sacred Kingfisher	C		X
MELIPHAGIDAE				
<i>Lichmera indistincta</i>	Brown Honeyeater	C	X	
<i>Manorina melanocephala</i>	Noisy Miner	C	X	X
<i>Meliphaga lewinii</i>	Lewin's Honeyeater	C	X	
MOTACILLIDAE				
<i>Anthus novaeseelandiae</i>	Richard's Pipit	C		X
OTIDIDAE				
<i>Ardeotis australis</i>	Australian Bustard	C	X	X
PACHYCEPHALIDAE				
<i>Pachycephala rufiventris</i>	Rufous Whistler	C	X	
PARDALOTIDAE				
<i>Acanthiza pusilla</i>	Brown Thornbill	C	X	X
<i>Pardalotus striatus</i>	Striated Pardalote	C	X	
PELECANIDAE				
<i>Pelecanus conspicillatus</i>	Australian Pelican	C	X	
PHALACROCORACIDAE				
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant	C	X	
<i>Phalacrocorax melanoleucos</i>	Little Pied Cormorant	C	X	
PODARGIDAE				
<i>Podargus strigoides</i>	Tawny Frogmouth	C	X	X
PSITTACIDAE				

Scientific Name	Common Name	Status	Dry Survey	Wet Survey
<i>Aprosmictus erythropterus</i>	Red-winged Parrot	C	X	X
<i>Nymphicus hollandicus</i>	Cockatiel	C	X	X
<i>Platycercus adscitus</i>	Pale-headed Rosella	C	X	X
<i>Psephotus haematonotus</i>	Red-rumped Parrot	C		X
<i>Trichoglossus haematodus</i>	Rainbow Lorikeet	C	X	
STRIGIDAE				
<i>Ninox novaeseelandiae</i>	Southern Boobook	C	X	
THRESKIORNITHIDAE				
<i>Platalea flavipes</i>	Yellow-billed Spoonbill	C	X	
<i>Threskiornis spinicollis</i>	Straw-necked Ibis	C	X	
TYTONIDAE				
<i>Tyto alba</i>	Barn Owl	C	X	

Status Key:

- C = Common
- E = Endangered (Schedule 2) under the *Nature Conservation (Wildlife) Regulation 2006*
- V = Vulnerable (Schedule 3) under the *Nature Conservation (Wildlife) Regulation 2006*
- R = Rare (Schedule 4) under the *Nature Conservation (Wildlife) Regulation 2006*
- C1 = Class 1 declared pest under the *Land Protection (Pest and Stock Route Management) Act 2002*
- C2 = Class 2 declared pest under the *Land Protection (Pest and Stock Route Management) Act 2002*

No fauna species of conservation significance, listed under the NCWR or the EPBC Act, were found to occur on the Project Site.

ANABAT echolocation detection identified 9 possible bat species occurring on the site. Of these, the Little Pied Bat (*Chalinolobus picatus*) is listed as Rare under the NCWR and was recorded as 'B-Probable' on site. Also *Nyctophilus* sp. 'B/C-Probable/Possible' was recorded during the survey. The species is most likely *N.geoffroyi* - Lesser Long-eared Bat or *N.gouldii* – Gould's Long-eared Bat, however *N.timoriensis* – Eastern Long-eared Bat (Vulnerable - NCWR) potentially occurs in the survey region, and cannot be discarded.

Five declared pest animals under Queensland's *Land Protection (Pest and Stock Route Management) Act 2002* (LP Act) were recorded during the surveys. These include the House Mouse (*Mus musculus*), Feral Pig (*Sus sctofa*), European Rabbit (*Oryctolagus cuniculus*), European Fox (*Vulpes vulpes*) and Dingo (*Canis familiaris dingo*). The Cane Toad (*Bufo marinus*) is not a declared pest species, however, it is introduced and is considered to be of serious environmental concern in Queensland.



3.8 NOISE AND AIR

Nine sensitive receivers have been identified within 5 km of the mining and processing site.

Noise studies will include the deployment of background environmental noise loggers to obtain noise levels representative of the region under typical circumstances. Noise levels from the Project, and the potential impact on sensitive receivers, will be predicted based on the proposed mine plan. Modelling will be undertaken to assess the impact of noise and vibration on the sensitive receivers identified.

Dust from disturbed areas and haul roads are expected to be the primary air quality issues for the Project. Dust deposition gauges will be installed on the Project site to collect background levels representative of the region under typical circumstances. Air quality modelling will be undertaken to predict the impact of dust levels and emissions on sensitive receivers during Project operations.

3.9 GROUNDWATER

Groundwater has been encountered in the majority of exploration holes drilled to date. Groundwater studies have commenced to determine potential impacts of the Project, and its suitability for use as process water.

3.10 INDIGENOUS CULTURAL HERITAGE

Presently, there are no Aboriginal cultural heritage sites on EPC 650 or EPC 1171 as recorded on the Aboriginal Cultural Heritage Database and Register. All activities will be undertaken with due consideration of the Duty of Care Guidelines prescribed under the *Aboriginal Cultural Heritage Act 2003*.

The registered native title claimants for EPC 650 are the IMAN People #2 QC97/055. In accordance with the *Aboriginal Cultural Heritage Act 2003*, native title claimants will be consulted regarding the development of a Cultural Heritage Management Plan (CHMP) for the Project.

Native title is extinguished on EPC 1171 and EPC 650 excluding a small camping and water reserve located in the centre of EPC 650.

3.11 EUROPEAN CULTURAL HERITAGE

No Queensland Heritage Registered Places, listed in the *Environmental Protection Regulation 2008* as a Category B Environmentally Sensitive Area, are identified on any of the Project tenements.



4.0 COMMUNITY CONSULTATION

The Project is located within the Western Downs Regional Council, approximately 35 km west of Wandoan and 45 km southwest of Taroom. The main sources of employment in the local area include industries such as agriculture, forestry and fishing, retail trade, construction and healthcare (ABS 2006).

Social impacts of the Elimatta Project will be assessed in the EIS. The Project is expected to provide employment opportunities for community members and economic benefits to local businesses. The workforce is expected reside in accommodation camps, to be owned and operated by an external service provider.

The Social Impact Assessment will be developed in consultation with the local community and will consider the Project in light of other proposed developments in the area.

4.1 CONSULTATION PROCESS

Affected and interested persons for the entire Project will be included in the community consultation program and will be provided with a copy of the Terms of Reference (TOR) Notice and EIS Notice for public comment. The community consultation program will include meetings with affected and interested persons as required. All correspondence with interested and affected persons will be recorded in the Consultation Register as a part of the EIS.

The draft TOR will be released for public comment, and to interested and affected persons, and advisory bodies for at least 30 business days. Anyone can make comments on the draft TOR to the DERM. At the end of the comment period, copies of all comments received by the DERM will be given to the proponent. Taroom Coal (through NEC) will then prepare the following:

- A written summary of the comments;
- A response to the comments; and
- Proposed amendments to the TOR as a result of the comments received.

The above information must be provided by Taroom Coal (through NEC) to the DERM within 20 business days of receiving copies of the documents. However, a longer period of time can be agreed between Taroom Coal and the DERM. The DERM will then prepare and publish the final TOR based on the responses from Taroom Coal within 20 business days.

Taroom Coal will then undertake the necessary assessments, research and consultations to prepare the EIS, in accordance with the TOR. The EIS will support an application for Project approvals, in particular an Environmental Authority (EA).

Taroom Coal will submit the completed EIS to the DERM. The DERM will then assess the EIS and decide whether or not it adequately addresses the published TOR. If it does, Taroom Coal must then publish an EIS Notice and give a copy of the EIS Notice to each affected and interested person. The submission period for public comment will be set by the DERM and must be at least 30 business days. Copies of the EIS will be made available to all interested and affected persons and Advisory Bodies. The DERM will accept all properly-made submissions received during the submission period. The DERM will provide Taroom Coal with a copy of all the submissions received on the EIS. Taroom Coal must then prepare a response to the submissions and make any necessary amendments to the submitted EIS.



The DERM will prepare and give an EIS Assessment Report to Taroom Coal. This Assessment Report will consider the final TOR, the submitted EIS, all properly made submissions, Taroom Coal responses to submissions and the standard criteria in preparing the EIS Assessment Report. The Assessment Report will, among other things, recommend any relevant conditions that will be necessary for the Project to proceed.



5.0 ASSESSMENT OF EIS TRIGGER CRITERIA

Table 11 below contains an assessment of the Project against the DERM's EIS Trigger Criteria as set out in *Guideline 4 – Deciding the Level of Impact Assessment for the Mining Industry*.

Table 9: EIS Trigger Criteria

EIS TRIGGER CRITERIA	TRIGGERED	COMMENTS
1. Significant Impact on Category A or B environmentally sensitive areas	Yes	Limited clearing of a Category B - Endangered Regional Ecosystem on the Project Site.
2. Involve any mining in a marine area	No	-
3. Involve any mining less than 500m landward from the highest astronomical tide	No	-
4. Require the construction of more than 150 new dwelling units	No	Accommodation will be sought from private facilities operating out of Wandoan and Taroom
5. Include any activity that would otherwise be a Level 1 ERA with an annual fee greater than \$4000	Yes	All ERAs are described in Table 3.
6. Involve the mining of more than 2 million tonnes of mineral or run of mine ore per annum	Yes	Mining of up to 8.0 million tonnes of ROM ore per annum
7. Involve the abstraction of more than 2 million m ³ of water per annum from natural surfaces and/or groundwater sources	No	Annual water requirement estimated at 1.5 million m ³ .
8. Result in more than 25ha remaining post mining in a non-beneficial land capability where an acceptable alternative may be feasible	No	-
9. Involve any non-standard mining activity less than 2 km from a town	No	-
10. Contain a dam that requires a dam failure assessment under the <i>Water Act 2000</i>	No	-
11. Include mining for uranium or asbestos	No	-

6.0 BIBLIOGRAPHY

ABS (2006) *Australian Bureau of Statistics – Census Data 2006* Commonwealth of Australia.

DERM (2000) *Guideline 4 – Deciding the Level of Impact Assessment for the Mining Industry*, Version 1, December 2000.

DERM (2003) *Guideline 8 – Preparing an EMOS for Non-Standard Mining Projects*, Version 1.1, March 2003.

Department of Mines and Energy. (1995). *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland – Land Suitability Assessment Techniques*.

Sattler and Williams eds. (1999) *The Conservation Status of Queensland's Bioregional Ecosystems*. Queensland Environmental Protection Agency. Brisbane.