



Taroborah Coal Project

Appendix 23 –
Social Impact Assessment
Social Impact Management Plan



Taroborah Coal Project

Social Impact Assessment

Prepared for:

Shenhua International Group Pty Ltd

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	4
1.1 STUDY AREAS	4
2.0 METHODOLOGY	6
2.1 INFORMATION SOURCES.....	6
2.2 COMMUNITY CONSULTATION.....	7
2.2.1 Community Stakeholders	7
2.2.2 Community Engagement.....	9
2.2.2.1 Community Feedback.....	10
2.2.2.2 Project Fatigue.....	10
2.3 LIMITATIONS.....	10
2.3.1 Census.....	10
2.3.2 Random Error.....	10
3.0 PROJECT DESCRIPTION	11
3.1 PROJECT OVERVIEW	11
3.2 LANDHOLDERS	12
3.2.1 Land Use.....	12
3.2.2 Mineral Development Licence Landholders	12
3.2.3 Native Title	13
3.3 WORKFORCE PROFILE	13
3.3.1 Construction Phase.....	13
3.3.2 Operations Phase.....	14
3.3.3 Employment and Training	16
3.3.4 Workforce Accommodation	16
4.0 EXISTING SOCIAL ENVIRONMENT	17
4.1 LOCAL COMMUNITY	17
4.1.1 History and Heritage.....	17
4.1.2 Community Values	18
4.1.3 Indigenous Community Values.....	18
4.1.4 Rural Lifestyle.....	18
4.1.5 Recreation, Leisure and Culture.....	19
4.1.6 Social Order	19
4.1.7 Infrastructure and Community Services	22
4.1.7.1 Community Organisations.....	23
4.1.7.2 Indigenous Community Services	23
4.1.8 Education	24
4.1.8.1 Higher Education	25
4.1.8.2 Early Childhood Education and Childcare Services.....	26
4.1.9 Health.....	26
4.1.9.1 General Care	26
4.1.9.2 Aged Care.....	27
4.1.10 Emergency Services	27
4.1.10.1 Police.....	27
4.1.10.2 Ambulance.....	27
4.1.10.3 Fire and Rescue	28
4.1.11 Public and Community Transport	28
4.1.11.1 Transport Services.....	28
4.1.11.2 Highways and Roads.....	29
4.1.12 Utilities.....	29
4.1.12.1 Electricity	29
4.1.12.2 Water	30
4.1.12.3 Waste Management.....	30
4.1.12.4 Communications.....	30

4.1.13	Business and Enterprise	31
4.1.14	Tourism	33
4.1.15	Summary of Local Community	34
4.2	DEMOGRAPHIC PROFILE	36
4.2.1	Population	36
4.2.2	Gender	38
4.2.3	Age	39
4.2.4	Family Composition	40
4.2.5	Ethnicity	40
4.2.6	Mobility	41
4.2.7	Internet Connection	42
4.2.8	Income and Earnings	43
4.2.8.1	Resources Industry Salaries	44
4.2.9	Need for Assistance	44
4.2.10	Socio-Economic Index of Disadvantage	45
4.2.11	Health and Wellbeing	45
4.2.12	Education	46
4.2.12.1	Tertiary Qualifications	47
4.2.13	Employment and Industry	49
4.2.13.1	Prevalent Local Industries	50
4.2.13.2	Employment by Occupation	50
4.2.14	Summary of Demographic Profile	51
4.3	INDIGENOUS DEMOGRAPHIC PROFILE	52
4.3.1	Population	52
4.3.2	Gender and Age	53
4.3.3	Income and Earnings	54
4.3.4	Need for Assistance	55
4.3.5	Education	56
4.3.5.1	Tertiary Qualifications	58
4.3.6	Employment and Industry	59
4.3.7	Summary of Indigenous Demographic Profile	61
4.4	HOUSING AND ACCOMMODATION	63
4.4.1	Current Emerald Housing and Accommodation Status	63
4.4.1.1	Household Composition	63
4.4.1.2	Dwelling Structure	63
4.4.1.3	Dwelling Ownership	64
4.4.1.4	Vehicles per Household	65
4.4.2	Housing Affordability	65
4.4.2.1	Home Repayments	65
4.4.2.2	Median House Prices	66
4.4.2.3	Median Vacant Land Prices	67
4.4.2.4	Land Valuations	67
4.4.2.5	Rental Properties	68
4.4.2.6	Housing Affordability Index	68
4.4.3	Housing Availability	69
4.4.3.1	Residential Building Approvals	69
4.4.3.2	Constraints to Development	71
4.4.4	Short-Term Accommodation	71
4.4.4.1	Accommodation Villages	71
4.4.4.2	Hotels and Motels	72
4.4.5	Workforce Accommodation	72
4.4.6	Community Housing	72
4.4.7	Summary of Housing and Accommodation	73
5.0	SOCIAL IMPACT AND MITIGATION/OPPORTUNITY ANALYSIS	75
6.0	REFERENCES AND INFORMATION SOURCES	87

LIST OF FIGURES

Figure 1: Taroborah Study Areas.....	5
Figure 2: Taroborah Project Location	11
Figure 3: Gender by Study Area 2011	38
Figure 4: Family Composition by Study Area 2011	40
Figure 5: Country of Birth by Study Area 2011	41
Figure 6: Proficiency in Spoken English by Overseas-Born Residents by Study Area 2011	41
Figure 7: Internet Connection in Dwellings by Study Area 2011	42
Figure 8: Weekly Individual Income by Study Area 2011	43
Figure 9: Weekly Household Income by Study Area 2011	43
Figure 10: Type of Educational Institution Attended by Study Area 2011	46
Figure 11: Highest Level of Schooling by Study Area 2011	47
Figure 12: Highest Level of Tertiary Qualification Achieved by Study Area 2011	48
Figure 13: Tertiary Field by Study Area 2011	48
Figure 14: Labour Force Status by Study Area 2011	49
Figure 15: Industry of Employment by Study Area 2011	50
Figure 16: Employment by Occupation by Study Area 2011	51
Figure 17: Indigenous Total Personal Weekly Income by Study Area 2011	54
Figure 18: Indigenous Total Household Weekly Income by Study Area 2011	55
Figure 19: Indigenous Type of Educational Institution Attended by Study Area 2011	56
Figure 20: Indigenous Highest Year of School by Study Area 2011	57
Figure 21: Indigenous Highest Level of Tertiary Qualification by Study Area 2011	58
Figure 22: Indigenous Labour Force Status by Study Area 2011	59
Figure 23: Industries of Indigenous Employment by Study Area 2006.....	60
Figure 24: Indigenous Occupations by Study Area 2006	61
Figure 25: Household Composition by Study Area 2011	63
Figure 26: Dwelling Structure by Study Area 2011	64
Figure 27: Dwelling Ownership by Study Area 2011	64
Figure 28: Motor Vehicles per Household by Study Area 2011	65
Figure 29: Monthly Mortgage Repayments by Study Area 2011	66
Figure 30: Emerald Median Monthly Property Prices 2012-2013.....	67
Figure 31: Rental Payments (Weekly) by Study Area 2011	68

LIST OF TABLES

Table 1: Taroborah Study Areas	4
Table 2: Taroborah Stakeholders and Impact Areas	7
Table 3: Indicative Onsite Open-Cut Workforce	14
Table 4: Estimated Peak Onsite Longwall Workforce.....	14
Table 5: Reported Offences in Emerald Police Division 2007-2012.....	19
Table 6: Summary of Central Highlands Schools	24
Table 7: Registered Businesses by Industry and Study Area 2010-2011	31
Table 8: Registered Businesses by Turnover Range and Study Area 2010-2011	33
Table 9: Registered Businesses by Employment Size and Study Area 2010-2011	33
Table 10: Resident Population by Study Area 2006-2011	36

Table 11: Projected Resident Population by Study Area 2011-2031	36
Table 12: Resident versus Enumerated Population by Age, Gender and Study Area 2011	37
Table 13: Age by Study Area 2011	39
Table 14: Places of Usual Residence Five Years Ago by Study Area 2011	42
Table 15: Selection of Queensland Coal Industry Salaries 2012	44
Table 16: Persons in Need of Assistance by Study Area 2011	44
Table 17: Unpaid Assistance to a Person with a Disability by Study Area 2011	45
Table 18: Socio-Economic Index of Disadvantage by Study Area 2011	45
Table 19: Indigenous Population by Study Area 2011.....	53
Table 20: Indigenous Age and Gender by Study Area 2011	53
Table 21: Indigenous Persons in Need of Assistance by Study Area 2011	55
Table 22: Unpaid Assistance to a Person with a Disability by Study Area 2011	56
Table 23: Emerald Median House Prices 2006-2011	67
Table 24: Queensland Housing Affordability Index 2011.....	69
Table 25: Building Approvals: 12 months to March 2013 by Study Area	70
Table 26: Emerald Property Development as at June 2013.....	70
Table 27: Bowen Basin NRW Shift Workers by Accommodation Type 2012.....	71
Table 28: Bowen Basin Accommodation Camp Bed Availability by LGA2012.....	71
Table 29: Bowen Basin Vacant and Available Hotel/Motel Rooms by LGA 2012	72
Table 30: Social Impact and Mitigation/Opportunity Analysis.....	75

LIST OF APPENDICES

Appendix A: Taraborah Community Engagement Plan	A
Appendix B: Taraborah Community Consultation Report.....	B

LIST OF ABBREVIATIONS

AARC	AustralAsian Resource Consultants Pty Ltd
ABS	Australian Bureau of Statistics
ANZSIC	Australia and New Zealand Standard Industrial Classification
ANZSCO	Australia and New Zealand Standard Classification of Occupations
ASCO	Australian Standard Classification of Occupations
BIBO	Bus-In Bus-Out
CDEP	Community Development Employment Program
CHDC	Central Highlands Development Corporation
CHRC	Central Highlands Regional Council
CIP	Community Investment Program
COC	Chamber of Commerce
CQID	Central Queensland Indigenous Development Ltd
CQU	Central Queensland University
CRG	Community Reference Group
DEHP	Queensland Department of Environment and Heritage Protection
DIDO	Drive-In/Drive-Out
DSDIP	Queensland Department of State Development, Infrastructure and Planning
EIS	Environmental Impact Statement
EPC	Exploration Permit (Coal)
FIFO	Fly-In/Fly-Out
GP	General practitioner
GRP	Gross regional product
H	High
Ha	hectare
HACC	Home and Community Care
ICN	Industry Capability Network
km	kilometre

kV	kilovolt
L	low
LGA	Local Government Area
m	metre
M	medium
MDL	Mineral Development Licence Application
MLA	Mining Lease Application
mtpa	million tonnes per annum
MW	Mega watts
NRW	Non-resident worker
P/N	Positive or negative
QMEA	Queensland Minerals and Energy Academy
QAS	Queensland Ambulance Service
QFRS	Queensland Fire and Rescue Service
QPS	Queensland Police Service
QRC	Queensland Resources Council
RADF	Regional Arts Development Fund
RDAF	Regional Development Australia Fund
RFDS	Royal Flying Doctor Service
ROM	Run of Mine
Shenhua	Shenhua International Group Pty Ltd
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
TAFE	Technical and Further Education
TO	Traditional Owners
TOR	Terms of Reference
YoY	Year on Year

EXECUTIVE SUMMARY

Shenhua International Group Pty Ltd is proposing to develop the Taraborah Project, a coal mining operation located some 22 kilometres west of the central Queensland town of Emerald.

Shenhua is a Brisbane-based subsidiary of the Henan Shenhua Group, one of China's largest multi-industrial and multi-regional enterprises. The group is engaged predominantly in coal exploration and mining, electricity generation and electrolytic aluminium production.

Brisbane-based geological and engineering company IMC Mining Group has been working on Shenhua's behalf to complete exploration and technical evaluations for the Taraborah Project, and to oversee the Environmental Impact Statement process.

IMC commissioned AustralAsian Resource Consultants to conduct a Social Impact Assessment for the Taraborah Project and the assessment was conducted during the latter half of 2012. This report describes the methods employed to conduct the assessment, provides details of the key organisations and stakeholders who will be impacted by, or have an interest in, this Project and summarises the outputs of this assessment. AARC has been in contact with the Social Impact Assessment Unit of the Department of State Development Infrastructure and Planning throughout the social impact assessment process to provide the department with an opportunity to comment on this process.

The proposed project will involve mining a resource of approximately 190 million tonnes of thermal coal by both open-cut and underground methods. It will produce an eventual 2.3 million tonnes per annum of run-of-mine coal from the open cut operation, and up to 5.6 million tonnes per annum from the underground operation.

The economic diversity of the Central Highlands has shaped the character of the various communities within the region. Over the next 20 years, expansion of the coal industry, along with robust agricultural and pastoral industries, will see population growth in the Central Highlands outpace growth rates in both the Fitzroy Statistical Division (comprising the Central Highlands, Rockhampton, Gladstone and Banana local government areas) and Queensland overall.

This growth trend highlights the role of the Central Highlands, and particularly the economic hub of Emerald, as a growing regional centre. When compared with the rest of Queensland, the region is characterised by a high percentage of working-age males and young families, relatively fewer mature-age residents, relatively fewer school-age children (5-19 years) and relatively more young children (0-4 years). Growth in the young family demographic represents increased demand for childcare and family support services in the area, with access to and affordability of childcare nominated as a significant barrier to workforce participation.

Growth of the region's non-resident workforce is placing additional demands on infrastructure and services in the Central Highlands. Forward projections by the Queensland Office of Economic and Statistical Research suggest that by 2018, the combined resident population and non-resident workforce numbers will be equivalent to the Central Highlands' 2023 estimated resident population. The development of more village-style accommodation to service the mining and construction industries, along with housing availability and affordability issues, has created concerns within the resident community.

Shenhua understands that its licence to operate is largely conditional on the company's ability to create and maintain positive long-term relationships with its stakeholders. In addition to the company's ongoing stakeholder consultation during the past few years, AustralAsian Resource Consultants (AARC) implemented a Social Impact Assessment-specific engagement strategy to keep the local community informed about key developments and timelines associated with the proposed project. This included face-to-face consultation with directly affected landholders in November 2012 and a broader community information session held in Emerald in May 2013.

Through this process, AARC has identified and collaborated with a range of stakeholders to gain a full appreciation of the positive and negative impacts that the proposed Taraborah project will have on the region.

A number of general and Taraborah-related impacts on the affected landholders and the Emerald area (and more broadly, the Central Highlands LGA) were identified during the Social Impact Assessment process. Of these, the more critical included:

- Landholder/rural lifestyle:
Many landholders expressed concerns about Taraborah-related increases in dust, noise and light levels, with a concomitant devaluation of their land;
- Land use:
The predominant land-use concern is potential Project impact on the local area's water supply. Landholders fear that the Project will negatively impact the aquifer beneath the MDL, resulting in bore-water levels decreasing, thereby placing the local area at risk during drought conditions;
- Childcare:
While it is not expected that the Taraborah Project will greatly impact local childcare services, it is understood that this is a key issue for the region;
- Highways and roads:
The section of the Capricorn Highway between Emerald and Taraborah is of questionable quality, with local residents reporting ongoing road maintenance due to structural problems since the highway base is situated on unstable black soil. Another major concern is the potential for coal trains to travel through Emerald, across three level crossings; and
- Local business and employment:
There is real potential for Taraborah-related opportunities but the project may also put pressure on non-resources businesses.

Other impact areas include the cumulative effect of nearby Galilee projects coming to fruition; changing demography, psychological impacts; effects on community values, recreation and leisure pursuits; social order, education; healthcare, emergency services, public and community transport, utilities, tourism; housing and accommodation; and cultural heritage and the environment.

While Shenhua will place significant focus on high-impact areas, all impacts will be addressed. Mitigations that will be further developed in Taraborah's Social Impact Management Plan include:

- Establishing a community reference group;
- Participating in regional planning and contributing to initiatives that attract government funding for improved community infrastructure and services;
- Maximising local business and employment opportunities through maintaining close relationships with key business and employment facilitators, such as the Industry Capability Networks, Training Queensland and the Kinetic Group;
- Developing and implementing a number of key strategies and plans, including:



- Land Access Management Plan;
- Traffic Management Plan;
- Drive Safe Program;
- Enquiries and Complaints Management Process;
- Community Investment Program;
- Indigenous Participation Strategy;
- Workforce Accommodation Strategy;
- Employee Behavioural Code; and
- Employee Induction Program.

To successfully manage these impacts, Shenhua will work to develop proactive partnerships, while at the same time maintain a balance between growth demands and lifestyle needs for the region.

1.0 INTRODUCTION

Shenhua International Group Pty Ltd (Shenhua) proposes to establish a new coal mining operation in Queensland's Bowen Basin. Located some 22 kilometres (km) west of the central Queensland town of Emerald, the Taraborah Project (MDL467) is expected to produce up to 5.7 million tonnes per annum (Mtpa) of thermal coal.

In accordance with section 46 of the *Environmental Protection Act 1994*, the Department of Environment and Heritage Protection (DEHP) finalised the Terms of Reference (TOR) for carrying out an Environmental Impact Statement (EIS) for the proposal in August 2012.

An integral part of the EIS process includes development of this Social Impact Assessment (SIA) under Department of State Development, Infrastructure and Planning (DSDIP) guidelines. The report has two specific aims, which are as follows:

- Collect and analyse information about key social and cultural issues, population change, communities and social relationships that are likely to occur as a direct or indirect result of the Taraborah Project; and
- Develop strategies for social impact mitigation, management, monitoring and review.

Based on information gathered and analysed, the SIA will assist Shenhua, in collaboration with a range of stakeholders, to develop a Social Impact Management Plan (SIMP).

Note that AARC has been in contact with the Social Impact Assessment Unit of the Department of State Development Infrastructure and Planning throughout the social impact assessment process, in order to provide the department with an opportunity to comment on this process.

1.1 STUDY AREAS

Three Taraborah study areas were created to ensure adequate coverage of the region and to provide up-to-date and accurate statistics for the project area:

Table 1: Taraborah Study Areas

Study Area	2011 Census	2011 Resident Population
Emerald	Emerald Statistical Area Level 2	13,218
Central Highlands	Central Highlands Local Government Area	28,715
Queensland	Queensland	4,332,739

The Emerald study area represents the major township nearest to the Taraborah Project, while the Central Highlands Local Government Area (LGA) provides a broader view of regional localities.

Figure 1 outlines the study areas relative to the proposed Taraborah Project.

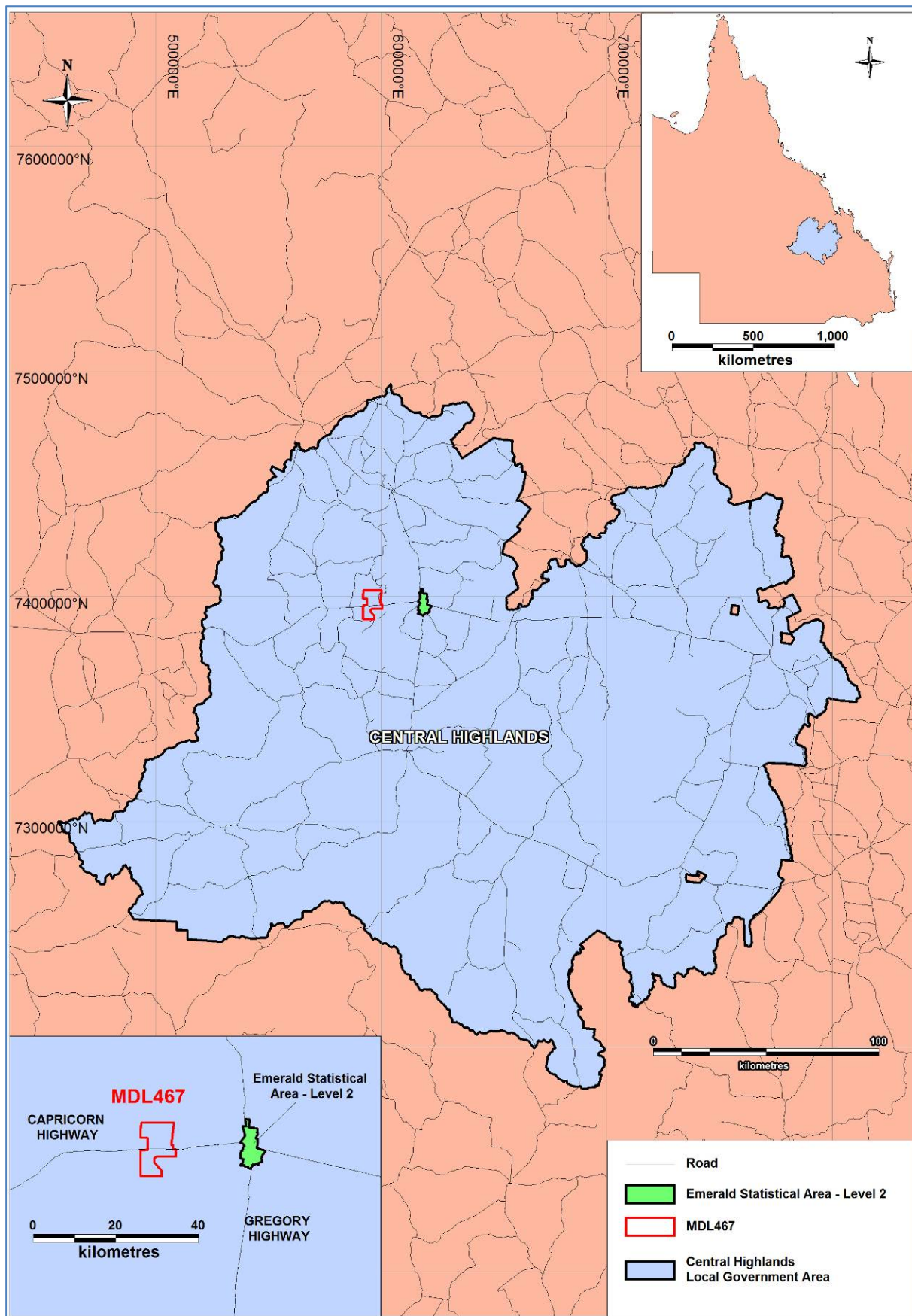


Figure 1: Taraborah Study Areas

2.0 METHODOLOGY

2.1 INFORMATION SOURCES

This work was conducted to meet the TOR for the Taraborah EIS. The SIA used a combination of desktop review, meetings, direct community consultation and a questionnaire to assemble the information needed to assess social impacts of the proposed project on various stakeholders.

A desktop audit of available information relating to the study areas was conducted using the following sources (refer Section 6 for full list) and included relevant regional and community planning documents:

- 2006 and 2011 Censuses, Australian Bureau of Statistics;
- Central Highlands Regional Council;
- Centre for the Government of Queensland, University of Queensland;
- Community of Emerald;
- Directly Affected Landholders;
- Office of Economic and Statistical Research;
- Queensland Ambulance Service;
- Queensland Department of Communities, Child Safety and Disability Services;
- Queensland Department of Education, Training and Employment;
- Queensland Department of Environment and Heritage Protection;
- Queensland Department of Housing and Public Works;
- Queensland Department of Natural Resources and Mines;
- Queensland Department of State Development, Infrastructure and Planning;
- Queensland Department of Transport and Main Roads;
- Queensland Fire and Rescue Service;
- Queensland Health;
- Queensland Minerals and Energy Academy;
- Queensland Police Service; and
- Queensland Resources Council.

2.2 COMMUNITY CONSULTATION

2.2.1 Community Stakeholders

The following key stakeholders and areas of impact were identified for the Taroborah Project:

Table 2: Taroborah Stakeholders and Impact Areas

Stakeholder	Impact Areas
Landholders affected by the Taroborah Project	Community identity and values Livelihood/quality of life Agricultural land/land use Property values Environment Protection of water sources Compensation Psychological Construction and ongoing mine operations (dust, noise, vibration) Safety and proximity to mine site Local employment opportunities Mine closure/rehabilitation
Local communities (especially Emerald)	Cumulative impacts of resources projects Employment and local business opportunities Community demographic Community identity and values Social order Housing affordability and availability Community infrastructure and services Local road networks Environment Construction and ongoing mine operations (dust, noise, vibration) Local employment opportunities
Community groups	Cumulative impacts of resources projects Community demographics Community identity and values Housing affordability and availability Greater demand for services
Indigenous community groups	Community identity and values Cultural heritage Local employment opportunities

Stakeholder	Impact Areas
Local government (Central Highlands Regional Council)	<ul style="list-style-type: none"> Cumulative impacts of resources projects Economic flow-on effect of project Infrastructure and planning Community demographics Community identity and values Housing affordability and availability Local road networks Environment Local employment opportunities Mine closure/rehabilitation
State government	<ul style="list-style-type: none"> Cumulative impacts of resources projects Economic flow-on effect of project Infrastructure and planning Community demographics Housing affordability and availability Environment and rehabilitation management Rail transportation Local employment opportunities Mine closure/rehabilitation
Federal government	<ul style="list-style-type: none"> Economic flow-on effect of project Infrastructure and planning required to secure successful growth of the region Federal road network
Hospital and health services	<ul style="list-style-type: none"> Cumulative impacts of resources projects Community demographics Social order Housing affordability and availability Greater demand for services
Emergency services	<ul style="list-style-type: none"> Cumulative impacts of resources projects Community demographics Social order Greater demand for services
Education and childcare services	<ul style="list-style-type: none"> Cumulative impacts of resources projects Community demographics Greater demand for services
Agricultural lobby groups	<ul style="list-style-type: none"> Protection of the rights of local farmers Potential loss of employees to mining industry
Environmental groups	<ul style="list-style-type: none"> Protection of local flora and fauna Protection of water sources Mine rehabilitation

Stakeholder	Impact Areas
Local businesses	Cumulative impacts of resources projects Community demographics Housing affordability and availability Support businesses required to service the project Local procurement opportunities
Local short-term accommodation providers (motel, hotel)	Cumulative impacts of resources projects Greater demand for services Ability/capacity to service tourist and other non-mining related industries
Local employment organisations	Larger workforce Local employment opportunities
Unions	Representation of a broad Bowen Basin workforce Project workforce agreements
Other mining and energy projects within the region	Cumulative impacts of resources projects Competitive employment market/capacity of immediate community for employment Road/rail access
Potential employees	Skill requirements Local employment opportunities
Potential suppliers/subcontractors	Capacity and skill set to meet requirements Local employment opportunities

2.2.2 Community Engagement

In addition to Shenhua's and IMC's ongoing stakeholder liaison during the past few years, AustralAsian Resource Consultants (AARC) implemented an engagement plan to keep the local community informed about key developments and timelines associated with the proposed project (refer Appendix A Taraborah Community Engagement Plan). The plan was also used to collect and analyse information about those social and cultural issues that are likely to have the most pronounced impacts.

Specific initiatives included mail distribution of a package containing a project fact sheet and reply-paid questionnaire to potentially affected stakeholders. Additional copies of the information package were delivered personally to business owners, state government offices, local government representatives and general community members.

Face-to-face consultation with directly affected landholders was undertaken in November 2012, while a broader community information session was held in Emerald in May 2013, attracting some 100 attendees.

In addition to regular liaison with Traditional Owner groups, consultation was undertaken with a 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. All communication with Indigenous stakeholders was carried out in a respectful and welcoming manner, an approach that is reinforced in the project's outline Indigenous Participation



Plan (refer to Appendix B of the Taroborah SIMP). For full details of Taroborah community engagement results, please refer to the Taroborah Community Consultation Report in Appendix B of this Social Impact Assessment.

2.2.2.1 Community Feedback

For details of Taroborah's Enquiries and Complaints Management Process, refer to the Taroborah Social Impact Management Plan.

2.2.2.2 Project Fatigue

The perceived mining industry downturn has had significant impact on Bowen Basin communities, including Emerald. While there is potential for major Galilee Basin projects to come to fruition in the future, recent mine closures (i.e. Gregory open cut) have negatively impacted the Central Highlands economy, including in the areas of employment and real estate and as such, general Emerald community opinion of the proposed Taroborah Project has been receptive. Residents believe that the project has potential to inject economic positivity into the region through jobs and business involvement.

Subsequently, the phenomenon known as 'project fatigue' – where communities surrounded by high levels of resources development are subjected to numerous project and EIS consultation programmes – has not been a feature in Emerald or its surrounds.

2.3 LIMITATIONS

2.3.1 Census

Australian Bureau of Statistics (ABS) 2011 Census data have been used where available. However, for some research areas, the 2006 Census was the most current information source.

2.3.2 Random Error

Many classifications used in ABS statistics have an uneven distribution of data throughout their categories. Random adjustment of the data is considered the most satisfactory technique for protecting individuals' privacy through not releasing identifiable Census data. These adjustments result in small introduced random errors, but the information value as a whole is not impaired.

3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The Taroborah Project site is located 22 km west of Emerald, in central Queensland. The Project extends north and south of the Capricorn Highway and Central West rail system, and is entirely located within Central Highlands Regional Council boundaries.

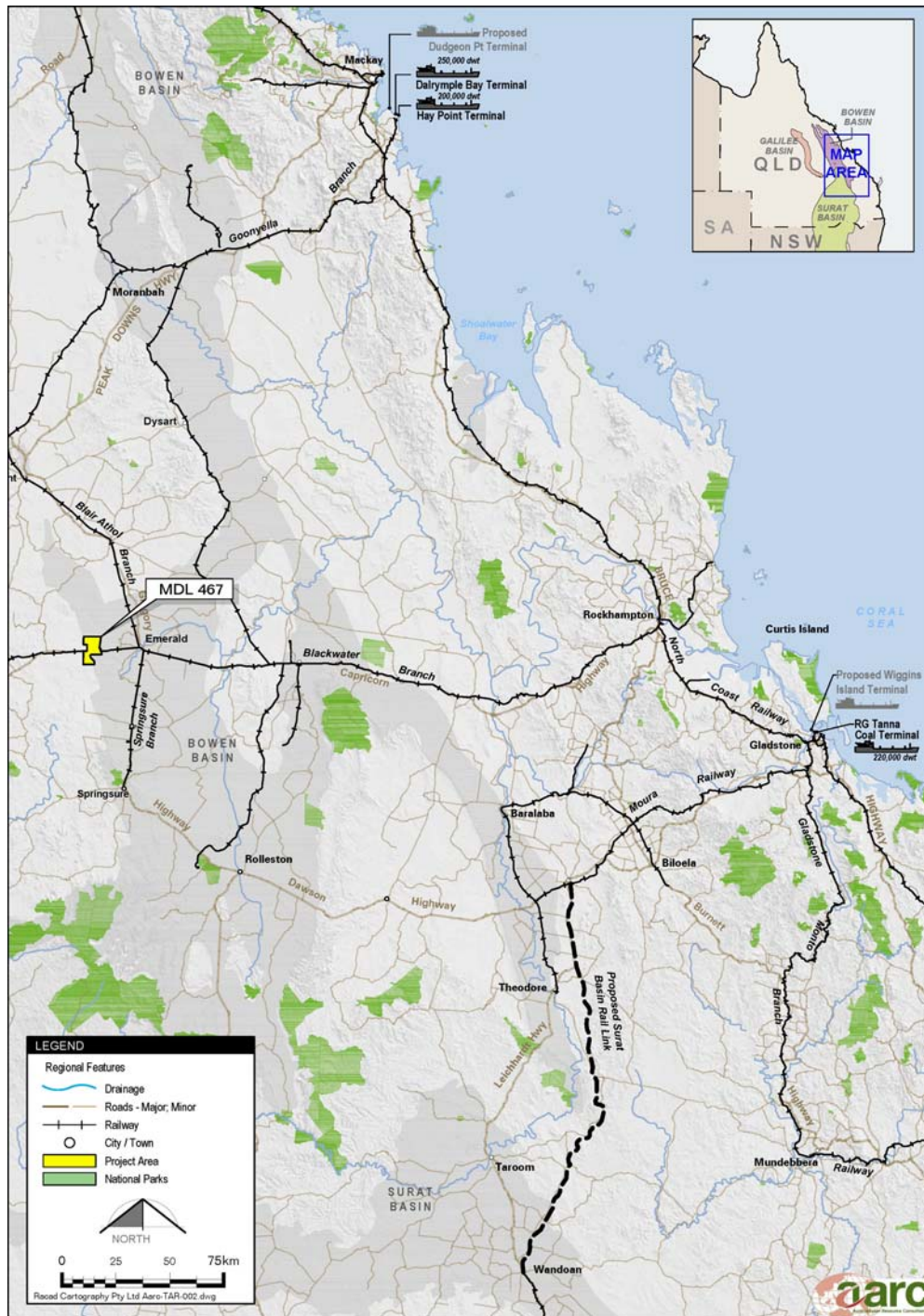


Figure 2: Taroborah Project Location

The proposed Project will involve mining a resource of approximately 190 million tonnes of thermal coal, at an eventual rate of up to 2.3 Mtpa of run-of-mine (ROM) coal for the open-cut operation, and up to 5.7 Mtpa ROM for the underground mine. Coal will be processed onsite before being transported to Gladstone port via the Central West and Blackwater Rail Systems. The Taraborah Project has an estimated mine life of up to 25 years, including construction, commissioning, operation, decommissioning and rehabilitation periods.

The project is currently managed under Mineral Development Licence No 467 (MDL467), which exhibits an area of 7,966 hectares (ha). Proposed major project activities will include:

- Open-cut mining, via hydraulic excavator and dump truck, in the southern part of the proposed mining area;
- Underground mining, via longwall mining extraction techniques, in the northern part of the proposed mining area;
- Processing of mined coal at a coal handling and preparation plant, including coal sizing, handling and washing; and
- Transporting of coal to the port of Gladstone via the Central West and Blackwater Rail Systems.

3.2 LANDHOLDERS

3.2.1 Land Use

The Project area and surrounds are used predominantly for cattle grazing and cropping. A small section of land in the northeast area of the MDL467 lease boundary has been designated by the Queensland Government as a Strategic Cropping Land Protection Area, although this land occurs as a sandstone ridge with moderate timber and is suitable only for cattle grazing. Other pockets of land within the lease boundaries have been designated Strategic Cropping Land Trigger Areas.

Lot areas range from approximately 65ha to more than 2,500ha. A number of smaller allotments are utilised as retirement blocks/hobby farms, while the larger allotments are used for commercial pastoral businesses. Five homesteads are located on properties within the MDL467 boundary; however, many of the other lots have no residence on site.

There are no apparent social and cultural activities in the immediate vicinity of the Taraborah site. Most of these types of activities are centred in Emerald, some 22 km to the east, along with recreational activities around Lake Maraboon, which is located approximately 10 km south of the Taraborah MDL. The Gemfields, around 20 km west of Taraborah along the Capricorn Highway, are a popular destination for tourists and locals interested in the character and history of the small communities.

Note that the Final Terms of Reference are based on Project activities that will be conducted within EPC1011 (now MDL467). Since the draft TOR was submitted to the former Department of Environment and Resource Management – now the Department of Environment and Heritage Protection (DEHP) – a Mineral Development Licence Application (MDLA467) has been approved. MDL467 occupies a smaller area than the former EPC1011 and excludes the State Forest.

3.2.2 Mineral Development Licence Landholders

There are 21 properties within the Project's MDL467 boundary (either entirely or in part), with 11 registered owners, including Queensland Rail and the Department of Transport and Main Roads. Properties directly affected by the eventual Mining Lease will either be purchased by the proponent,

or surface rights will be acquired where applicable. These arrangements will be subject to discussions with each affected landholder. Surface rights arrangements will provide the mining lease holder with use of the land for the term of the lease, with the land reverting to the original owner when the lease is relinquished by the proponent.

The number of families directly and indirectly affected by the proposed Taraborah Project is estimated at 20, including:

- Nine families that are principal leaseholders under the Taraborah MDL;
- Two families resident on the properties located on the MDL; and
- Eleven families living on or owning properties adjacent to the MDL.

3.2.3 Native Title

Native title claimants for the proposed Taraborah Project area are the Western Kangoulu People (lodged in May 2013 – Federal Court file number QUD229/2013) and Bidjara #7 People (lodged in November 2012 – Federal Court file number QUD644/2012). While no Native Title determination has been agreed over the region containing the Project, Shenhua liaises directly with the Western Kangoulu on cultural heritage issues.

A cultural heritage map of Queensland indicates three sites of Indigenous cultural heritage value located within the general vicinity of the project site. Two are identified as 'story places or cultural sites', and the third is classified as 'engravings and paintings'. They are all located south of Lake Maraboon, approximately 20km south of the project site.

The project's Historic Heritage Management Plan also identified seven non-Indigenous cultural heritage sites during a field survey. None of these were assessed as demonstrating significance at a State or local level, as set against criteria provided in Section 35 of the *Queensland Heritage Act 1992*.

Consequently, it is not anticipated that project activities will have an adverse impact on sites of significant Indigenous or non-Indigenous cultural heritage.

3.3 WORKFORCE PROFILE

It is proposed that the Taraborah Project will be a combined open-cut and underground operation, with a duration of six years for the open-cut and 16 years for the underground mine (underground development will commence four years after open-cut start-up).

3.3.1 Construction Phase

The open-cut construction workforce is expected to peak at 150 employees, whilst the underground construction workforce will be 100 employees. Wherever possible, priority will be given to people from local communities to join the construction workforce. However, it is expected that many workers will have to be sourced from outside the local area and operate on a drive-in/drive-out (DIDO) basis. These employees may require short-term accommodation in Emerald and will be bussed to and from the Project (BIBO) before and after their shifts.

3.3.2 Operations Phase

Mine operations are expected to commence in 2018, with a peak operations workforce of approximately 350. The Taraborah Project will operate on a 24-hour/seven-day-a-week basis. The open-cut operation will involve three rotating shifts of workers (two mining and one maintenance). Rosters are yet to be finalised but it is expected that open-cut employees will work industry standard 12-hour shifts (refer to Table 3 for details of the open-cut workforce). The underground mine will support two 10-hour production shifts per day, with a third 8-hour shift dedicated to maintenance also proposed (refer to Table 4 for details of the underground mine workforce). During the operations phase, any non-local employees will operate on a DIDO basis, with many expected to ultimately choose to relocate to the area.

In addition to the permanent mine employees indicated in the tables, a varying number of contractors will be used for undertaking intermittent and one-off tasks.

Table 3: Indicative Onsite Open-Cut Workforce

Year	2018	2019	2020	2021	2022	2023	2024
Operators	37	68	63	90	90	90	60
Maintenance	12	22	21	30	30	30	20
Contractors	4	8	8	8	8	8	4
Supervision & Administration	9	13	13	13	13	13	13
Total	62	111	105	141	141	141	97

Table 4: Estimated Peak Onsite Longwall Workforce

	Typical Roster				Total for 2 Rosters
	Day	Evening	Night	Total	
WAGES					
Longwall					
Supervisor	1	1	1	3	5
Operator	2	4	4	10	18
Absentee	1	1	1	3	5
Subtotal	4	6	6	16	28
Development					
Supervisor	2	2	2	6	10
Operator	6	10	10	26	46
Absentee	2	3	3	8	14
Subtotal	10	15	15	40	70
Mine Maintenance					
Longwall					

	Typical Roster				Total for 2 Rosters
	Day	Evening	Night	Total	
Fitter	2	1	1	4	6
Electrical	2	1	1	4	6
Development					
Fitter	2	2	2	6	10
Electrical	2	2	2	6	10
Conveyors					
Fitter	1	1	1	3	5
Electrical	1	1	1	3	5
Outbye/diesel					
Workshop	2	1	1	4	6
Fitter	1	1	1	3	5
Electrical	1	1	1	3	5
Subtotal	14	11	11	36	58
Mine Services					
Outbye deputy/pumps	1	2	2	5	9
Beltman	2	2	2	6	10
Secondary support	4			4	4
Stone dust	2			2	2
Supplies/roadwork	2	2	2	6	10
Surface general	1	1	1	3	5
*Absentees	3	2	2	7	11
Subtotal	15	9	9	33	51
TOTAL WAGES	43	41	41	125	207
STAFF					
General manager	1			1	1
Mine manager	1			1	1
Production manager	1			1	1
Under manager	1	1	1	3	5
Control room operator	1	1	1	3	5
Longwall manager	1			1	1
Maintenance engineer	1			1	1
Electrical engineer	1			1	1
Longwall maintenance manager	1			1	1
Development maintenance manager	1			1	1
Maintenance planner	2			2	2
Prep plant manager					
Tech services manager	1			1	1
Mine engineers	3			3	3
Geologist	1			1	1
Surveyor	2			2	2

	Typical Roster				Total for 2 Rosters
	Day	Evening	Night	Total	
Purchasing manager	1			1	1
Human resources manager	1			1	1
Safety/training	2			2	2
Commercial manager	1			1	1
Clerks	3			3	3
TOTAL STAFF	27	2	2	31	35
TOTAL MINE PERSONNEL (wages + staff)	70	43	43	156	242

Source: Pre-Feasibility Mining Study for the Taraborah Project - EPC1011

3.3.3 Employment and Training

Wherever possible, Shenhua will source employees from the local area. This will result in minimal disruption to community fabric; both lifestyle and infrastructure. Regardless of such programmes, it is not anticipated that the local employment pool will sustain the project, so Shenhua will also recruit from across the Central Highlands, central Queensland and if required, further afield.

In addition to standard recruitment practices (such as utilising the services of employment agencies and advertising in local media) Shenhua will work with local Indigenous communities to identify and engage potential trainees and employees for the project.

The company will also work with entities such as Training Queensland and other Registered Training Organisations to implement a broad spectrum of training programmes, so as to attract, develop and retain skilled and unskilled workers. Business as usual will include traineeships, apprenticeships and graduate programs, as well as participation in local school-to-work initiatives, as appropriate.

3.3.4 Workforce Accommodation

Employees sourced from outside the region will either relocate to the local community (Emerald) or operate on a DIDO basis, requiring short-term accommodation in Emerald while working their shifts. Workers will be transported between the Project and Emerald by BIBO arrangement.

There will be no camp accommodation for the Taraborah Project. The company will encourage DIDO employees to relocate to the local area, which has the potential to benefit communities through participation in community organisations, sporting and recreation groups and charities.

4.0 EXISTING SOCIAL ENVIRONMENT

4.1 LOCAL COMMUNITY

Settlement patterns around the Project site reflect the agricultural heritage of the region, although this is being challenged by changing social patterns, brought about by long-term expansion of the resources sector.

Large and diverse agricultural and pastoral industries, including cattle, cotton, grain and citrus, have been the backbone of the region's development for many years, supported by the 1.3 million megalitre Fairbairn Dam, which feeds 300 irrigators. More recently, expansion of the coal sector has brought to the region a more diverse range of employment skills for the service resources-related industries.

The changing economic and social landscape is having mixed impacts on the community. Businesses in the region have begun to diversify away from traditional markets in the agricultural sector into components, parts and services for the resources sector. Strong growth and development are evident across the region in electricity, gas and water supply industries, while professional services, transport and manufacturing are also experiencing unprecedented expansion.

Markedly, liveability and lifestyle factors for the region are changing, due to a number of interrelated factors, including increased population numbers, pressures on social and economic infrastructure, conflicts over land use and impacts on amenity from development proliferation.

Located on the Nogoa River, approximately 265km west of Rockhampton, the region's largest community, Emerald, is a large and modern town that boasts a strong and growing community with excellent facilities, including a botanical gardens, sporting venues, cinema and several shopping centres.

4.1.1 History and Heritage

The Central Highlands was originally home to many Indigenous groups, such as the Kairi, Kanolu and Wadja peoples, and the Western Kangoulu People, who are registered native title claimants over the area where the proposed Taroborah Project will be located. Note that the Bidjara #7 People have also made a native title claim over this area.

The Emerald region was visited by Ludwig Leichhardt in the mid 1840s and in 1861, former gold prospector Peter MacDonald took up the first of several pastoral areas around Emerald. He is generally considered to be the first permanent white settler. In 1866 MacDonald consolidated his properties into the Emerald Downs station, which became the source of the district's name.

Regional growth continued into the late 1800s, bolstered by expansion of the railway from Rockhampton to Longreach, and the growth of a number of railway towns along the line. The region grew substantially from the 1950s to 1980s with the introduction of cattle grazing and diverse agricultural activities.

Established in 1879 as a base for the railway construction, the town of Emerald is now considered a key hub for the Central Highlands and gateway to the Gemfields, one of the southern hemisphere's richest sapphire fields and a popular fossicking place for tourists.

In 1972, construction of Fairbairn Dam and the Emerald Irrigation Scheme allowed for significant development and expansion of agriculture across the region. The dam construction and associated Lake Maraboon coincided with the commencement of large-scale coal mining in the Bowen Basin. Open-cut and underground mines developed in the Central Highlands contribute towards a significant proportion of Queensland's total coal exports.

4.1.2 Community Values

Community values can be described as liveability and lifestyle in the region, encompassing the standards and principles by which people live, and the expectation that others will live and behave in a similar manner. A sense of community is based on certain shared values, which are identified as the principles of solidarity, participation and coherence.

According to direct consultation and the Central Highlands 2022 Community Plan, local residents value their relaxed lifestyle, safe environment, friendly people, involvement in sports, high level of volunteerism and that their environment is a good place to raise children.

Emerald residents specifically value their rich history and their active community, along with their access to a range of services and community facilities. Additionally, they appreciate their permanent access to water sports and recreational space afforded by the Fairbairn Dam.

In the Gemfields, residents value the unique character and charm of the small communities, as well as their laid-back, down-to-earth lifestyle, their local history and the creativity involved in the mining and preparation of gemstones.

The attraction of employment opportunity, along with lifestyle factors, has generated an increasing multicultural population in the Central Highlands. As at 2011, 4,075 local residents, representing 13.7% of the population, were born overseas. Growing ethnic populations include residents born in South Africa, the Philippines, the United States and Sri Lanka. This multicultural diversity is celebrated annually with a local festival to acknowledge the many cultures that have been brought together in the region.

4.1.3 Indigenous Community Values

In addition to the social, economic, environmental and cultural values described previously, Indigenous community values also include the recognition of relationships, processes and connections between social groups, people and place, as well as people and non-human entities.

While Indigenous people represent 3.3% and 3.6% of the Emerald and Central Highlands regional populations respectively, the richness and diversity of Indigenous cultures are nonetheless important to the region and need to be preserved.

4.1.4 Rural Lifestyle

Residents have indicated that one of the strong attractions of the region is the presence of healthy family and friendship networks, which are typical of most rural towns. Close-knit communities and long-standing family connections benefit from the fact that the majority of people know each other and look out for one another. To a large degree, these factors act as a buffer to the prevalence of rural isolation.

Furthermore, regular social gatherings in the towns and a wide choice of sporting and recreational options assist in promoting social connections within the community. Nevertheless, there is a risk that a small percentage of the community (e.g. women and children on rural properties without ready access to transport) may become marginalised.

4.1.5 Recreation, Leisure and Culture

The Central Highlands 2002 Community Plan identified the region as having a younger, active community, with well-resourced and utilised sporting, recreation and leisure facilities.

Emerald has a large offering of sporting facilities, leisure and cultural amenity for both adults and children. These include a \$10 million expansion of the aquatic centre, gymnasium, various sporting and recreational clubs, an art gallery and twin cinemas. Nearby Lake Maraboon offers water-oriented recreational opportunities and has onsite accommodation, as well as dedicated picnic areas and barbecues.

The Emerald Art Gallery showcases art exhibitions drawn from local, state and national artists. It is supported by the Regional Arts Development Fund (RADF), a partnership program with Arts Queensland managed by local governments across regional Queensland. The program focuses on developing quality art and arts practice for and with regional communities, in order to support professional arts outcomes and development in regional Queensland.

4.1.6 Social Order

Queensland Police statistics for Emerald over a five-year period indicated that there was a general downward trend for offences against the person (homicide, assault, sexual offences, etc.). Assaults dropped from 71 to 58 since 2007, while sexual offences decreased by 45% over the same period. Conversely, during the past five years unlawful entries and general theft offences increased by 17% and 62% respectively.

Since 2007, drug offences in Emerald increased slightly (from 99 to 105); while good-order offences decreased by 19% and drunkenness offences dropped by 13%. Despite ongoing growth in the region, traffic and related offences decreased by 21% during the past five years.

Refer to Table 5 for a breakdown of the reported offences figures in Emerald Police Division for the period 2007 to 2012.

Table 5: Reported Offences in Emerald Police Division 2007-2012

Offence Type	Number					Rate per 100,000 Persons				
	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Homicide (Murder)	-	-	-	-	-	-	-	-	-	-
Other Homicide	-	-	-	-	-	-	-	-	-	-
Attempted Murder	-	-	-	-	-	-	-	-	-	-
Conspiracy to Murder	-	-	-	-	-	-	-	-	-	-
Manslaughter (excl. by driving)	-	-	-	-	-	-	-	-	-	-
Driving Causing Death	-	-	-	-	-	-	-	-	-	-
Assault	71	58	79	74	58	499	397	530	487	375
Grievous Assault	4	5	3	9	9	28	34	20	59	58
Serious Assault	35	18	32	31	24	246	123	215	204	155

Offence Type	Number					Rate per 100,000 Persons				
	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Serious Assault (Other)	3	13	6	5	4	21	89	40	33	26
Common Assault	29	22	38	29	21	204	150	255	191	136
Sexual Offences	20	17	13	10	11	141	116	87	66	71
Rape and Attempted Rape	6	4	7	5	2	42	27	47	33	13
Other Sexual Offences	14	13	6	5	9	98	89	40	33	58
Robbery	-	-	-	-	1	-	-	-	-	6
Armed Robbery	-	-	-	-	1	-	-	-	-	6
Unarmed Robbery	-	-	-	-	-	-	-	-	-	-
Other Offences Against the Person	13	12	9	12	2	91	82	60	79	13
Kidnapping & Abduction etc.	4	-	3	-	-	28	-	20	-	-
Extortion	-	-	-	-	-	-	-	-	-	-
Stalking	3	1	-	-	1	21	7	-	-	6
Life Endangering Acts	6	11	6	12	1	42	75	40	79	6
Offences Against the Person	104	87	101	96	72	731	595	677	632	466
Unlawful Entry	82	57	116	76	96	576	390	778	500	621
Unlawful Entry With Intent - Dwelling	40	20	35	23	47	281	137	235	151	304
Unlawful Entry Without Violence - Dwelling	38	17	35	23	46	267	116	235	151	298
Unlawful Entry With Violence - Dwelling	2	3	-	-	1	14	21	-	-	6
Unlawful Entry With Intent - Shop	9	8	18	11	10	63	55	121	72	65
Unlawful Entry With Intent - Other	33	29	63	42	39	232	198	422	277	252
Arson	2	-	-	4	7	14	-	-	26	45
Other Property Damage	138	118	128	129	146	970	807	858	850	945
Unlawful Use of Motor Vehicle	7	11	19	20	16	49	75	127	132	104

Offence Type	Number					Rate per 100,000 Persons				
	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Other Theft (excl. Unlawful Entry)	133	145	148	201	216	935	991	992	1,324	1,398
Stealing from Dwellings	13	10	19	21	21	91	68	127	138	136
Shop Stealing	5	15	8	15	9	35	103	54	99	58
Vehicles (steal from/ enter with intent)	25	32	50	53	86	176	219	335	349	557
Other Stealing	90	88	71	112	100	633	602	476	738	647
Fraud	177	239	129	108	64	1,244	1,634	865	711	414
Fraud by Computer	-	2	1	12	1	-	14	7	79	6
Fraud by Cheque	1	3	12	10	2	7	21	80	66	13
Fraud by Credit Card	71	4	31	66	1	499	27	208	435	6
Identity Fraud	-	3	-	2	5	-	21	-	13	32
Other Fraud	105	227	85	18	55	738	1,552	570	119	356
Handling Stolen Goods	2	-	3	15	12	14	-	20	99	78
Possess Property Suspected Stolen	-	-	-	2	1	-	-	-	13	6
Receiving Stolen Property	1	-	-	5	1	7	-	-	33	6
Possess etc. Tainted Property	1	-	3	8	10	7	-	20	53	65
Other Handling Stolen Goods	-	-	-	-	-	-	-	-	-	-
Offences Against Property	541	570	543	553	557	3,802	3,897	3,640	3,642	3,605
Drug Offences	99	114	87	109	105	696	779	583	718	680
Prostitution Offences	-	-	3	-	-	-	-	20	-	-
Liquor (excl. Drunkenness)	40	55	41	24	35	281	376	275	158	227
Gaming Racing & Betting Offences	-	-	-	-	-	-	-	-	-	-
Breach Domestic Violence Protection Order	37	31	39	40	27	260	212	261	263	175
Trespassing and Vagrancy	8	17	10	13	17	56	116	67	86	110
Weapons Act Offences	10	8	7	4	16	70	55	47	26	104

Offence Type	Number					Rate per 100,000 Persons				
	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012
Good Order Offences	174	230	144	141	129	1,223	1,573	965	929	835
Stock Related Offences	28	186	4	7	5	197	1,272	27	46	32
Traffic and Related Offences	235	257	190	209	185	1,652	1,757	1,274	1,376	1,197
Miscellaneous Offences	3	8	2	1	11	21	55	13	7	71
Other Offences	634	906	527	548	530	4,456	6,195	3,533	3,609	3,430

Rates are expressed per 100,000 persons and are calculated based on the estimated residential population as at 30 June each year.

Source: Queensland Police Service.

4.1.7 Infrastructure and Community Services

To plan for the region's future growth and development, the Central Highlands Regional Council developed its 2022 Community Plan. To inform the plan and to provide a baseline analysis of the existing social environment, a 'Get Involved' community engagement phase was initiated, including workshops, meetings, displays and events.

Through this consultation process, Council prioritised a number of key infrastructure and community services goals for the region, including:

- Planning and delivering a regional road network that is well maintained and interconnected for safe and effective movement of people and products;
- Developing and maintaining reliable, affordable and integrated regional transport services, networks and systems including public transport options;
- Planning and providing access to reliable, affordable high-speed telecommunication systems and services;
- Planning and delivering energy and power to meet economic development, community and environmental requirements; and
- Planning and providing for land availability to deliver a diverse range of quality housing and accommodation options for people living in or relocating to the region.

Key findings of the research activity from Emerald-area residents concerned:

- Attracting and improving community services such as medical, childcare and aged care to meet growth demands;
- Building on the region's strengths and further diversifying within the local economy, including tourism development; and
- Planning, developing and expanding facilities and infrastructure to meet current and future growth, especially transport systems and housing.

Specific to the Gemfields area, priorities included:

- Increasing the community's access to health, childcare and transport services;

- Improving community infrastructure and development, especially communications; and
- Attracting more tourists and improving economic development.

4.1.7.1 Community Organisations

There are a wide variety of opportunities to become involved in community activities across the study areas (Emerald and Central Highlands). Some of the active community organisations and networks listed by the Central Highlands Regional Council include:

- Anglicare;
- Central Highlands Children's Choir;
- Central Highlands Regional Resources Use Planning Cooperative;
- Emerald Art Group;
- Emerald Community Care Centre (Bluecare);
- Emerald Little Theatre;
- Emerald Neighbourhood Centre;
- Emerald Patchwork and Quilting Group;
- Emerald Photographic Club;
- Lifeline;
- Ozcare Community Care Central Highlands;
- Rotary Club of Emerald;
- Royal Queensland Bush Children's Health Scheme; and
- St Vincent de Paul.

4.1.7.2 Indigenous Community Services

The area around Emerald was subject to extensive clearing during the late 1800s and the majority of the area's Indigenous population were moved closer to the coast. However, approximately 70-80 people of Aboriginal or Torres Strait Islander descent, mostly the Western Kanguroo People, currently live in and around Emerald.

Competitively-priced housing availability is critical across the community, which is exacerbated in the Indigenous community where overcrowding in existing houses is a constant issue, often with up to three families to a single house. There are many families on the waiting list for low-cost accommodation, but few suitable houses become available.

Based in Emerald, the Central Highlands Aboriginal Corporation provides seven government-funded houses and a number of units for Indigenous accommodation in Emerald. However, because of long waiting lists for available houses, overcrowding leads to other social and behavioural problems.

Indigenous healthcare is the focus of two Indigenous healthcare workers who are responsible for facilitating primary healthcare from the Central Highlands Community Health Centre in Emerald. One specialises in child and youth health, while the other is the chronic-disease care coordinator. Both positions are funded by the Queensland Government. The education program involves visits to schools in the region to check out the status of Indigenous health. Currently the program is targeting

ear health through an initiative called 'Deadly Ears'. If a diagnosis is made, a referral is organised to a local GP through the child's parents or guardians.

A government-funded immunisation program for Indigenous children has recently been discontinued because of budget constraints, although local GPs are offering to continue this service for free for children under 16 years.

A cardiac programme for adult Aborigines has been designed to educate people about the risk of heart attack. This programme includes an annual visit by a Brisbane health team, including a cardiologist, to examine at-risk clients.

Besides heart problems, various health issues endemic in the wider Indigenous community (e.g. diabetes, dietary problems, etc.) are evident to health workers but for various reasons, professional staff experience difficulties in organising people to visit health services in the region for assistance.

4.1.8 Education

Emerald is an important education centre for the region, serviced by three state primary schools, a state secondary school, three independent colleges and the Capricorn School of Distance Education. The Gemfields region is serviced by the Anakie State School, which opened in 1885. A summary of all study-area schools is presented in Table 6.

Table 6: Summary of Central Highlands Schools

School	Year Levels	Enrolment
Anakie State School	P-7	106
Arcadia Valley State School	P-7	5
Bauhinia State School	P-7	13
Blackwater North State School	P-7	492
Blackwater State High School	8-12	331
Blackwater State School	P-7	187
Bluff State School	P-7	43
Capella State High School	8-12	142
Capella State School	P-7	181
Capricornia (Emerald Campus) School of Distance Education	P-12	244
Comet State School	P-7	37
Denison State School	P-7	489
Dingo State School	P-7	40
Duaringa State School	P-7	31
Emerald Christian College	P-12	234
Emerald North State School	P-7	333

School	Year Levels	Enrolment
Emerald State High School	8-12	619
Emerald State School	P-7	392
Gindie State School	P-7	35
Lochington State School	P-7	4
Marist College (Emerald)	8-12	533
Orion State School	P-7	8
Our Lady of The Sacred Heart School (Springsure)	P-7	67
Rolleston State School	P-7	59
Springsure State School	P-10	117
St Patrick's School (Emerald)	P-7	660
Tieri State School	P-7	223
Tresswell State School	P-7	8

*Source: Queensland Department of Education, Training and Employment Schools Directory (2012).
Catholic Education Office and Various School Annual Reports.*

Several boarding schools operate out of major centres, including Rockhampton, Charters Towers, Townsville and Toowoomba.

Despite the recent downturn in the coal industry, student numbers in Emerald schools remain reasonably static (and high).

Staff at Emerald State High School are undertaking 'Crossing Cultures' training and further embedding Aboriginal and Torres Strait Islander perspectives into the curriculum to develop strategies to 'close the gap' between Indigenous and non-Indigenous students in the areas of achievement, retention and Year 12 certification.

A major issue affecting the attraction of teachers to Emerald relates to affordability of housing for purchase and rent. The region's two-tier economy means that residents working outside the mining industry (and associated salaries) are unable to afford the artificially high rents without subsidy.

4.1.8.1 Higher Education

Emerald offers tertiary educational facilities such as Technical and Further Education (TAFE), Central Queensland University (CQU) Emerald Campus and the Emerald Agricultural and Pastoral College. The 1,200ha Australian Agricultural College Corporation Emerald campus is located three kilometres east of the town. The research and training campus specialises in beef, cattle, cotton, horses and horticulture.

The Central Queensland Institute of TAFE (main campus in Rockhampton) has a Central Highlands regional campus located in Emerald and additional campuses at Barcaldine, Blackwater and Clermont. Curriculum and delivery systems have been adapted to meet the training needs of clients in the region, including the provision of flexible learning programs.

CQU is headquartered in Rockhampton and has campuses in Gladstone, Mackay and Emerald. On-campus and distance education fields of study include IT, business, education, built environment,



creative and performing arts, engineering and technology, health and recreation, primary industries and environmental sciences, humanities and social science. As there is no public transport available to the CQU Emerald campus, which is located on the Emerald Agricultural College precinct, students require private transportation.

4.1.8.2 Early Childhood Education and Childcare Services

The town is currently serviced by five childcare centres – Emerald Preschool and Community Kindergarten, Goodstart Early Learning Centre, Borilla Community Kindergarten, C&K Emerald Community Kindergarten and C&K Emerald South Community Kindergarten. Emerald World of Learning also provides a day-care service, while Emerald Outside School offers preschool, after-school and holiday care.

Childcare facilities in Emerald are under pressure, as demand for places significantly exceeds supply. Emerald currently has an estimated waiting list of more than 400 children requiring childcare places. Availability in day-care for babies and toddlers (0 years to 2 years) is a particular problem. The shortage of places is considered to be a significant barrier to workforce participation, particularly for women in the region. A difficulty for Council and others planning future childcare needs is the cyclical nature of the mining industry and the corresponding fluctuations in workforce requirements.

4.1.9 Health

4.1.9.1 General Care

Central Highlands is serviced by Blackwater, Springsure and Emerald Hospitals. The latter is a 38-bed facility that provides medical services for an average 3,000 patients a year. These services include medical and surgical, specialist clinics, clinical support and allied health. More acute cases or patients requiring emergency surgery are sent to larger hospitals in Rockhampton or Brisbane via the Royal Flying Doctor Service (RFDS) or rescue helicopter.

The hospital has a level-three low-risk birthing facility, catering for around 360 births a year. This is consistent with the high proportion of women in the region of child-bearing age. The median age of Emerald's population is 29 years, eight years below the Australian average.

The rural town of Springsure and small towns within the Gemfields region 40km to the west of Emerald have a small and mostly older population that has grown up in the area or moved there because of its affordability. Their relative isolation has created logistical problems to deliver adequate health services. In response, Queensland Health provides a primary health service clinic five days a week in the town of Sapphire in the Gemfields area, which includes visiting specialists, weekly mental health visits, diabetes education, dietician visits, cardiac rehabilitation education and women's wellness clinics. Similarly, a multipurpose health service operates five days a week in Springsure, which is 65 km south of Emerald.

The Emerald region is serviced by 16 general practitioners (GPs), many of whom use a telemedicine service for advice and direction from the larger Queensland hospitals. A funding agreement has been put in place with the Central Queensland Rural Division of General Practice to establish an Emerald GP super clinic, which it is hoped will be a coordinating centre for all of Emerald's medical centres. Construction of the \$5.5 million clinic is expected to commence in April 2013 and will comprise two procedure rooms, an emergency room to assist Emerald Hospital, a treatment room and capacity to accommodate allied health services such as occupational therapy and physiotherapy. The facility will also provide training placements for medical students, post-graduates, GP registrars, nursing students and Indigenous health workers.

One identified issue for local healthcare involves mining/construction workers seeking Workcover appointments or applying for medical certificates at Emerald Hospital's emergency department. These people are encouraged to visit their own GP, either in Emerald or in the case of fly-in-fly-out workers, in their home towns, rather than put increased pressure on an already busy facility for non-emergency situations.

4.1.9.2 Aged Care

Compared to the rest of Queensland, the Central Highlands region has a smaller proportion of mature-age residents. This can partly be attributed to a percentage of older people moving to coastal areas, a phenomenon exacerbated by a lack of affordability in Emerald and other growth centres.

For aged care in the region, Blue Care operates the Avalon Aged Care facility in Emerald, which provides 20 high-care and 30 low-care beds. This two-tier arrangement allows 'ageing in place', a service that permits residents to remain at the facility as their care needs change. Springsure's Multipurpose Health Service Centre offers a 15-bed aged-care wing.

The Federal Government's Home and Community Care (HACC) programme provides an important in-home health and aged-care service across the region. HACC also offers a transport service for people requiring transfer to Emerald for healthcare.

4.1.10 Emergency Services

4.1.10.1 Police

Emerald Police Station is supported by 20 uniformed police officers and two traffic-branch officers. With the exception of the traffic officers, this number has remained static for the past five years, despite a substantial increase in Emerald's population.

The Emerald Police area of involvement extends to Teresa Creek to the north, Taraborah to the west, Comet to the east and halfway to Springsure to the south. Despite the many coal mines in the area and Emerald being a host town for coal mine employees and their families, the Taraborah Project will be the only coal mine within Emerald Police's jurisdiction.

While it is envisaged that Project employees will be bussed between the mine site and their accommodation in Emerald, a potential issue may be the increased road safety hazards arising from the construction workforce using private vehicles to travel between Emerald and their home bases.

Police also raised the potential safety concerns related to coal trains travelling through Emerald. While grain, other freight and passenger trains move through Emerald currently, longer coal trains traversing two major road crossings in Emerald at the same time would present a concerning safety hazard, especially for emergency vehicles wishing to move between north and south of Emerald town. It should be noted, however, that the planned length of coal trains servicing Taraborah would be short enough to prevent this from occurring.

4.1.10.2 Ambulance

Emerald's ambulance service currently comprises three vehicles and eight officers working on a 24-hour roster. The approved staffing level is 15 officers; however, due to the difficulty of replacing people as they leave, the service is currently understaffed by seven. This can be attributed mainly to Emerald's two-tier economy, whereby affordability of housing and cost of living in the region preclude those residents who do not work within the mining industry.

Emerald's ambulances provide a range of services, including attending road and rural accidents, and providing transport to Rockhampton Hospital if required. The ambulance service also liaises closely with the Rockhampton-based Careflight emergency helicopter rescue service and the RFDS.

The ambulance centre is currently located next to the hospital in north Emerald; however, due to this area being flood-prone, the Department of Community Safety is considering a move to the vacant Queensland Fire and Rescue Service (QFRS) building in Egerton Street. This has created its own problems, with Council strongly opposed to the new location because it would prefer to see the ambulance service and QFRS located in a common facility that is readily accessible to and from all parts of town.

A single ambulance and officer are based in Anakie to service the Gemfields region.

4.1.10.3 Fire and Rescue

Emerald is part of QFRS's Central Region. Located near the airport, Emerald's fire station has two fire and rescue vehicles, supported by a staff of one full-time fire fighter and a pool of 20 auxiliary fire-fighters.

A rural fire service works in parallel with the QFRS to contain rural bush and grass fires. This service has vehicles and volunteer teams centred at the Iona property on the Capricorn Highway (near Taraborah), and two units in the Gemfields.

The range of emergencies involving the QFRS includes road crash rescue, industrial accidents, hazardous materials releases and residential and town grass fires. The QFRS also supports the district's disaster response and recovery efforts, as well as local disaster management groups.

The QFRS expects mining companies to introduce fire mitigation measures, including fire breaks, around their operational infrastructure.

4.1.11 Public and Community Transport

Emerald is serviced by plane, train and bus services into and out of the region.

4.1.11.1 Transport Services

Private coach companies (Greyhound and Paradise Coaches) operate daily bus services within the region, including:

- Longreach to Rockhampton/Rockhampton to Longreach (via Emerald); and
- Emerald to Mackay/Mackay to Emerald.

Paradise Coaches also offers a boarding school holiday service, which operates during school holiday periods to and from several Rockhampton boarding schools.

Local bus companies, such as Emerald Coaches, also provide charter services within Emerald and surrounds, including a daily bus run to primary and secondary schools, as well as employee transport to and from regional coal mines.

Emerald residents can also choose to travel by train, with Queensland Rail's Spirit of the Outback service operating between Rockhampton and Longreach twice weekly.

Emerald Airport, the main airport for the region, is located six kilometres from Emerald township. Six flights operated by Qantas and Virgin airlines arrive and depart from the airport daily. The Central Highlands Regional Council will receive \$4.99 million from round two of the Regional Development Australia Fund (RDAF) for the Emerald Airport Apron Extension Project during 2012/13. The \$9.98

million extension project will increase the Emerald airport bays by two and upgrade cargo bays. On completion, the airport will have a helipad and aeromedical bay to accommodate the RFDS and other emergency services operations, and a safe, all-weather walkway for passengers.

4.1.11.2 Highways and Roads

The Capricorn Highway is a major central Queensland artery traversing a distance of 684km from Rockhampton to Longreach and intersecting the towns of Barcaldine, Alpha, Jericho and Emerald. The Capricorn Highway is predominantly straight and flat, with some overtaking lanes and 110km/hr sections between Rockhampton and Emerald. The road is well used by B-doubles and B-triples carrying cattle, agricultural machinery and mining components. During the winter tourist season, the highway is also well utilised by 'grey nomads' driving recreational vehicles and towing caravans.

The increasing level of traffic on the highway is problematic and is exacerbated by a rise in light vehicle traffic volumes created by DIDO activities between coastal centres and the mining towns. The State Government has committed \$100 million to maintaining and improving the Capricorn Highway from 2011 to 2014.

There are many bus traffic movements in and around Emerald, with mining companies and contractors transporting employees between work and home. Police have mapped bus movements in an effort to better coordinate private transport activities. To assist with this situation, a large floodlit car park has been constructed in Hospital Road as a bus pickup point, where mine employees can leave their private vehicles.

The road between Emerald and Taraborah is of questionable quality, with local residents reporting ongoing road maintenance due to problems with the highway base being situated on unstable black soil. This section of highway currently has an 80km/hr limit and the sector closest to Emerald has also suffered flood damage.

Specific issues for Taraborah will include provision of an adequate turning lane for vehicles to safely enter and leave the mine.

4.1.12 Utilities

4.1.12.1 Electricity

Emerald's current electricity supply is distributed via the Emerald substation, which is supplied by two 66,000-volt (66 kilo Volts) power lines – one from Lilyvale (approximately 69 km away) and the other from Blackwater (76 km away).

The existing Blackwater-to-Emerald power line is more than 50 years old and does not have the capacity to support the Emerald electricity supply if there is a fault on the Lilyvale power line. For this reason, Ergon Energy has identified the need to acquire a suitable power line route and construct a new dual-circuit, high-voltage power line from the Blackwater substation to the Emerald substation, so as to ensure the security and reliability of power supply to the Emerald community.

For the Taraborah Project, it is expected that there will be sufficient electrical capacity available via the Emerald substation after the Blackwater feeder upgrade to supply the maximum project power needs (approximately 25 Mega Watts (MW) for the combined open-cut and underground operations). Consequently, the only power infrastructure required for the project will be an overhead feeder line from the Emerald substation to the mine industrial area and a substation to service the coal handling and processing plant and the underground mine.

4.1.12.2 Water

The Nogoia Mackenzie Water Supply Scheme was established in 1968 to service agricultural and mining developments, and meet water requirements of associated central Queensland urban communities. The central feature of the scheme is the conservation of water from Nogoia River by Fairbairn Dam, 19km upstream (south) of Emerald. Work on the dam commenced in 1968 and was completed in December 1972. Water storage commenced in January 1972 and the dam filled and overflowed for the first time two years later.

The 1.3 million megalitre storage for the dam is known as Lake Maraboon, with the Selma, Bedford, Bingegang and Tartrus weirs below it on the Mackenzie River. Water from Fairbairn Dam is released down the Nogoia River to the Selma Weir for supply to Emerald. Supplies are then diverted by pipelines to the towns of Blackwater, Bluff, Tieri, Dysart and Middledmount.

For industrial purposes, water from Fairbairn Dam is released to supply resource developments in the Bowen Basin. SunWater's Blackwater pipeline provides water to several mines and the town, while several other pipelines owned by mining companies divert water from the scheme to support various mining operations.

For the region's agricultural industry, water is diverted from Fairbairn Dam to two irrigation channel systems to customers via a network of mostly open-earth channels. The main crops irrigated are cotton, citrus (mandarins, oranges and lemons) and grapes. Other crops irrigated include wheat, pulse crops, sorghum, maize, lucerne, oats, barley and sunflowers.

For the Taraborah Project, data from exploratory drilling indicates that a sufficient quantity of water with acceptable quality for mining and coal processing operations is available via the aquifer beneath the MDL467 permit area.

One of the landholders has also constructed a large water-storage dam in the northwest of the underground mining area. It is proposed that this dam could be used for provision of fresh water for operations, assuming that a water take-off agreement has been reached with the landholder. It is intended that a pipeline will be run from the dam to water treatment facilities (located in the mine infrastructure area), where a storage tank will be used as buffer water storage.

To minimise supply and discharge requirements, a water recycling scheme will be instituted at Taraborah.

4.1.12.3 Waste Management

Emerald has waste management facilities to cater for general waste, construction and demolition waste, commercial and industrial waste, scrap steel, timber, green waste and recyclables.

Wastes likely to be generated during construction of the Taraborah mine will include green waste, concrete materials, timber, metals, hydrocarbons, sewage, exhaust emissions, tyres and paint materials. Wastes likely to be produced during the Taraborah mine operations include green waste, batteries, scrap metal, tyres, water treatment plant waste, tailings and other general waste. Tailings will be generated from washing ROM coal, and it is planned to de-water the tailings for disposal in the mine waste rock dumps. In general, waste management principles will include recycling wherever possible (to external recyclers) and planned disposal of what cannot be recycled either onsite or to a registered waste-disposal contractor.

4.1.12.4 Communications

Emerald receives good quality mobile phone and internet reception. Internet speeds have increased significantly since the opening of Australia's 3,800km fibre-optic link in December 2011, when

Emerald was one of 30 regional towns to receive faster and more competitive broadband for households and small businesses. The link was part of the Federal Government's \$250 million Regional Backbone Blackspots Program that has developed broadband infrastructure in areas where it would not be commercially viable to do so.

Mobile phone and internet reception are marginal on the Taraborah Project site and in the Gemfields to the west of the site. A study of site communications needs will be conducted as part of a detailed engineering study for this Project.

4.1.13 Business and Enterprise

Analysis of the size, turnover and nature of businesses in the Central Highlands indicates that there are core sectors that drive broader economic activity and growth in the region. These sectors are agriculture, resources, tourism and construction. The four sectors account for the largest number of businesses in the region, and contribute significantly to the Gross Regional Product (GRP). They are also highlighted in the Central Highlands Community Plan, which describes the region's diverse economy as being based on:

- A globally competitive coal mining industry;
- Traditionally robust and resilient agricultural and horticultural sectors;
- Dynamic small and medium businesses;
- Professional and government sectors; and
- A growing tourism market.

According to the Central Highlands Development Corporation, in 2010/11, the Central Highlands regional economy contributed \$4.56 billion to the state. Of this total, the mining industry accounted for 70%, contributing \$3.2 billion despite the low percentage of registered mining businesses. This figure underwrites the significance of mining as an economic driver for the Central Highlands regional economy.

Other significant contributors to GRP included ownership of dwellings - \$165 million (3.6% of GRP), construction - \$163 million (3.6%) and agriculture - \$100 million (2.2%). The 'construction' and 'agriculture, forestry and fishing' sectors have the largest number of businesses with a turnover greater than \$2 million, followed by 'retail trade' and 'accommodation and food services.' While 'mining' has fewer businesses earning \$2 million or greater, the magnitude of earnings was substantially higher than the turnover of all other sectors. Summaries of registered businesses by industry (Table 7), turnover range (Table 8) and employment size (Table 9) have been constructed as follows:

Table 7: Registered Businesses by Industry and Study Area 2010-2011

Industry	Emerald		Central Highlands		Qld	
	No.	%	No.	%	No.	%
Agriculture, forestry and fishing	138	10.3%	1,135	35.0%	45,446	10.6%
Mining	43	3.2%	77	2.4%	1,914	0.4%
Manufacturing	52	3.9%	89	2.7%	18,090	4.2%

Industry	Emerald		Central Highlands		Qld	
	No.	%	No.	%	No.	%
Electricity, gas, water and waste services	6	0.4%	6	0.2%	1,189	0.3%
Construction	272	20.2%	472	14.6%	77,805	18.1%
Wholesale trade	22	1.6%	49	1.5%	13,959	3.2%
Retail trade	85	6.3%	153	4.7%	28,424	6.6%
Accommodation and food services	63	4.7%	111	3.4%	15,698	3.6%
Transport, postal and warehousing	43	3.2%	113	3.5%	25,919	6.0%
Information, media and telecommunications	3	0.2%	3	0.1%	3,011	0.7%
Financial and insurance services	50	3.7%	86	2.7%	29,048	6.7%
Rental, hiring and real estate services	155	11.5%	291	9.0%	47,977	11.1%
Professional, scientific and technical services	113	8.4%	155	4.8%	45,173	10.5%
Administrative and support services	61	4.5%	93	2.9%	16,751	3.9%
Public administration and safety	6	0.4%	9	0.3%	1,448	0.3%
Education and training	22	1.6%	28	0.9%	5,110	1.2%
Healthcare and social assistance	41	3.0%	71	2.2%	19,516	4.5%
Arts and recreation services	12	0.9%	21	0.6%	5,289	1.2%
Other services	135	10.0%	223	6.9%	19,433	4.5%
Not classified	23	1.7%	54	1.7%	9,206	2.1%
TOTAL	1,345	100.0%	3,239	100.0%	430,406	100.0%

Source: Queensland Office of Economic and Statistical Research.

Table 8: Registered Businesses by Turnover Range and Study Area 2010-2011

Year	Emerald	Central Highlands	Qld
\$0 to less than \$100k	527	1,357	200,447
\$100k to less than \$500k	494	1,151	149,481
\$500k to less than \$2M	220	531	57,342
\$2M or more	104	200	23,136
TOTAL	1,345	3,239	430,406
Businesses \$2M or more as % of total	7.7%	6.2%	5.4%

Source: Queensland Office of Economic and Statistical Research.

Table 9: Registered Businesses by Employment Size and Study Area 2010-2011

Year	Emerald	Central Highlands	Qld
Small	1,274	3,120	411,935
Medium	71	119	17,310
Large	0	0	1,161
TOTAL	1,345	3,239	430,406
Small business as % of total	94.7%	96.3%	95.7%

Businesses defined as small (employing less than 20 people, including non-employing businesses), medium (employing 20 or more people but less than 100 people) and large (employing 100 or more persons).

Source: Queensland Office of Economic and Statistical Research.

For further details of the economic benefits that the Project will bring to local, state and regional economies, refer to EIS Section 4.12 – Economy.

4.1.14 Tourism

Emerald's reputation as the 'gateway to the west' offers a key destination/stopover point for tourists, particularly the grey nomads exploring western Queensland during the winter months.

Once renowned for being a major sunflower producer, Emerald is now home to the world's biggest Van Gogh sunflower painting on an easel located in Morton Park on the Capricorn Highway.

Fairbairn Dam is a holiday destination in itself with a selection of cabin, caravan and camping accommodation on Lake Maraboon. The lake is stocked with eight different kinds of fish, including barramundi, but is famous for its red-claw crayfish. Other attractions include the National Trust-listed railway station built in 1900 and a 250-million-year-old fossilised tree at the town hall.

Some 40km west of Emerald along the Capricorn Highway, the Gemfields is a significant sapphire-bearing region, which attracts thousands of fossickers annually. A highlight of the year is the August Gemfest, when visitors can appreciate the history, character and charm of this unique region.

4.1.15 Summary of Local Community

The Central Highlands was originally home to many Indigenous peoples, including the Western Kangoulou People, who are registered Native Title claimants over the area where the proposed Taraborah Project will be located.

The region's European roots are tied to a rural lifestyle; however, this is changing with the economic diversity that the expanding mining and construction industries are bringing to the area. A number of landholders who will be impacted have endured and survived years of rural hardship, including a prolonged period of drought, and the prospect of having to share their land, and especially their water supply, with a mining operation is unpalatable to many of them.

The transition from a traditional agricultural profile to a combination of mining and agricultural industries is a key social, cultural and employment consideration. Stakeholders have expressed concerns about potentially disparate values when combining traditional agricultural populations with mining populations. Concerns were also expressed that the lure of highly-paid mining salaries would cause employment transition away from traditional industries and hence, result in a loss of identity for the region.

Direct consultation and the Central Highlands 2022 Community Plan revealed that local residents value their relaxed lifestyle, safe environment, friendly people, involvement in sports, high level of volunteerism, and that their environment is a good place to raise children.

Queensland Police statistics for Emerald over a five-year period indicated that there has been a general downward trend for offences against the person (homicide, assault, sexual offences, etc.). Assaults dropped from 71 to 58 since 2007, while sexual offences decreased by 45% over the same period. Conversely, during the past five years unlawful entries and general theft offences increased by 17% and 62% respectively.

Council prioritised a number of key infrastructure and community services goals for the region, including:

- Planning and delivering a regional road network that is well maintained and interconnected for safe and effective movement of people and products;
- Developing and maintaining reliable, affordable and integrated regional transport services, networks and systems including public transport options;
- Planning and providing access to reliable, affordable high-speed telecommunication systems and services;
- Planning and delivering energy and power to meet economic development, community and environmental requirements; and
- Planning and providing for land availability to deliver a diverse range of quality housing and accommodation options for people living in or relocating to the region.

Emerald is an important education centre for the region, serviced by three state primary schools, a state secondary school, three independent colleges and the Capricorn School of Distance Education. The Gemfields region is serviced by the Anakie State School, which opened in 1885. Emerald also offers tertiary educational facilities such as TAFE, university and the Emerald Agricultural and Pastoral College.

Childcare facilities in Emerald are under pressure, as demand for places significantly exceeds supply. Emerald currently has an estimated waiting list of more than 400 children requiring childcare places. Availability in day-care for babies and toddlers (0 years to 2 years) is a particular problem.

Health services across the study areas appear adequate, although fly-in fly-out (FIFO) employees who work at local mines have been placing pressure on hospital facilities for non-emergency

situations. In addition, the local ambulance service is grossly undermanned, mostly as a result of the two-tier economy, where affordability of housing and cost of living in the region have traditionally precluded those residents who do not work within the mining industry.

A good standard of sport and recreational facilities is currently available in the region. These facilities play an important role in the way of life and connection to the outdoors evident across the region.

Emerald is serviced by plane, train and bus services into and out of the region. The increasing level of traffic on the highway is problematic and is exacerbated by a rise in light vehicle traffic volumes created by DIDO activities between coastal centres and the mining towns. The State Government has committed \$100 million to maintaining and improving the Capricorn Highway from 2011 to 2014.

Competitively-priced housing is an ongoing issue in mining-affected communities, where higher-than-average salaries have had a flow-on effect in terms of house prices. Inflated house prices and rentals have had a negative impact on those employed external to the mining industry. The downturn in the mining industry has potentially reversed this trend and the Central Highlands Regional Council is currently implementing an affordable housing program, which could future-proof the region.

Central Queensland Indigenous Development (CQID) was established in November 2004 as a not-for-profit organisation responsible for regional coordination and management of the region's Community Development Employment Projects (CDEP) program. CQID coordinates and delivers services in Indigenous training and employment, child safety, community support, family support, alcohol and other drugs services, community and economic development projects. CQID has offices in the communities of Rockhampton, Gladstone, Emerald, Woorabinda, Longreach and Bundaberg.

There will be a noticeable shift in the industry profile in the region as more people are employed in the resource industries. The traditional industries – agriculture, fisheries and forestry – will continue to be important employers in the study areas but a more diverse economy will create new jobs and a need for different skills sets. Opportunities in construction, manufacturing, tourism, education, training and the retail trade, already important to the region, should strengthen. Significantly, the equal opportunity policies practiced by mining and associated industries will provide more job opportunities for women.

Agriculture, resources, tourism and construction account for the largest number of businesses in the region, and contribute significantly to the GRP. In 2010/11, the Central Highlands regional economy contributed \$4.56 billion to the state. Of this total, the mining industry accounted for 70%, contributing \$3.2 billion despite the low percentage of registered mining businesses.

4.2 DEMOGRAPHIC PROFILE

4.2.1 Population

In 2011, Emerald had a resident population of 13,576, which constituted approximately 46% of the broader Central Highlands LGA population (29,533). The Queensland Office of Economic and Statistical Research population projections to 2031 indicate that Emerald will grow by an average annual growth rate of three per cent over the 20-year period from 2011. This is significantly higher than growth in the Central Highlands region and Queensland, at 2.4% and 1.8% respectively.

Estimates of the resident population by study area from 2006 to 2011 are presented in Table 10, while projected resident populations from 2011 to 2031 are presented in Table 11.

Table 10: Resident Population by Study Area 2006-2011

Year	Emerald	Central Highlands	Qld
2006	12,120	28,256	4,090,908
2010pr	13,348	29,296	4,424,158
2011pr	13,576	29,533	4,474,098
Average annual growth rate 2006 – 2011 (%)	2.3%	0.9%	1.8%

*Based on usual place of residence as at July 2011. p = preliminary rebased.
Source: Queensland Office of Economic and Statistical Research.*

Table 11: Projected Resident Population by Study Area 2011-2031

Year	Emerald	Central Highlands	Qld
2011	14,352	31,861	4,611,491
2016	17,319	36,256	5,092,858
2021	20,466	40,880	5,588,617
2026	23,268	45,685	6,090,548
2031	26,117	50,742	6,592,857
Average annual growth rate 2011 – 2031 (%)	3.0%	2.4%	1.8%

*Based on usual place of residence as at July 2011.
Source: Queensland Office of Economic and Statistical Research.*

On 2011 Census night, counted populations were higher than resident populations in all study areas. Refer to Table 12 for details of resident versus enumerated local populations. While Emerald and Queensland experienced modest visitor influxes at 5.8% and 2.9% respectively, the Central Highlands LGA showed a 17.5% increase.

Further research indicated that communities such as Blackwater and the Gemfields were significant contributors to the larger regional enumerated population. There was a notable increase in enumerated males aged 25 to 64 in the Central Highlands region, potentially indicating FIFO/DIDO employees; as well as an increase in counted 65 to 74-year-old males and females, which could represent grey nomads.

Table 12: Resident versus Enumerated Population by Age, Gender and Study Area 2011

	Emerald						Central Highlands						Qld					
	Resident			Enumerated			Resident			Enumerated			Resident			Enumerated		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	638	621	1,259	634	605	1,239	1,400	1,297	2,697	1,397	1,279	2,676	153,225	144,667	297,892	154,724	146,132	300,856
5-14	1,094	1,042	2,136	1,086	1,033	2,119	2,289	2,079	4,368	2,267	2,084	4,351	296,519	281,449	577,968	299,470	284,378	583,848
15-19	535	458	993	528	443	971	1,018	879	1,897	1,047	863	1,910	150,427	143,490	293,917	153,051	147,235	300,286
20-24	499	507	1,006	554	507	1,061	1,028	921	1,949	1,358	963	2,321	147,568	146,278	293,846	152,729	152,829	305,558
25-34	1,249	1,192	2,441	1,360	1,226	2,586	2,516	2,299	4,815	3,297	2,418	5,715	290,580	296,828	587,408	297,448	304,862	602,310
35-44	1,127	996	2,123	1,262	991	2,253	2,410	2,087	4,497	3,228	2,110	5,338	304,084	316,667	620,751	308,646	321,648	630,294
45-54	942	847	1,789	1,112	870	1,982	2,207	1,848	4,055	3,146	2,000	5,146	290,311	300,572	590,883	295,754	306,889	602,643
55-64	531	408	939	669	459	1,128	1,543	1,126	2,669	2,254	1,425	3,679	249,208	251,880	501,088	258,670	263,584	522,254
65-74	181	161	342	230	190	420	697	515	1,212	1,083	805	1,888	160,858	161,785	322,643	173,863	175,043	348,906
75-84	74	78	152	87	90	177	238	206	444	332	255	587	80,792	95,750	176,542	87,398	101,619	189,017
85+	9	30	39	15	29	44	47	65	112	57	74	131	24,649	45,152	69,801	25,673	46,266	71,939
TOTAL	13,218			13,980			28,715			33,741			4,332,739			4,457,909		
	5.8% population increase due to visitors						17.5% population increase due to visitors						2.9% population increase due to visitors					

Source: Australian Bureau of Statistics.

4.2.2 Gender

In 2011, the Central Highlands region had more male than female residents. The local government area comprised 53.6% males, while 52.0% of Emerald residents were male. In contrast Queensland was made up of 49.6% males at the 2011 Census. Refer to Figure 3 for details of the gender balance for each study area.

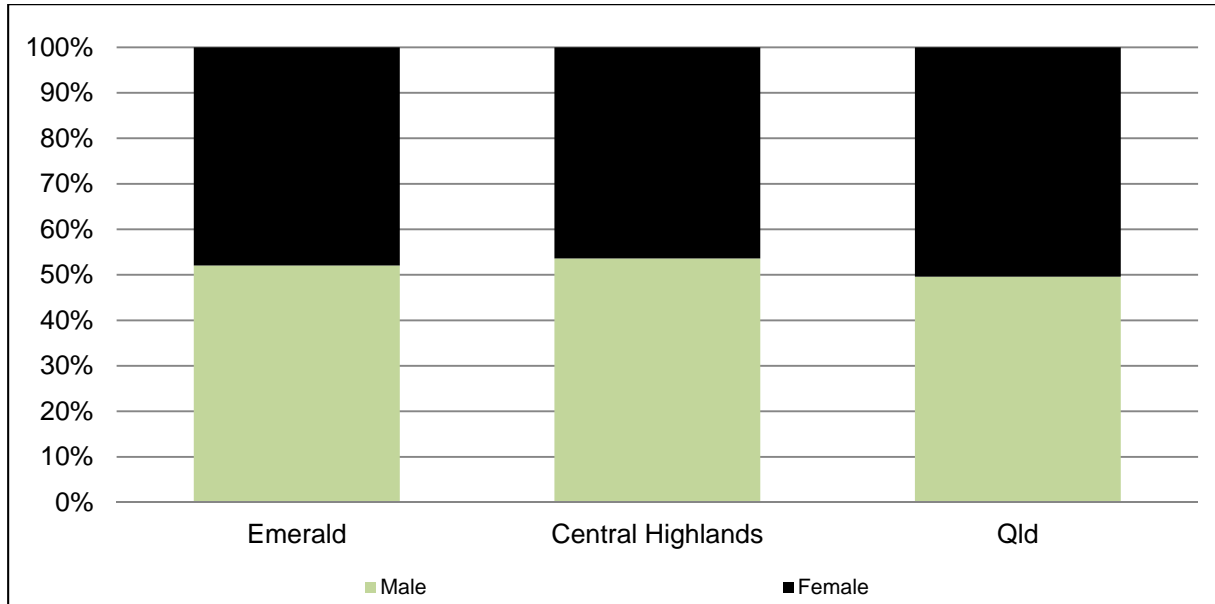


Figure 3: Gender by Study Area 2011

*Based on usual place of residence.
Source: Australian Bureau of Statistics.*

4.2.3 Age

This section describes the age structure of the regional study areas, which follows the same general trend as Queensland. In 2011, the key differences were in the 0-9 and 25-34 age groups, where Emerald and Central Highlands were up to three per cent above the Queensland average; and in the 65-75 year age group, where the study areas were some three per cent lower than across the state. Refer to Table 13 for the age structure of each study area.

Table 13: Age by Study Area 2011

Age	Emerald		Central Highlands		Qld	
	Male	Female	Male	Female	Male	Female
0-4 years	9.3%	9.8%	9.1%	9.7%	7.1%	6.6%
5-9 years	8.6%	8.6%	8.0%	8.2%	6.9%	6.4%
10-14 years	7.3%	7.8%	6.9%	7.4%	6.9%	6.5%
15-19 years	7.8%	7.2%	6.6%	6.6%	7.0%	6.6%
20-24 years	7.3%	8.0%	6.7%	6.9%	6.9%	6.7%
25-29 years	9.6%	9.9%	8.4%	9.2%	7.0%	6.9%
30-34 years	8.6%	8.9%	8.0%	8.1%	6.6%	6.7%
35-39 years	8.4%	8.0%	7.9%	8.1%	7.0%	7.2%
40-44 years	7.9%	7.7%	7.8%	7.6%	7.1%	7.3%
45-49 years	7.3%	7.3%	7.4%	7.3%	6.9%	7.1%
50-54 years	6.5%	6.0%	6.9%	6.5%	6.6%	6.7%
55-59 years	4.7%	4.0%	5.8%	5.0%	5.9%	6.0%
60-64 years	3.0%	2.5%	4.2%	3.5%	5.7%	5.6%
65-69 years	1.7%	1.4%	2.7%	2.3%	4.3%	4.2%
70-74 years	0.9%	1.2%	1.9%	1.6%	3.2%	3.2%
75-79 years	0.6%	0.8%	0.9%	1.0%	2.2%	2.4%
80-84 years	0.6%	0.5%	0.6%	0.5%	1.6%	2.0%
85-89 years	0.0%	0.3%	0.2%	0.4%	0.8%	1.3%
90-94 years	0.0%	0.1%	0.1%	0.1%	0.3%	0.6%
95-99 years	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
100 years and over	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	100%	100%	100%	100%	100%	100%

*Based on usual place of residence.
Source: Australian Bureau of Statistics.*

4.2.4 Family Composition

In 2011, the most popular family structure across the regional study areas comprised a couple with children, with 69.6% and 67.8% (respectively) of Emerald and Central Highlands families in this category. Figure 4 also shows that some 20.7% of Emerald families were couples with no children, compared to 23.4% for Central Highlands and 48.6% for Queensland.

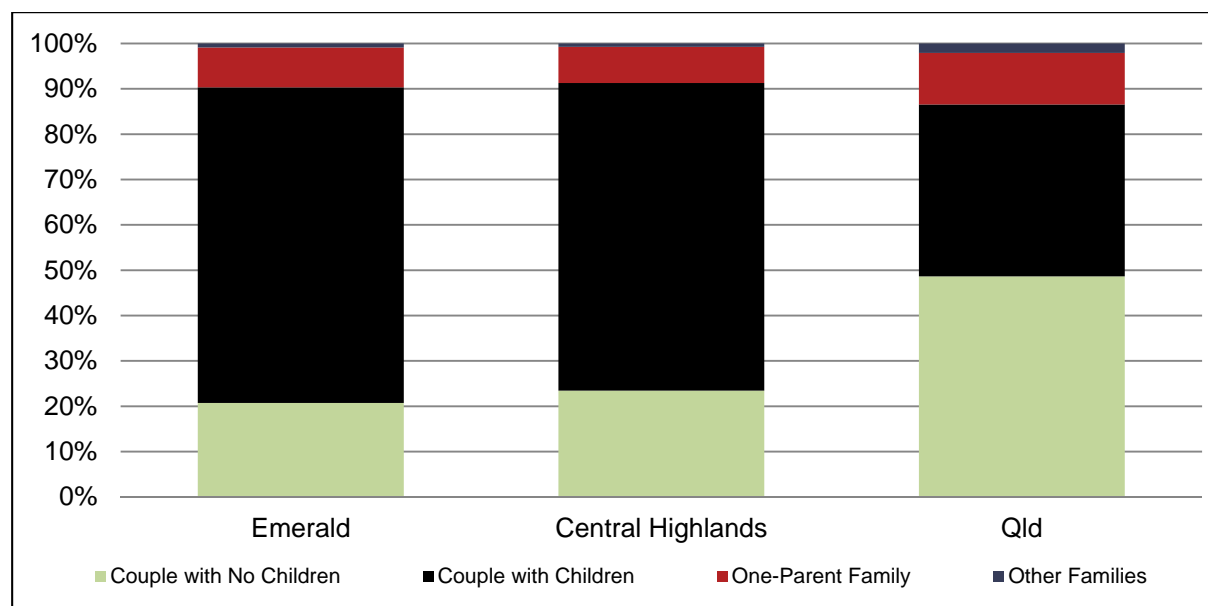


Figure 4: Family Composition by Study Area 2011

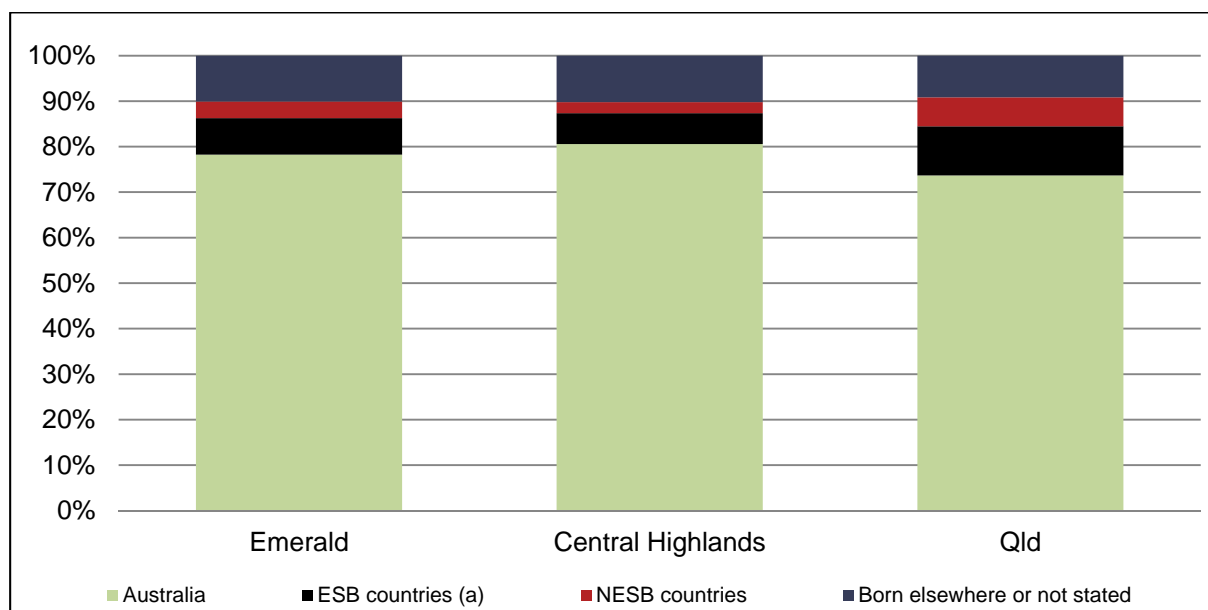
*Based on usual place of residence.
Source: Australian Bureau of Statistics.*

4.2.5 Ethnicity

This section describes ethnic characteristics of the regions and compares them to the rest of Queensland. Analysis was conducted by reviewing country of birth and English proficiency of individuals, with the regional study areas recording significantly lower ethnic diversity characteristics than that of Queensland. The higher ethnic diversity recorded in the rest of Queensland is most likely due to the fact that major cities are the primary target for immigration.

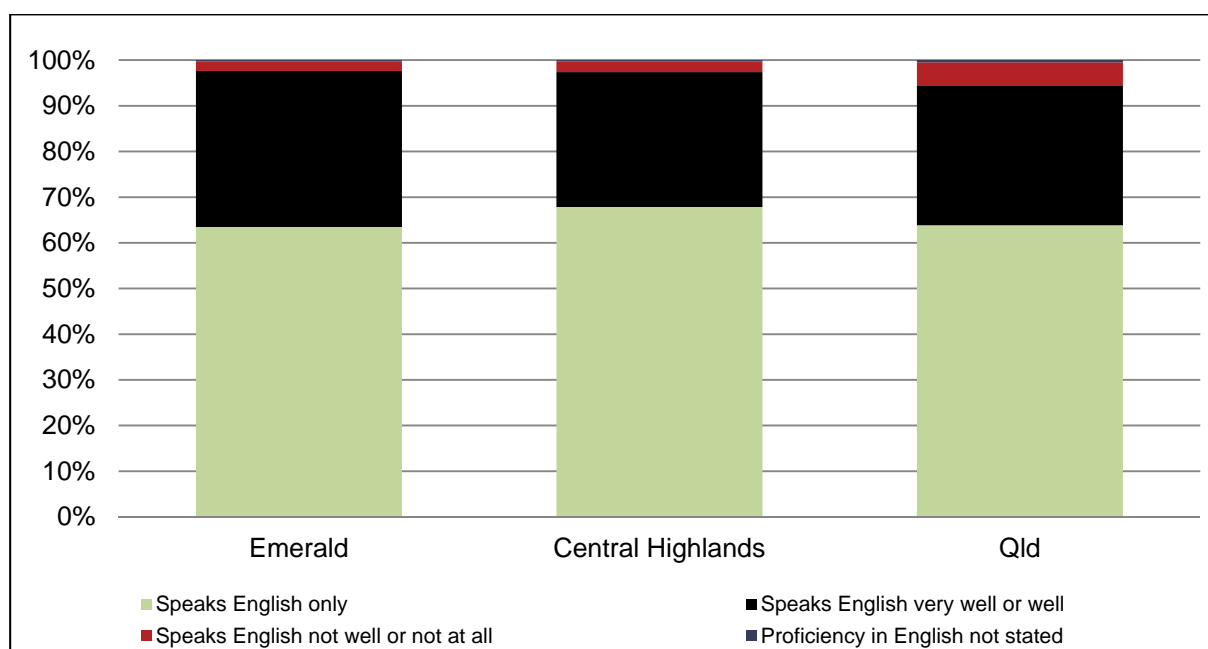
According to the 2011 Census, 78.3% of Emerald residents were born in Australia; while 80.6% of Central Highlands residents were Australian born. Countries of origin for those not born in Australia were predominantly English speaking. Only 2.1% and 2.3% respectively of Emerald and Central Highlands residents could not speak English well or at all, compared to 5.2% for Queensland. Refer to Figure 5 for a summary of available 2011 country of birth data and Figure 6 for a summary of proficiency of spoken English by study area.

Figure 5: Country of Birth by Study Area 2011



Based on usual place of residence. ESB: English-speaking background, includes the UK, Ireland, Canada, USA, South Africa and New Zealand; NESB: non-English-speaking background.
Source: Australian Bureau of Statistics.

Figure 6: Proficiency in Spoken English by Overseas-Born Residents by Study Area 2011



Based on usual place of residence
Source: Australian Bureau of Statistics.

4.2.6 Mobility

Mobility is a measure of the migratory patterns of residents. Five-year migration trends for the study areas and Queensland are shown below in Table 14. Both Emerald and Central Highlands featured significantly more migration than Queensland, with Emerald at 56.9% (within Queensland, within

Australia and overseas) and the broader regional area at 49.5% (within Queensland, within Australia and overseas). For all study areas, the majority of people opting for a new address did so outside of Queensland but within Australia.

Table 14: Places of Usual Residence Five Years Ago by Study Area 2011

Location	Emerald	Central Highlands	Qld
Same usual address 5 yrs ago as in 2011	4,018	10,517	1,958,914
Different address 5 yrs ago:			
Within Queensland	2,190	3,626	265,001
Within Australia	3,875	8,184	1,285,343
Overseas	743	1,078	238,588
TOTAL (a)	11,957	26,018	4,034,846
Proportion with a different address	56.9%	49.5%	44.3%

Based on place of usual residence and persons aged five years and over. (a) Includes persons who stated that they were usually resident at a different address five years ago but did not state that address; as well as persons who did not state whether they were usually resident at a different address five years ago.

Source: Australian Bureau of Statistics and Queensland Office of Economic and Statistical Research.

4.2.7 Internet Connection

In 2011, more households in the regional study areas had internet connection than the rest of Queensland. In Emerald and Central Highlands, 77.2% and 72.4% of households had a broadband connection, compared to 71.3% for the state. Refer to Figure 7 for a summary of internet connectivity.

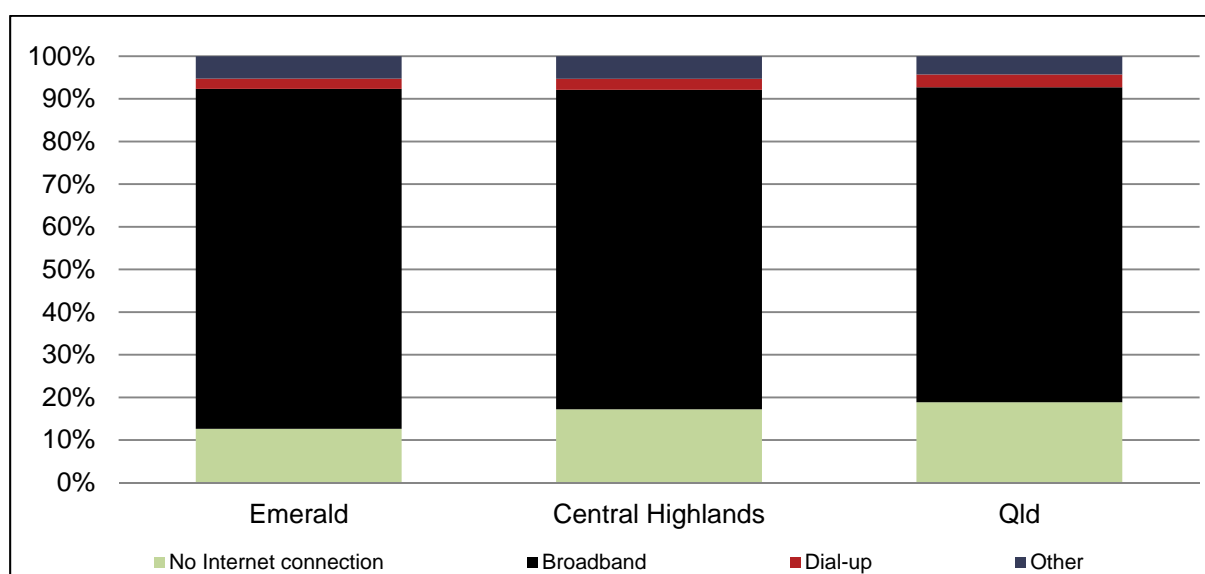


Figure 7: Internet Connection in Dwellings by Study Area 2011

Based on usual place of residence.

Source: Australian Bureau of Statistics and Queensland Office of Economic and Statistical Research.

4.2.8 Income and Earnings

About one third of Emerald and Central Highlands residents earned a gross income of \$1,500 per week or more in 2011 (35.8% and 33.7% respectively). This earning capacity is in comparison to Queensland, where less than one quarter of the population was in this income bracket (22.4%).

Only 14.8% of Emerald households earned less than \$1,000 per week, compared to Central Highlands at 21.4% and Queensland at 36.9%. Conversely, 6.6% of Emerald households reported weekly earnings of \$4,000 or more, which was similar to Central Highlands (6.3%) but four per cent more than for the state at 2.8%. Refer to Figure 8 for a summary of the weekly individual income data for each study area and Figure 9 for weekly household income.

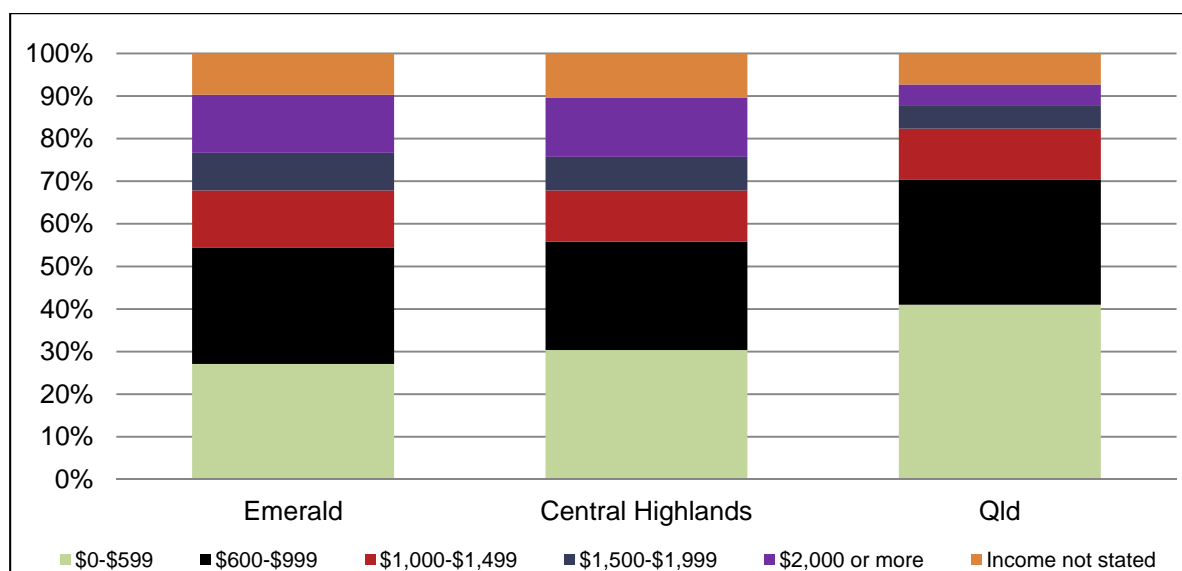


Figure 8: Weekly Individual Income by Study Area 2011

*Based on usual place of residence and persons aged 15 years and over.
Source: Australian Bureau of Statistics.*

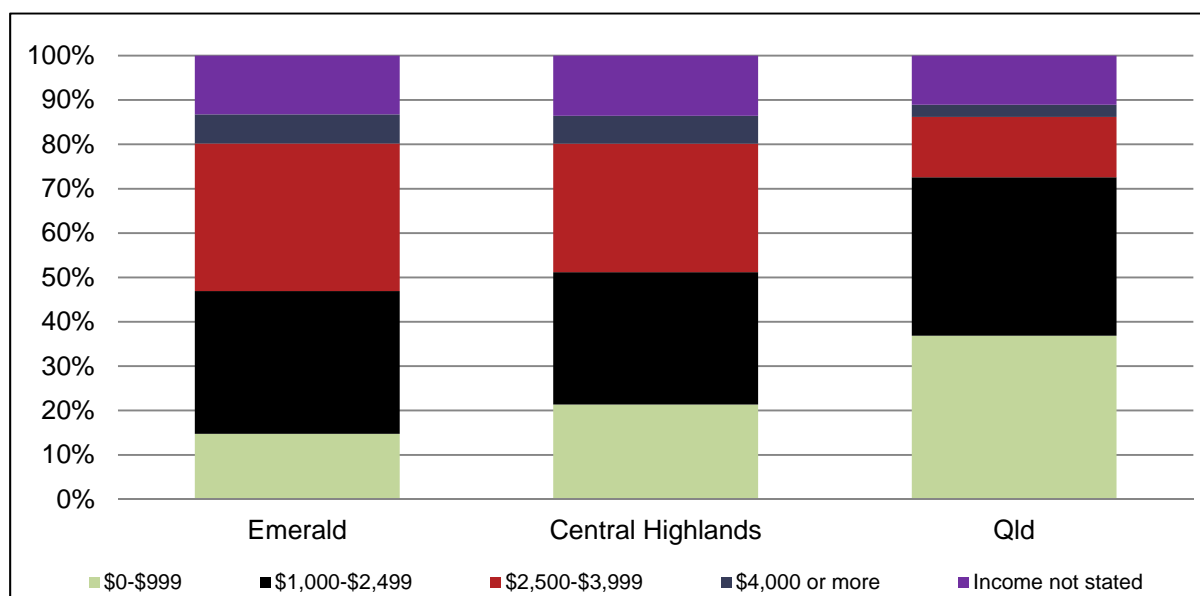


Figure 9: Weekly Household Income by Study Area 2011

*Based on usual place of residence and persons aged 15 years and over.
Source: Australian Bureau of Statistics.*

4.2.8.1 Resources Industry Salaries

According to an annual survey conducted by recruitment organisation Hays, salaries in the Queensland resources and mining sector are considerably higher than the current average earnings recorded for other industries. A selection of various jobs within the mining industry and their corresponding salary ranges are presented in Table 15.

Table 15: Selection of Queensland Coal Industry Salaries 2012

Category	Position	Annual Salary
Engineering/management	Senior mining engineer	\$160,000 – \$180,000
	Surveyor	\$110,000 – \$130,000
Production management	Production superintendent	\$140,000 – \$180,000
Geology	Mine geologist	\$115,000 – \$135,000
	Graduate geologist	\$75,000 – \$90,000
Maintenance engineering	Engineering manager	\$160,000 – \$200,000
	Electrical engineer	\$90,000 – \$115,000
Trades	Electrician	\$125,000 – \$145,000
	Boilermaker/welder	\$110,000 – \$135,000
Mobile plant	Dump-truck operator	\$110,000 – \$125,000
	Underground workshop supervisor	\$120,000 – \$140,000

Source: 2012 Hays Salary Guide.

4.2.9 Need for Assistance

There was a lower rate of people with a disability across the Central Highlands than for Queensland. At the time of the 2011 Census, there were 636 Central Highlands residents in need of assistance for a profound or severe disability, which equated to 0.33% of the Queensland population of individuals with a disability. Some 6.5% of Emerald residents provided unpaid assistance to a person with a disability in 2011, which was 36.3% lower than for Queensland. Refer to Table 16 for a summary of 2011 persons in need of assistance data for each study area and Table 17 for the numbers of unpaid individuals who assist people with a disability.

Table 16: Persons in Need of Assistance by Study Area 2011

Year	Emerald	Central Highlands	Qld
People with profound or severe disability	229	636	192,019
% Total population	1.7%	2.2%	4.4%

Based on usual place of residence. People with a profound or severe disability are defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long-term health condition (6 months or more) or old age.

Source: Australian Bureau of Statistics.

Table 17: Unpaid Assistance to a Person with a Disability by Study Area 2011

Year	Emerald	Central Highlands	Qld
Provided unpaid assistance	640	1,527	353,372
% Total population	6.5%	7.1%	10.2%

Based on usual place of residence and persons aged 15 years and over. People with a profound or severe disability are defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long-term health condition (6 months or more) or old age.

Source: Australian Bureau of Statistics.

4.2.10 Socio-Economic Index of Disadvantage

Socio-Economic Indexes for Areas are a summary measure of the social and economic conditions of geographic areas across Australia. In 2006, the Socio-Economic Index of Disadvantage was produced, ranking geographical regions to reflect disadvantage of social and economic conditions. The index focuses on low-income earners, relatively lower education attainment, high unemployment and dwellings without motor vehicles. Low-index values represent areas of most disadvantage and high values represent areas of least disadvantage.

2011 results detailed in Table 18 indicate that there were no Emerald residents in Quintile 1 (most disadvantaged), compared to Central Highlands at 8.4% and Queensland at 20%. Conversely, Emerald and Central Highlands had significantly more residents in Quintiles 4 and 5 than Queensland.

Table 18: Socio-Economic Index of Disadvantage by Study Area 2011

SEID Quintile	Emerald	Central Highlands	Qld
Quintile 1 (most disadvantaged)	0.0%	8.4%	20.0%
Quintile 2	15.9%	14.5%	20.0%
Quintile 3	15.6%	19.2%	20.0%
Quintile 4	26.5%	26.6%	20.0%
Quintile 5 (least disadvantaged)	42.0%	31.3%	20.0%

Source: Queensland Office of Economic and Statistical Research.

4.2.11 Health and Wellbeing

In terms of health and wellbeing in the local area and region, indicators for both Emerald and the Central Highlands region include:

- A major emergency hospital with good service offerings in Emerald, as well as hospitals in Blackwater and Springsure;
- Queensland Ambulance Service (QAS) stations in Emerald, Anakie, Blackwater, Capella, Daringa, Springsure and Tieri;
- In 2011, just 2.2% of Central Highlands residents were in need of assistance with a profound or severe disability.

The region is also well supported by health and wellbeing-targeted community services. Emerald community organisations include:

- Anglicare;
- Central Highlands Aboriginal Corp;
- Central Highlands and Western Queensland Family Support Association;
- Domestic Violence Service of Central Queensland;
- Emerald Blue Care;
- Emerald and District Social Development Association;
- Ozcare; and
- Lifeline.

4.2.12 Education

In 2011, the majority of Emerald and Central Highlands students were in primary school (34.2% and 33.9% respectively), which was in line with Queensland statistics (29.6%). The two regional study areas had significantly less university participation (5.9% and 5.0%) than Queensland (13.5%). At the 2011 Census, 46.3% of Emerald residents 15 years and over had achieved Year 12 or equivalent, compared to 41.2% for Central Highlands and 48.0% for Queensland. For a summary of attendance at various educational establishments by study area, refer to Figure 10; while Figure 11 details highest level of schooling by study area.

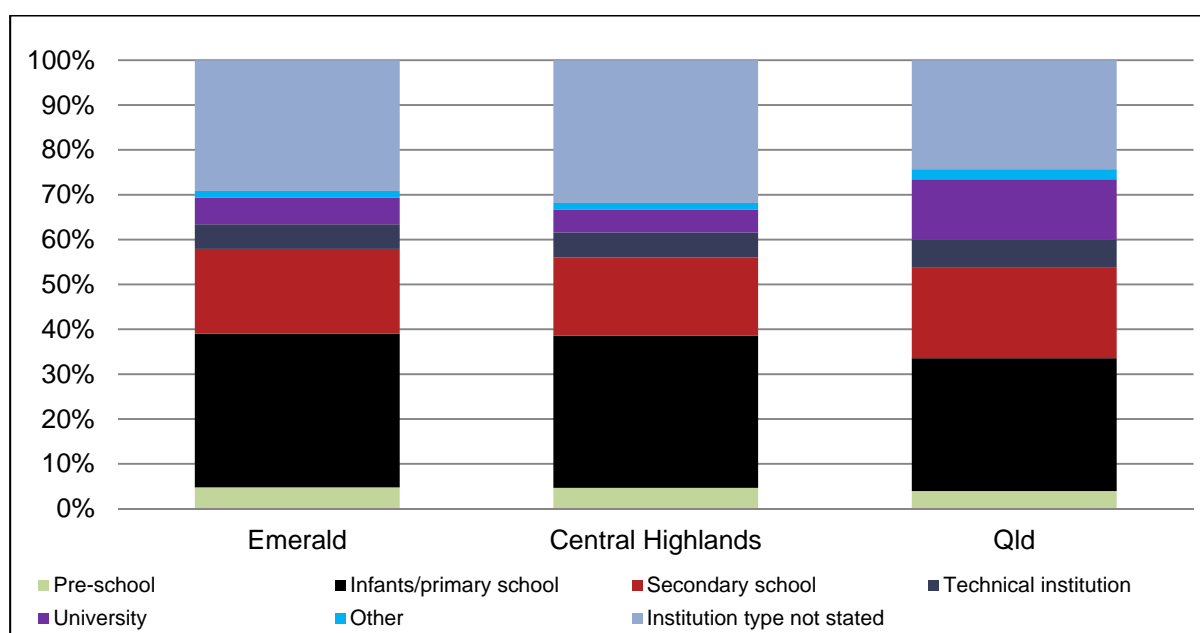


Figure 10: Type of Educational Institution Attended by Study Area 2011

*Based on school location and full-time students.
Source: Australian Bureau of Statistics.*

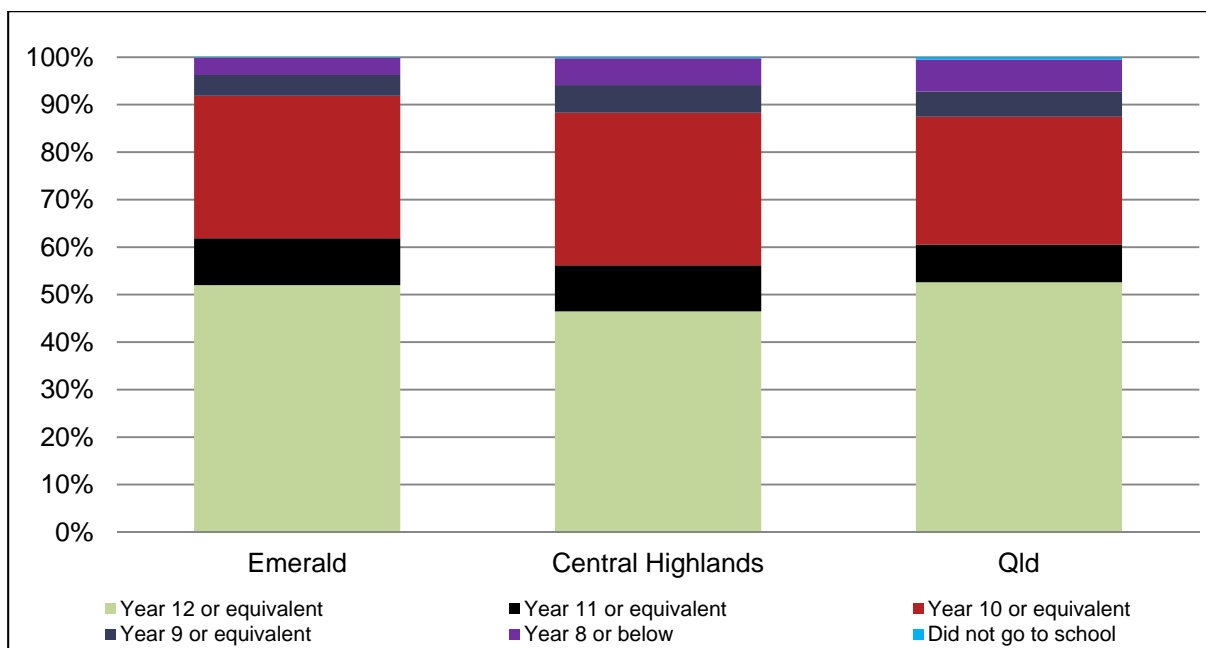


Figure 11: Highest Level of Schooling by Study Area 2011

Based on usual place of residence and persons aged 15 years and over.

Source: Australian Bureau of Statistics.

4.2.12.1 Tertiary Qualifications

In 2011, 35.5% of the Emerald population aged 15 years and over had a tertiary qualification, compared to 32.1% for Central Highlands and 36.5% for Queensland. Certificates were consistently the highest level of qualification achieved across all study areas; while Queensland had the highest proportion (27.0%) of Bachelor degrees, followed by Emerald (21.8%). Tertiary qualification levels for each study area are summarised in Figure 12.

Across all study areas, engineering and related technologies was the most popular tertiary field in 2011, ranging from 22.4% participation in Emerald to 21.1% across the Central Highlands LGA to 14.2% Queensland-wide. Management and commerce was the second most popular area of study throughout the state. Refer to Figure 13 for more detail.

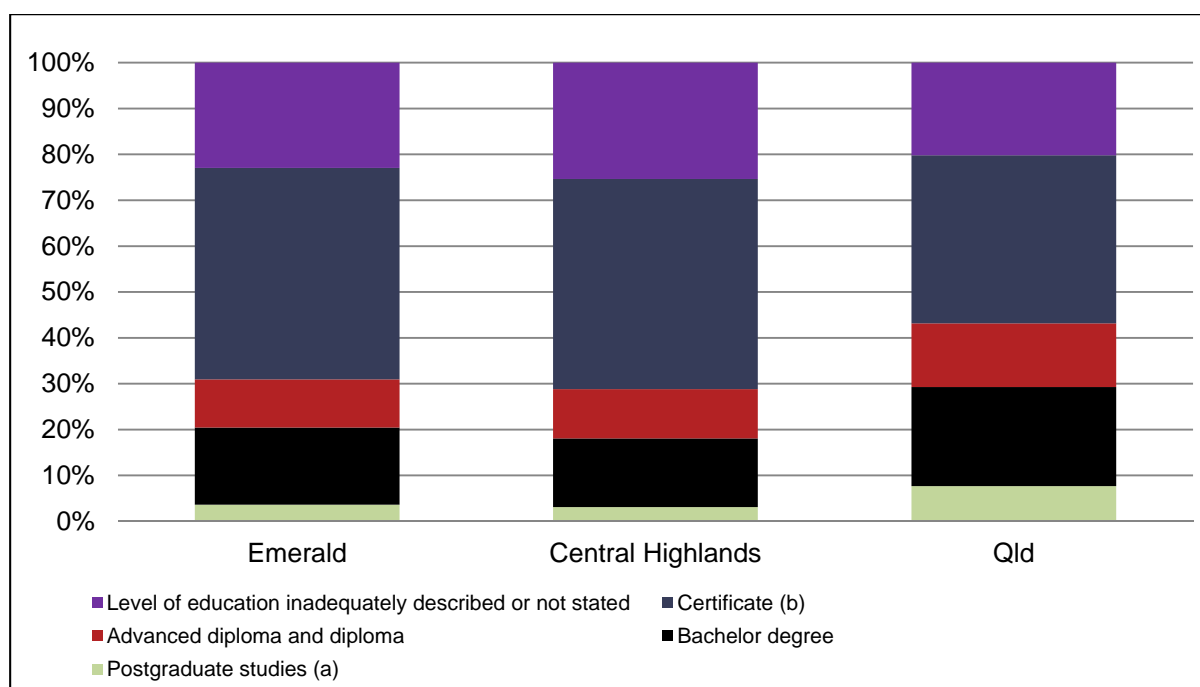


Figure 12: Highest Level of Tertiary Qualification Achieved by Study Area 2011

Based on usual place of residence and persons aged 15 years and over. (a) Includes graduate diploma, graduate certificate and postgraduate degree. (b) Includes certificates I, II, III and IV and certificates not further defined.

Source: Australian Bureau of Statistics.

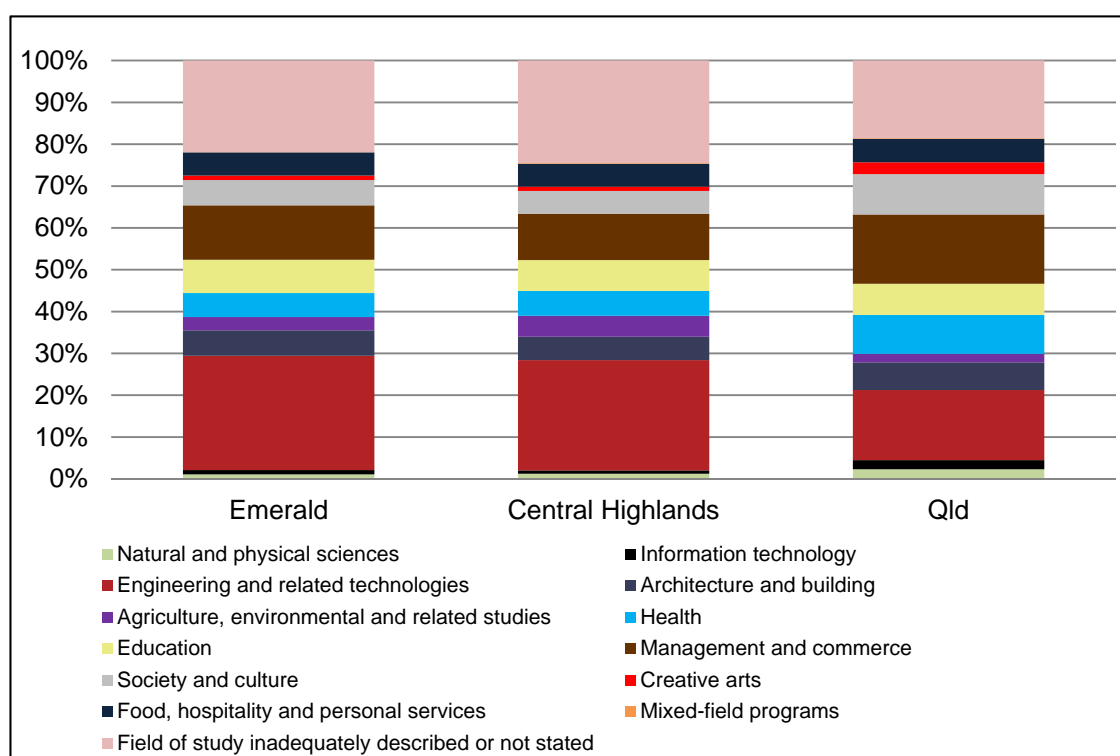


Figure 13: Tertiary Field by Study Area 2011

Based on usual place of residence and persons aged 15 years and over.

Source: Australian Bureau of Statistics.

4.2.13 Employment and Industry

At 2.2%, 2011 Emerald and Central Highlands unemployment rates were more than half that of Queensland (5.5%). These figures had increased by the 2013 June quarter (2.4% for Emerald and 2.8% for Central Highlands), according to Queensland Office of Economic and Statistical Research community profiles. Figure 14 presents a summary of the 2011 employment data.

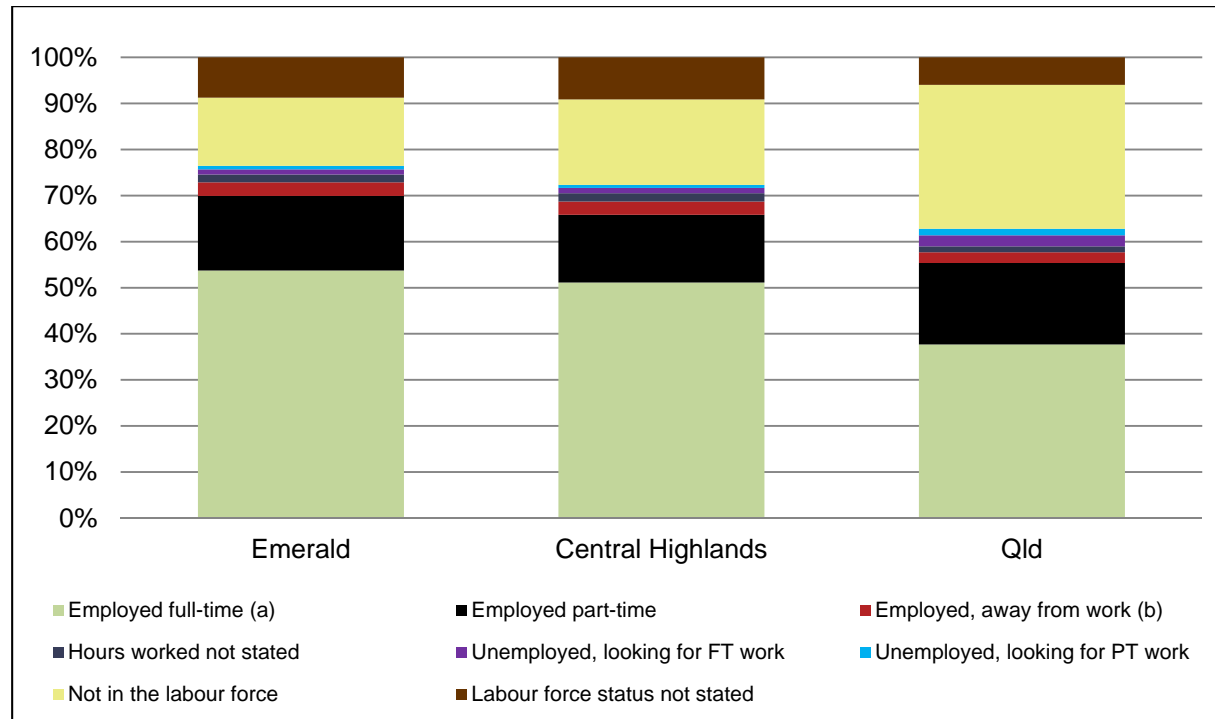


Figure 14: Labour Force Status by Study Area 2011

Based on usual place of residence and persons aged 15 years and over. (a) Employed full-time is defined as having worked 35 hours or more in all jobs during the week prior to Census night. (b) Comprises employed persons who did not work any hours in the week prior to Census night.

Source: Australian Bureau of Statistics.

4.2.13.1 Prevalent Local Industries

In 2011, the main industry of employment for the regional study areas was mining, with Emerald at 22.6% and Central Highlands at 26.0%, compared to all of Queensland at 2.6% (refer to Figure 15 for a breakdown of employment by industrial category for each study area). Emerald's second most popular profession was construction, while Central Highlands favoured agriculture, forestry and fishing. Queensland's top two professions were healthcare and social assistance (11.9%), and retail trade (10.7%).

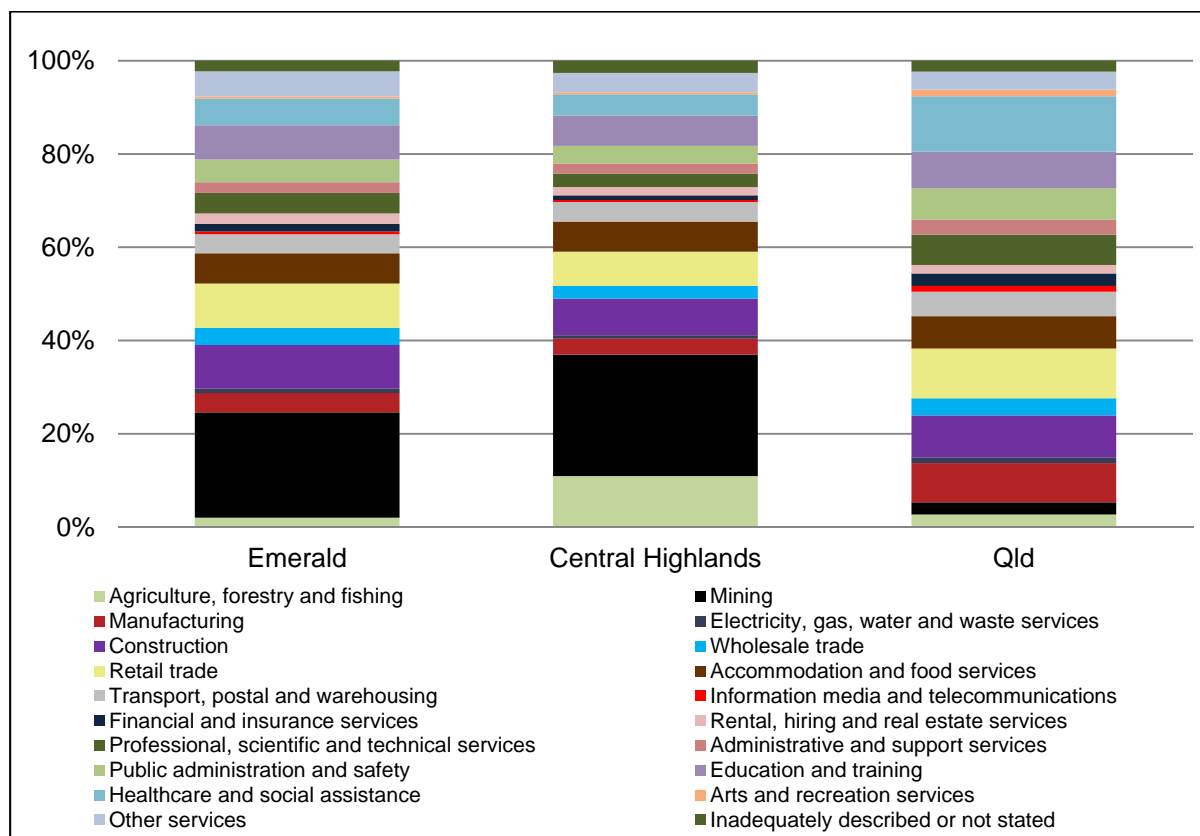


Figure 15: Industry of Employment by Study Area 2011

Based on usual place of residence and employed persons aged 15 years and over. Industry of employment was coded to the ABS 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC). This has replaced the 1993 ANZSIC edition.

Source: Australian Bureau of Statistics.

4.2.13.2 Employment by Occupation

At the time of the 2011 Census, all regional study areas had higher proportions of managers, technicians, trades workers and machinery operators and drivers, indicative of the area's prevalent mining industry.

Queensland reported a higher percentage of professionals than the regional areas. This could largely be due to professionals often concentrating in larger metropolitan centres. Refer to Figure 16 for a summary of local, regional and state employment figures by occupation.

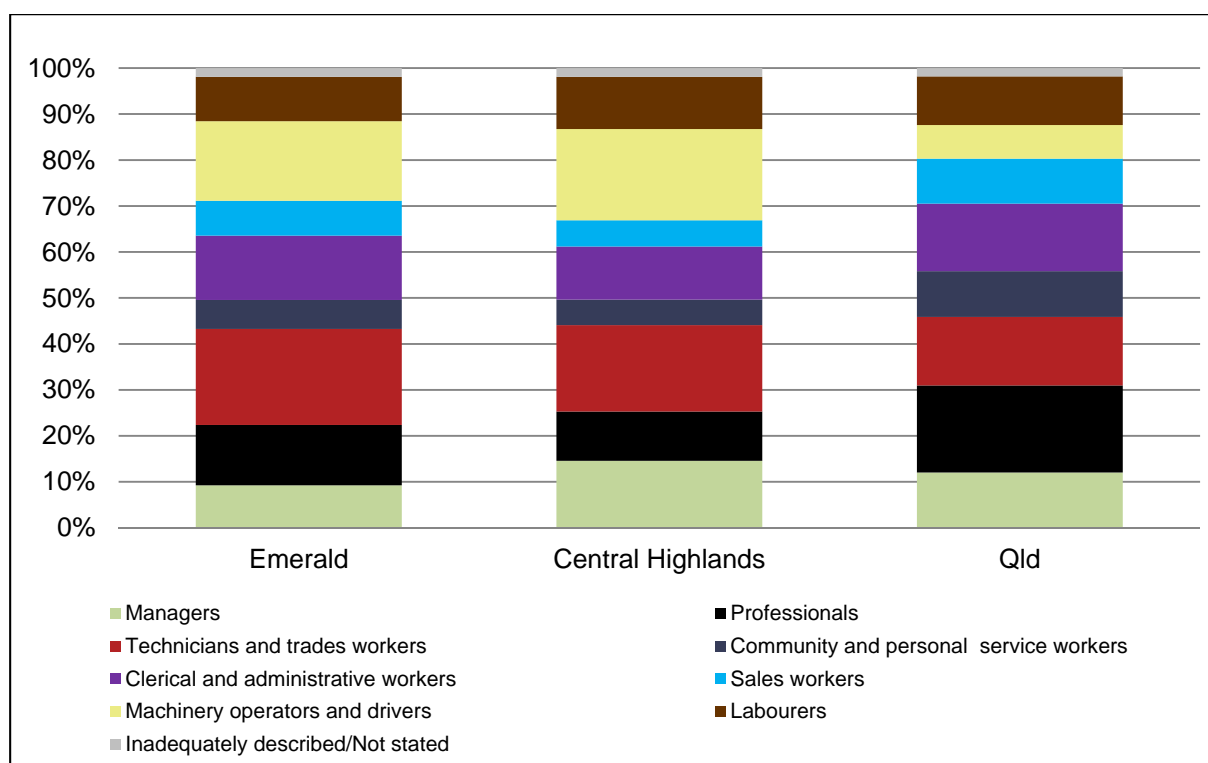


Figure 16: Employment by Occupation by Study Area 2011

Based on usual place of residence and employed persons aged 15 years and over. Occupation was coded to the ABS 2006 Australian and New Zealand Standard Classification of Occupations (ANZSCO). This replaced the 1996 Australian Standard Classification of Occupations (ASCO) Second Edition.

Source: Australian Bureau of Statistics and Queensland Office of Economic and Statistical Research.

4.2.14 Summary of Demographic Profile

In 2011, Emerald had a resident population of 13,576, which represented approximately 46% of the broader Central Highlands LGA population (29,533). The Queensland Office of Economic and Statistical Research population projections to 2031 indicated that Emerald will grow by an average annual rate of three per cent over the 20-year period from 2011.

On 2011 Census night, counted populations were higher than resident populations in all study areas. While Emerald and Queensland experienced modest visitor influxes at 5.8% and 2.9% respectively, Central Highlands showed a 17.5% increase. Further research indicated that communities such as Blackwater and the Gemfields were significant contributors to the larger regional enumerated population. There was a notable increase in enumerated males aged 25 to 64 in the Central Highlands region, potentially indicating FIFO/DIDO employees; as well as an increase in counted 65 to 74-year-old males and females, which could represent grey nomads.

The local government area had more male than female residents, and an age structure that followed the same general trend as Queensland. In 2011, the key differences were in the 0-9 and 25-34 age groups, where Emerald and Central Highlands were up to three per cent above the Queensland average.

Both regional study areas recorded significantly lower ethnic diversity characteristics than for Queensland. According to the 2011 Census, 78.3% of Emerald residents were born in Australia; while 80.6% of Central Highlands residents were Australian born.

Both Emerald and Central Highlands featured significantly more migration (over five years) than Queensland, with Emerald at 56.9% and the broader regional area at 49.5%.

About one third of Emerald and Central Highlands residents earned \$1,000 per week or more in 2011 (35.8% and 33.7% respectively). This was in comparison to Queensland, where less than one quarter of the population was in this income bracket (22.4%). Only 14.8% of Emerald households earned less than \$1,000 per week, compared to Central Highlands at 21.4% and Queensland at 36.9%.

A lower number of people with a disability were recorded across the Central Highlands than for Queensland. At the time of the 2011 Census, there were 636 Central Highlands residents in need of assistance for a profound or severe disability, which equated to 0.33% of the Queensland population of individuals with a disability.

There are positive health and wellbeing indicators for Emerald and the Central Highlands region, including:

- A major emergency hospital with good service offerings in Emerald, as well as hospitals in Blackwater and Springsure;
- Queensland Ambulance Service (QAS) stations in Emerald, Anakie, Blackwater, Capella, Duaringa, Springsure and Tieri; and
- In 2011, just 2.2% of Central Highlands residents were in need of assistance with a profound or severe disability.

In 2011, the majority of Emerald and Central Highlands students were in primary school (34.2% and 33.9% respectively), which was in line with Queensland statistics (29.6%). For those leaving or who had left school, 46.3% of Emerald residents had achieved Year 12 or equivalent, compared to 41.2% for Central Highlands and 48.0% for Queensland. Some 35.5% of the Emerald population aged 15 years and over had a tertiary qualification, compared to 32.1% for Central Highlands and 36.5% for Queensland. Across all study areas, engineering and related technologies was the most popular tertiary field in 2011.

At 2.2%, 2011 Emerald and Central Highlands unemployment rates were more than half that of Queensland (5.5%). By the 2013 June quarter, these figures had increased to 2.4% and 2.8% respectively (with Queensland at 6.0%). The main industry of employment for the regional study areas was mining, with Emerald at 22.6% and Central Highlands at 26.0%, compared to all of Queensland at 2.6%. All regional study areas had higher proportions of managers, technicians and trades workers, and machinery operators and drivers, indicative of the area's prevalent mining industry.

4.3 INDIGENOUS DEMOGRAPHIC PROFILE

4.3.1 Population

At the time of the 2011 Census, there were 1,021 persons in the Central Highlands LGA who stated that they were of Indigenous origin – 441 of these people resided in Emerald. This respectively equated to 3.3% and 3.6% of the general Emerald and Central Highlands populations. These rates closely correlated to Queensland's 2011 Indigenous population of 155,824, which was some 3.6% of the broader population. Refer to Table 19 for a summary of the Indigenous population by study area.

Table 19: Indigenous Population by Study Area 2011

Population	Emerald	Central Highlands	Qld
Indigenous (a)	441	1,021	155,827
Total population	13,218	28,715	4,332,739
Indigenous as % population	3.3%	3.6%	3.6%

*Based on place of usual residence. (a) Indigenous persons comprised of Aboriginal, Torres Strait Islanders and both Aboriginal and Torres Strait Islanders.
Source: Australian Bureau of Statistics.*

4.3.2 Gender and Age

The median age across all study areas indicated a young Indigenous population. Almost half of Emerald, Central Highlands and Queensland Indigenous residents were 19 years or younger in 2011; while only 8.8% of Emerald's Indigenous residents were 50 years or older, compared to Central Highlands (11.0%) and Queensland (13.2%).

Indigenous males outnumbered females in Emerald and Central Highlands, while the opposite was true for Queensland in 2011. Refer to Table 20 for a summary of the Indigenous age and gender data for each study area.

Table 20: Indigenous Age and Gender by Study Area 2011

Age	Emerald		Central Highlands		Qld	
	M	F	M	F	M	F
0-4 years	23	27	67	63	10,474	9,909
5-9 years	22	17	71	63	9,758	9,459
10-14 years	31	19	63	58	9,541	9,325
15-19 years	41	28	71	48	8,720	8,169
20-24 years	24	17	49	31	6,318	6,401
25-29 years	13	16	32	28	5,159	5,538
30-34 years	19	9	42	31	4,576	4,911
35-39 years	14	4	38	18	4,626	5,121
40-44 years	20	23	47	32	4,344	4,974
45-49 years	14	21	25	32	3,820	4,169
50-54 years	6	8	12	21	3,075	3,468
55-59 years	3	10	11	20	2,378	2,642
60-64 years	3	3	15	10	1,677	1,944
65 years and over	3	3	14	9	2,278	3,053
TOTAL	236	205	557	464	76,744	79,083

*Based on place of usual residence.
Source: Australian Bureau of Statistics.*

4.3.3 Income and Earnings

2011 Indigenous individual weekly incomes in Emerald and Central Highlands featured significantly more in the \$1,000+ earnings bracket than in Queensland. Respectively, 48.7% and 47.4% of Emerald and Central Highlands Indigenous residents earned \$600 or more per week, compared to 30.5% for Queensland. Conversely, Queensland had the largest percentage of Indigenous residents who earned \$200 or less, at 18.8%. Refer to Figure 17 for a summary of this data.

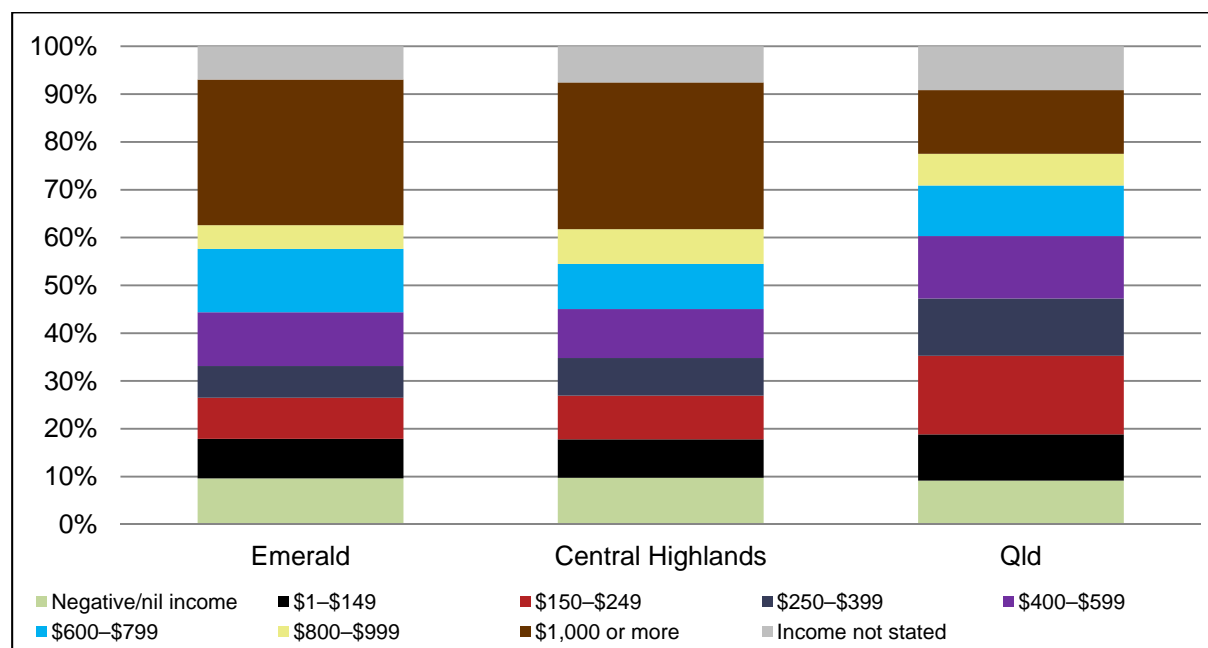


Figure 17: Indigenous Total Personal Weekly Income by Study Area 2011

*Based on usual place of residence and persons aged 15 years and over.
Source: Australian Bureau of Statistics.*

Indigenous households in Emerald and Central Highlands were significantly more affluent than those in Queensland. In 2011, some 32.2% and 31.4% of Emerald and Central Highlands Indigenous households earned \$2,500 or more per week, which was commensurate with general population household incomes in these study areas (39.8% and 35.2% respectively). In contrast, only 10.1% of Queensland Indigenous households were in this income bracket. For a summary of the Indigenous total household weekly income, refer to Figure 18.

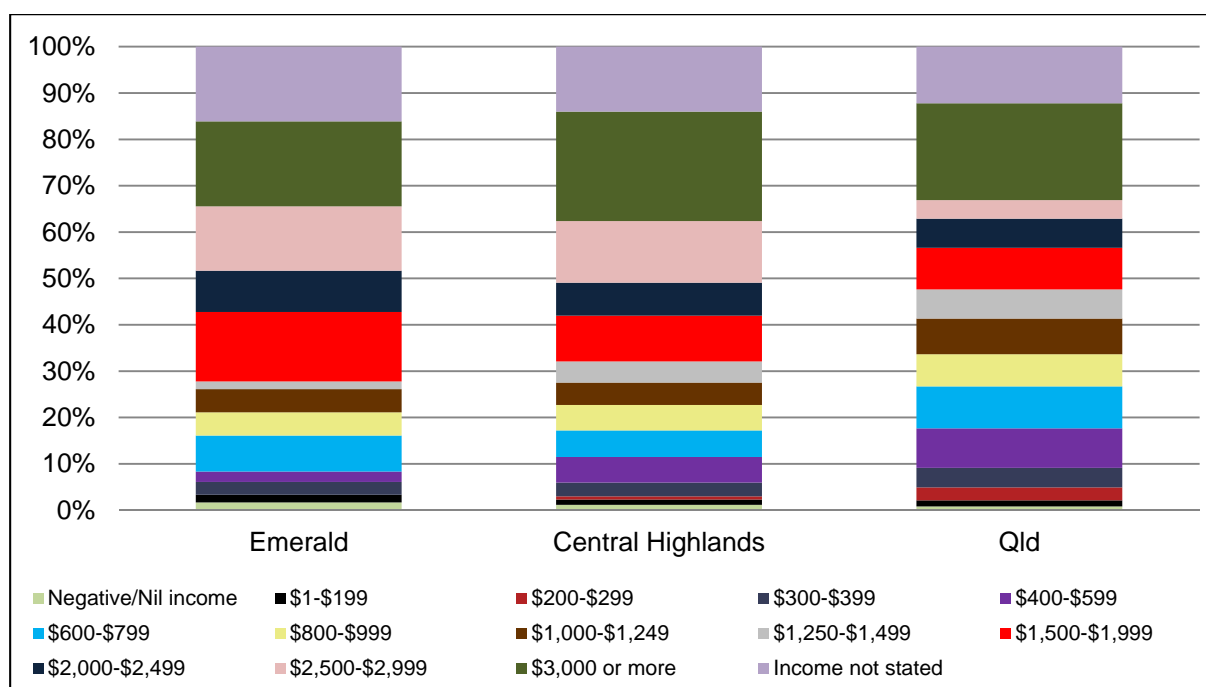


Figure 18: Indigenous Total Household Weekly Income by Study Area 2011

Based on occupied private dwellings. Includes houses with at least one Indigenous resident. Includes households where at least one member aged 15 years and over did not state an income and/or was temporarily absent on Census night.

Source: Australian Bureau of Statistics.

4.3.4 Need for Assistance

At the time of the 2011 Census, there were 29 Indigenous persons in need of assistance for a profound or severe disability across the Central Highlands LGA, which equated to 0.4% of the Queensland Indigenous population of people with a disability. These percentages were relatively similar for non-Indigenous people in need of assistance. This data is presented in Table 21. Some 8.6% of Emerald's Indigenous residents provided care to a person/people with a severe disability, compared to 11.6% for Queensland. Refer to Table 22 for a summary of the unpaid assistance data.

Table 21: Indigenous Persons in Need of Assistance by Study Area 2011

Population	Emerald	Central Highlands	Qld
People with a profound or severe disability	9	29	7,506
% Total Indigenous population	2.0%	2.8%	4.8%

Based on usual place of residence. People with a profound or severe disability are defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long-term health condition (6 months or more) or old age.

Source: Australian Bureau of Statistics.

Table 22: Unpaid Assistance to a Person with a Disability by Study Area 2011

Population	Emerald	Central Highlands	Qld
Provided unpaid assistance	26	46	11,339
% Total Indigenous population	8.6%	7.3%	11.6%

*Based on usual place of residence and persons aged 15 years and over. People with a profound or severe disability are defined as needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long-term health condition (6 months or more) or old age.
Source: Australian Bureau of Statistics.*

4.3.5 Education

In 2011, the majority of Queensland's Indigenous students were in primary school, with Emerald and Central Highlands (34.9% and 43.0%) in line with Queensland statistics (39.9%). Conversely, Central Highlands had the lowest tertiary participation in 2011 at 6.5%, followed by Queensland (10.9%) and Emerald (13%). For a summary of Indigenous education for each study area, refer to Figure 19.

At the 2011 Census, 35.3% of Emerald's Indigenous residents had completed Year 12 or equivalent, compared to 35.7% for Central Highlands and 29.7% for Queensland. A summary of this Indigenous school completion data is presented in Figure 20.

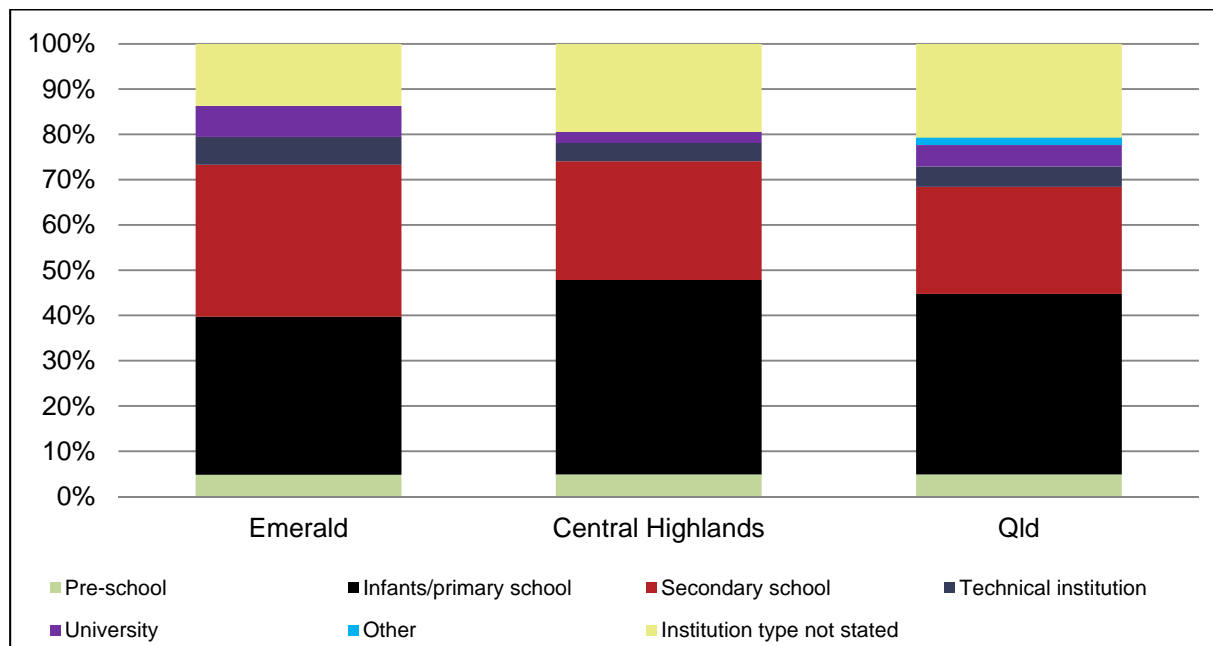


Figure 19: Indigenous Type of Educational Institution Attended by Study Area 2011

*Based on school location and full-time students.
Source: Australian Bureau of Statistics.*

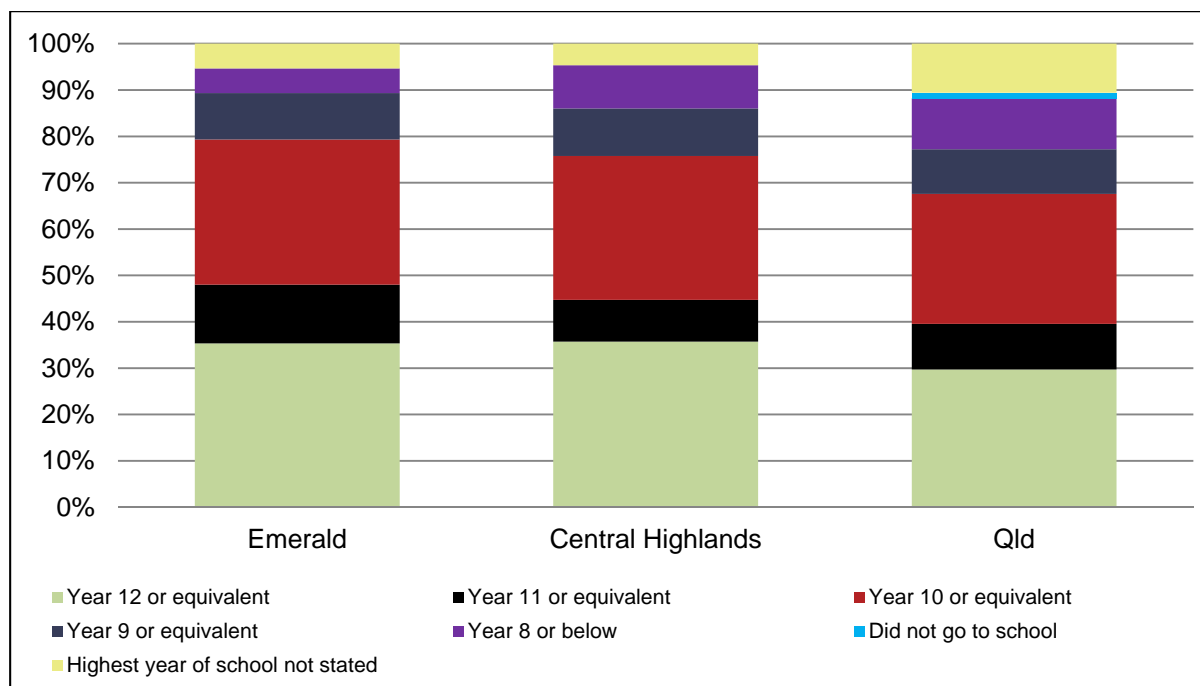


Figure 20: Indigenous Highest Year of School by Study Area 2011

*Based on place of usual residence and persons aged 15 years and over.
Source: Australian Bureau of Statistics.*

4.3.5.1 Tertiary Qualifications

In 2011, 24.0% of Queensland's Indigenous population had achieved tertiary qualifications, compared to 36.5% for the general population. The majority of tertiary qualified Indigenous persons in the study areas had achieved certificate level. Emerald had the highest rate of Indigenous university participation (Bachelor degree or higher) at 12.4%, followed by Queensland at 11.2% and Central Highlands at 6.6%. A summary of the tertiary studies data is provided in Figure 21.

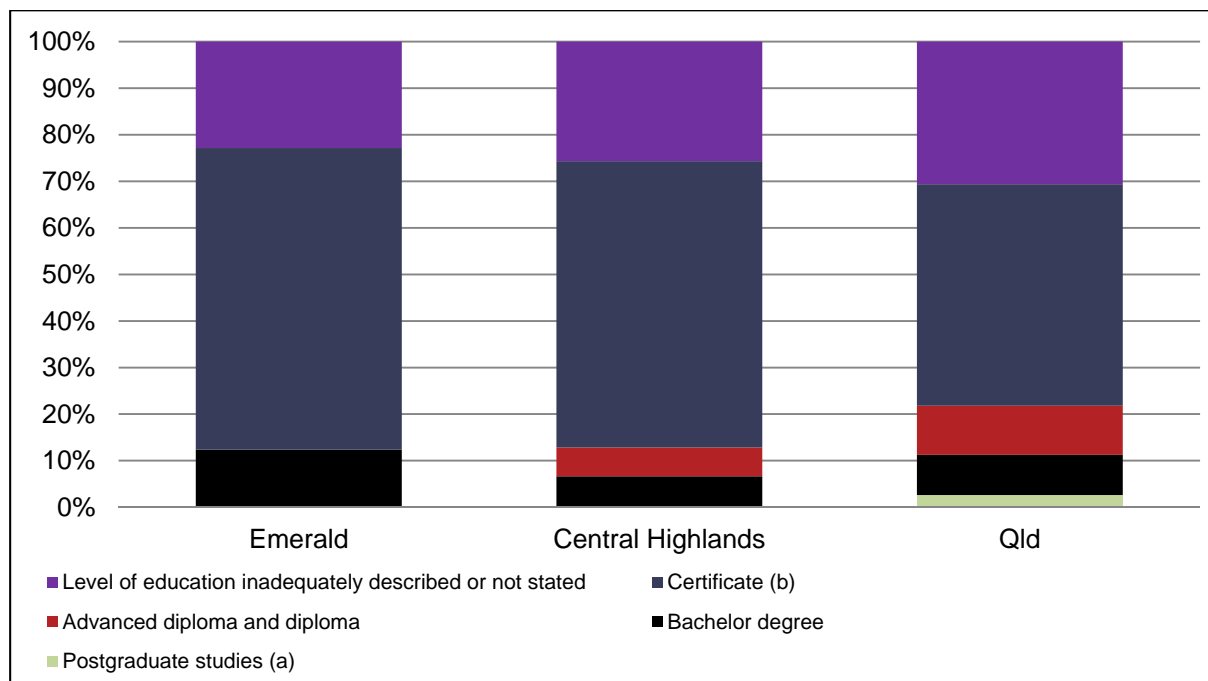


Figure 21: Indigenous Highest Level of Tertiary Qualification by Study Area 2011

Based on usual place of residence and persons aged 15 years and over. (a) Includes graduate diploma, graduate certificate and postgraduate degree. (b) Includes certificates I, II, III and IV and certificates not further defined.

Source: Australian Bureau of Statistics.

4.3.6 Employment and Industry

At the 2011 Census, Indigenous unemployment in Queensland was at 18.0%; while Indigenous unemployment figures for Emerald and Central Highlands were significantly more positive at 7.7% and 8.0% respectively. In comparison, broader 2011 unemployment rates in the study areas included 2.2% for Emerald and the Central Highlands and 5.5% across Queensland – more than one-third lower than corresponding Indigenous unemployment rates. Figure 22 presents the Indigenous employment statistics for each study area.

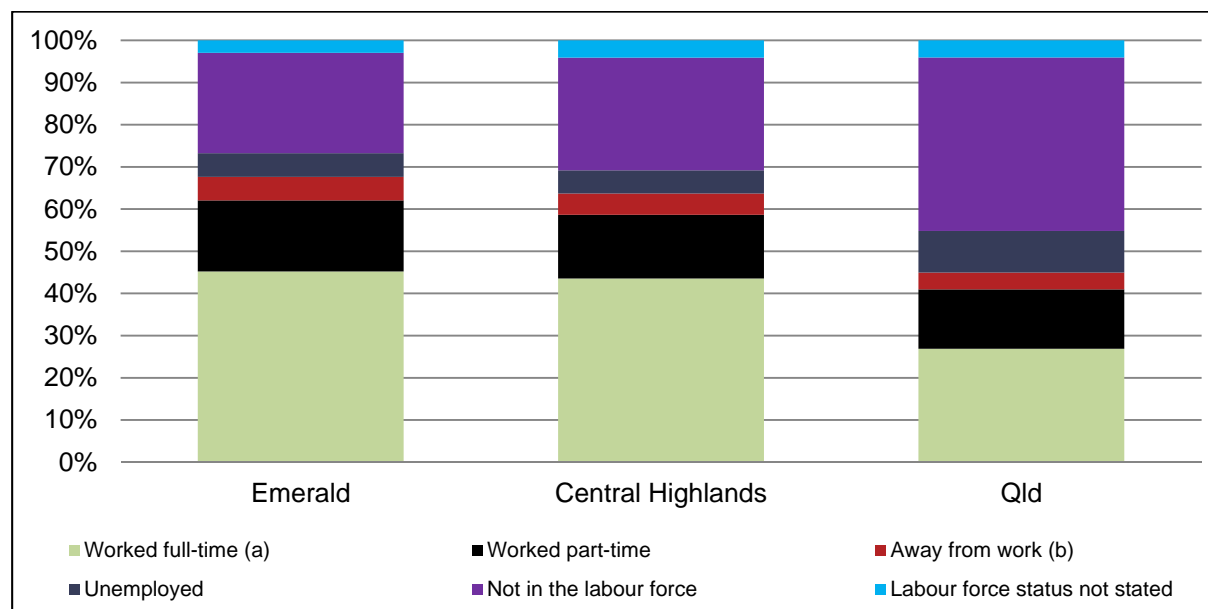


Figure 22: Indigenous Labour Force Status by Study Area 2011

Based on usual place of residence and persons aged 15 years and over. (a) Employed full-time is defined as having worked 35 hours or more in all jobs during the week prior to Census night. (b) Comprises employed persons who did not work any hours in the week prior to Census night.

Source: Australian Bureau of Statistics.

In 2006, the largest industry of Indigenous employment in the Central Highlands LGA was mining (20.6%); while Queensland's largest Indigenous employment industry was public administration and safety (20.2%). For each study area, Figure 23 provides details of the various categories of industry (and associated percentages) that employ Indigenous people.

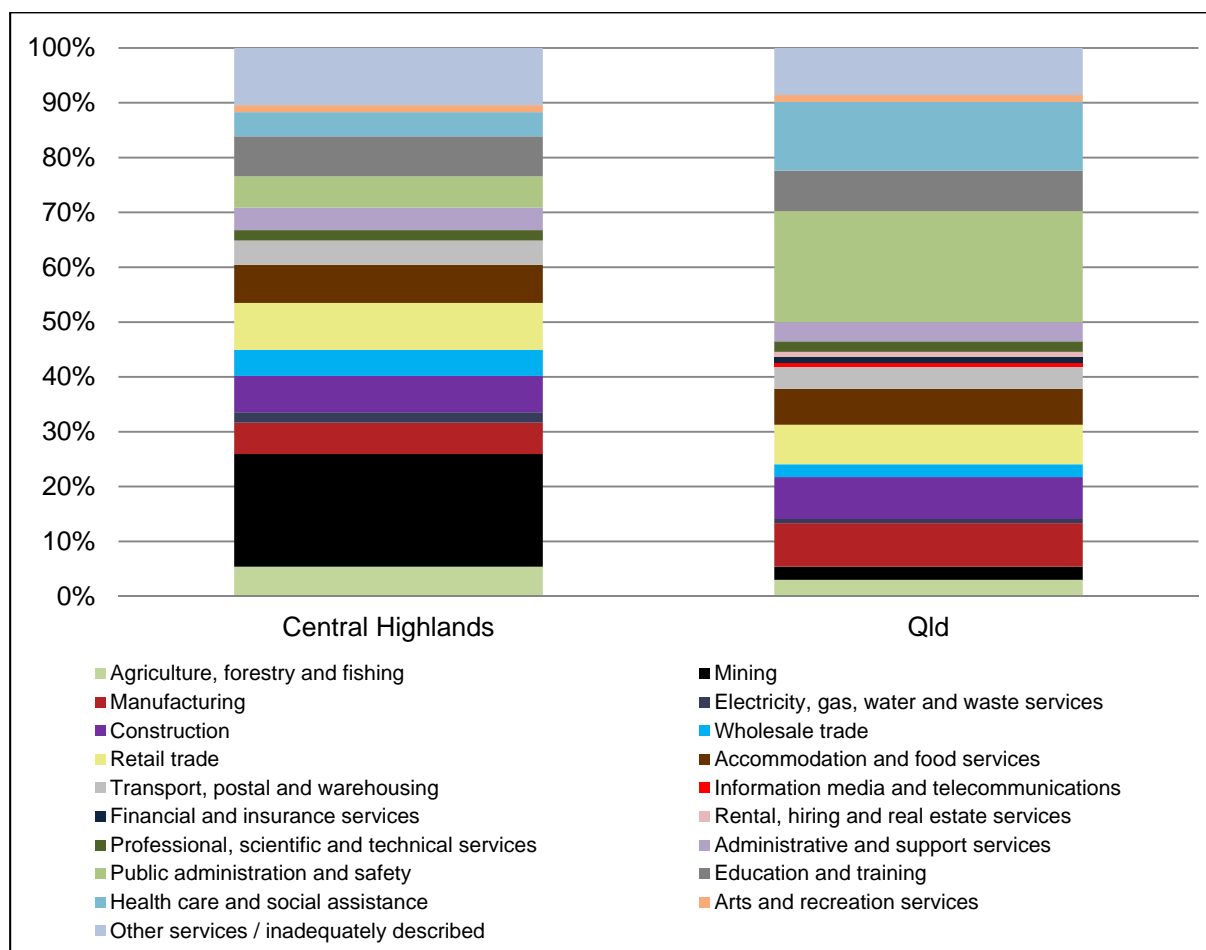


Figure 23: Industries of Indigenous Employment by Study Area 2006

*Data not available for equivalent Emerald study area. Based on usual place of residence and employed persons aged 15 years and over. Industry of employment was coded to the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC) edition. This has replaced the 1993 ANZSIC edition.
Source: Australian Bureau of Statistics.*

In 2006, 'labourer' was the most popular profession in all study areas: 24.8% in the Central Highlands and 26.6% in Queensland. Other popular professions included 'machinery operator and driver' (Central Highlands) and 'community and personal service' (Queensland). A breakdown of these occupational categories is presented in Figure 24.

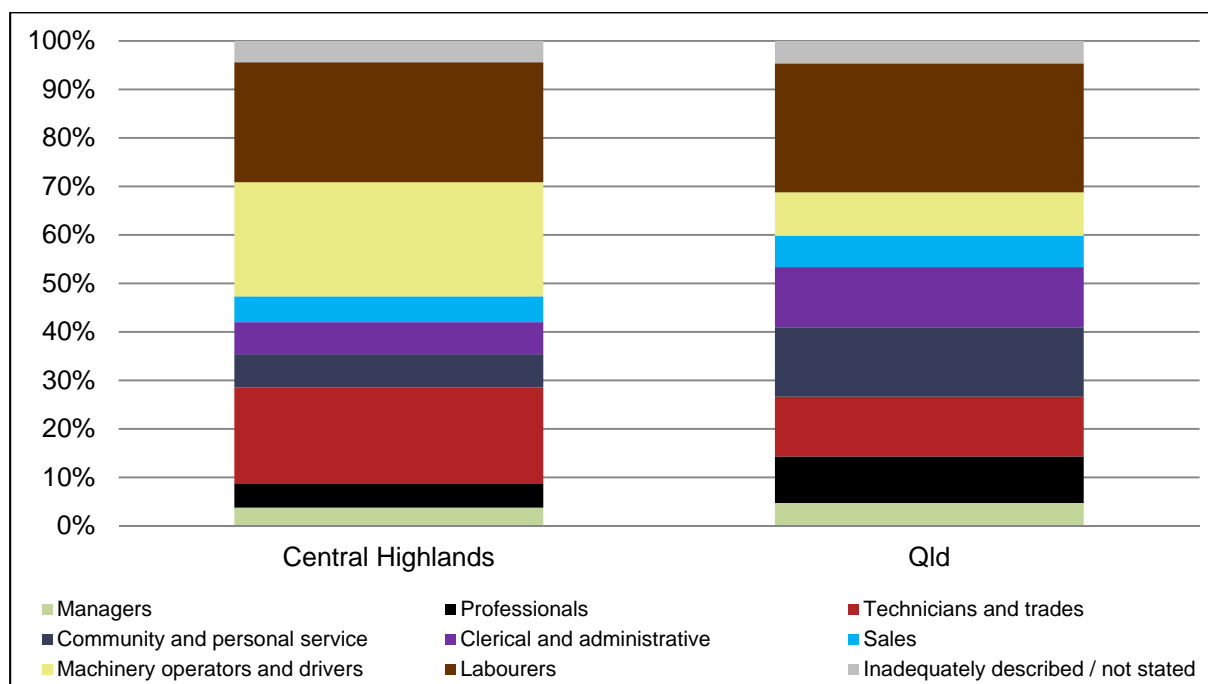


Figure 24: Indigenous Occupations by Study Area 2006

Data not available for equivalent Emerald study area. Based on place of usual residence and employed persons aged 15 years and over. Occupation was coded to the 2006 Australia and New Zealand Standard Classification of Occupations (ANZSCO). This has replaced the 1996 Australia Standard Classification of Occupations (ASCO) Second Edition.

Source: Australian Bureau of Statistics.

4.3.7 Summary of Indigenous Demographic Profile

At the time of the 2011 Census, there were 1,021 persons in the Central Highlands LGA who stated that they were of Indigenous origin – 441 of these resided in Emerald. This equated to 3.3% and 3.6% of the general Emerald and Central Highlands populations respectively.

The median age across all study areas indicated a young Indigenous population. Almost half of Emerald, Central Highlands and Queensland Indigenous residents were 19 years or younger in 2011; while only 8.8% of Emerald's Indigenous residents were 50 years or older, compared to Central Highlands (11.0%) and Queensland (13.2%).

Indigenous individual incomes in Emerald and Central Highlands in 2011 featured significantly more in the \$1,000+ earnings bracket than in Queensland. Respectively, 48.7% and 47.4% of Emerald and Central Highlands Indigenous residents earned \$600 or more per week, compared to 30.5% for Queensland.

Indigenous households in Emerald and Central Highlands were more affluent than those across Queensland. In 2011, some 32.2% and 31.4% of Emerald and Central Highlands Indigenous households earned \$2,500 or more per week, which was commensurate with general population household incomes in these study areas (39.8% and 35.2% respectively). In contrast, only 10.1% of Queensland Indigenous households were in this income bracket.

At the time of the 2011 Census, there were 29 Indigenous persons in need of assistance for a profound or severe disability across the Central Highlands LGA, which equated to 0.4% of the Queensland Indigenous population of people with a disability.

In 2011, the majority of Queensland's Indigenous students were in primary school, with Emerald and Central Highlands (34.9% and 43.0%) in line with Queensland statistics (39.9%).

Some 35.3% of Emerald's Indigenous residents had completed Year 12 or equivalent in 2011, compared to 35.7% for Central Highlands and 29.7% for Queensland.

In 2011, 24.0% of Queensland's Indigenous population had achieved tertiary qualifications, compared to 36.5% for the general population. The majority of tertiary qualified Indigenous persons in the study areas had achieved certificate level.

Indigenous unemployment in Queensland was at 18.0% in 2011. Indigenous unemployment figures for Emerald and Central Highlands were significantly more positive at 7.7% and 8.0% respectively. All study areas' Indigenous employment rates were more than one-third higher than for their corresponding general populations.

In 2006, the largest industry of Indigenous employment in the Central Highlands LGA was mining (20.6%), while 'labourer' was the most popular profession in all study areas: 24.8% in the Central Highlands and 26.6% in Queensland.

4.4 HOUSING AND ACCOMMODATION

4.4.1 Current Emerald Housing and Accommodation Status

4.4.1.1 Household Composition

In all study areas, two-person households were the most common residential composition, averaging almost 33% of all households. Emerald's next most common household structure was four persons, while single-person households were prevalent in the Central Highlands LGA and Queensland. A summary of household composition data is presented in Figure 25.

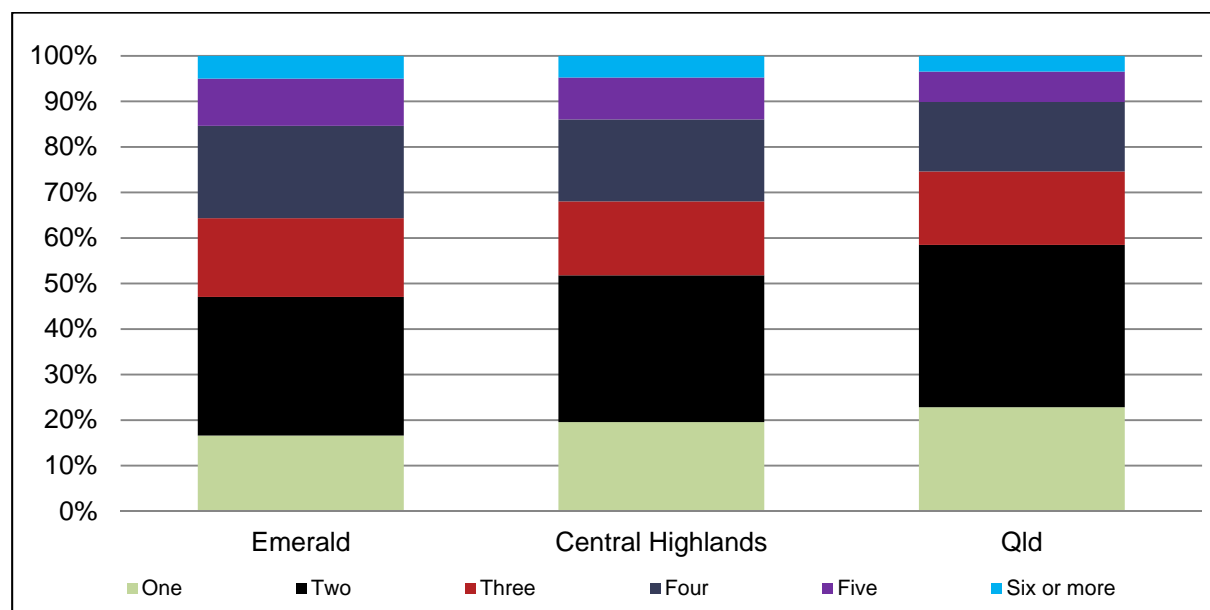


Figure 25: Household Composition by Study Area 2011

Source: Australian Bureau of Statistics.

4.4.1.2 Dwelling Structure

In 2011, there were 7,698 separate houses in the Central Highlands LGA (3,176 of them in Emerald), representing 68.0% of all private dwellings, compared to Queensland at 70.4%. There were low numbers of semi-detached houses and apartments in the regional study areas, while Central Highlands had the highest rate of unoccupied dwellings at 20.7%, followed by Emerald at 16.4% and Queensland at 10.3%. Figure 26 represents a summary of dwelling structures in each of the study areas.

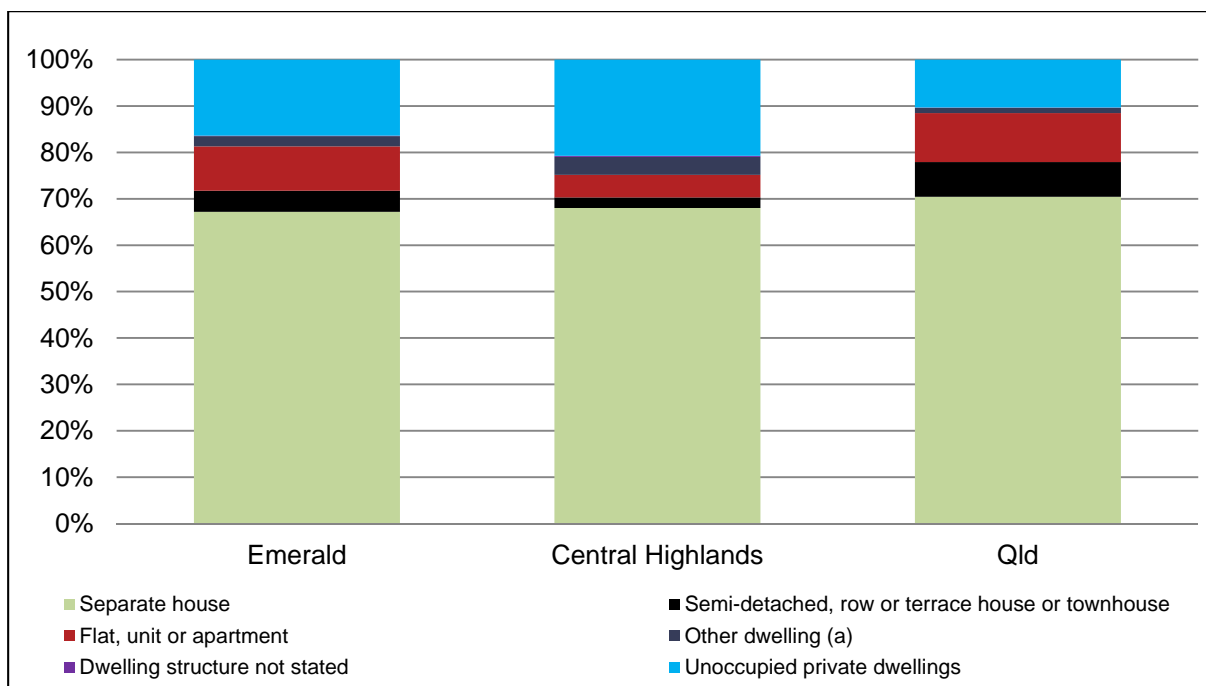


Figure 26: Dwelling Structure by Study Area 2011

(a) Includes caravans, cabins, houseboats, tents and dwelling attached to a shop or office.
Source: Australian Bureau of Statistics.

4.4.1.3 Dwelling Ownership

At the 2011 Census, 56.0% of Emerald residents owned their dwelling (outright or through mortgage), compared to 51.6% for Central Highlands and 63.5% across the state. Central Highlands had the highest proportion of rented properties at 44.4%, followed by Emerald at 41.9%. A summary of this data is provided in Figure 27.

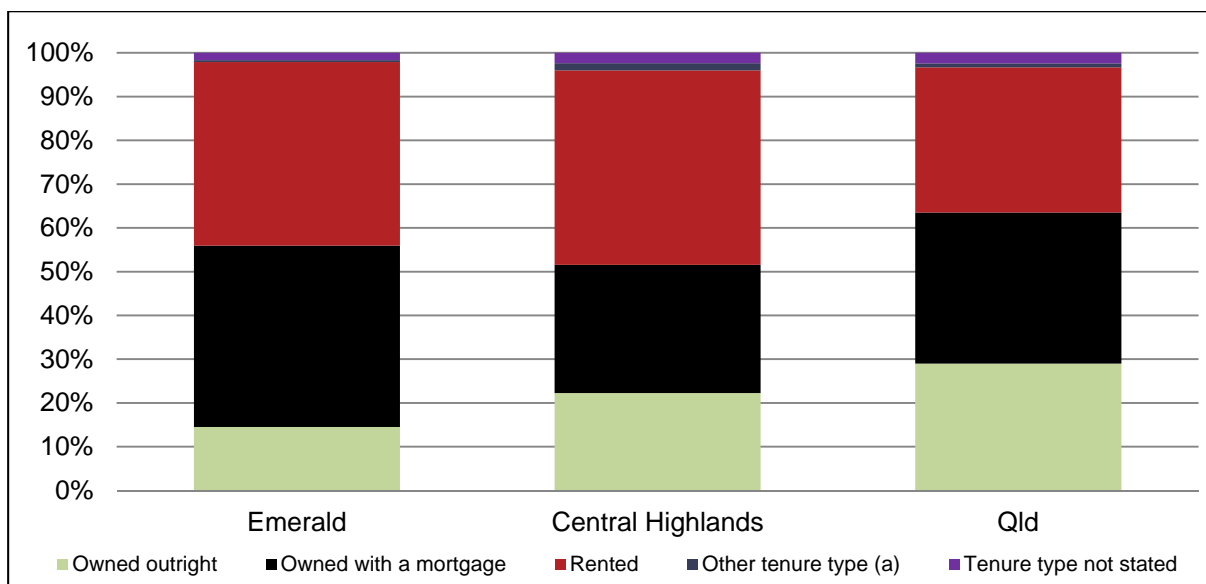


Figure 27: Dwelling Ownership by Study Area 2011

(a) Includes dwellings occupied under a life tenure scheme.
Source: Australian Bureau of Statistics.

4.4.1.4 Vehicles per Household

An average of 63.5% of households across the study areas had two or more vehicles in 2011. Emerald had the largest proportion of households with three or more vehicles (26.3%), while 7.2% of Queensland households had no vehicles at all (the highest proportion of the study areas). Figure 28 provides a breakdown of domestic vehicle ownership for each of the study areas.

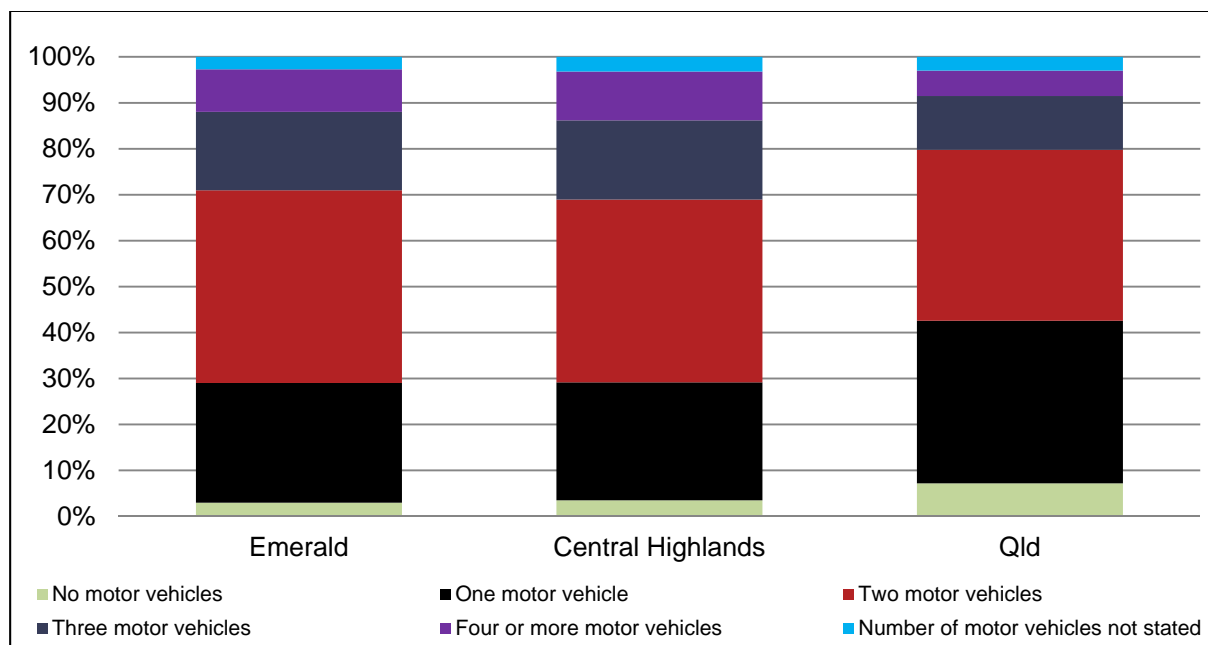


Figure 28: Motor Vehicles per Household by Study Area 2011

*Excludes motorbikes / scooters.
Source: Australian Bureau of Statistics.*

4.4.2 Housing Affordability

4.4.2.1 Home Repayments

Across all study areas, \$1,800-\$2,399 was the most common monthly mortgage repayment bracket in 2011. Only 6.0% of Emerald residents paid mortgages of less than \$1,000 per month, compared to 13.4% in Central Highlands and 17.3% across the state. Conversely, 17.8% of Emerald mortgagees paid \$3,000+/per month in repayments, compared to 16.2% for Central Highlands and 15.2% for Queensland. Details of monthly mortgage repayments are provided in Figure 29.

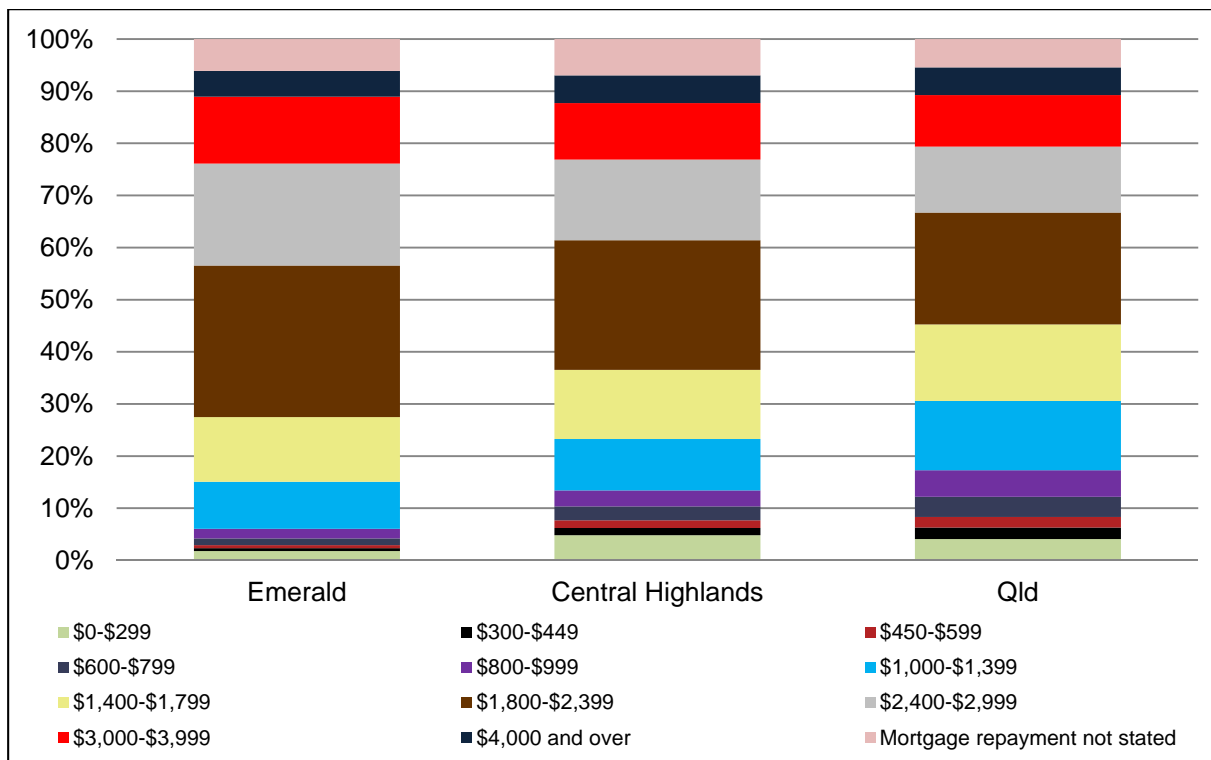


Figure 29: Monthly Mortgage Repayments by Study Area 2011

*Includes dwellings being purchased under a rent/buy scheme.
Source: Australian Bureau of Statistics.*

4.4.2.2 Median House Prices

From 2007 to 2012, median house prices increased in Emerald by 26.0% (including a 2.2% decrease in 2008), while median unit prices increased by 23.2%. However, the median house price dropped to \$425,000 in February 2013 – a fall of 7.8% in 12 months. Median unit prices fell 16.9% during the same period.

There are many more houses currently available for sale in Emerald than a year ago and prices have reduced, with current averages for a three-bedroom house and land package at around \$400,000. *Realestate.com.au* stated that in May 2013, 9 Ward Place (three-bed) sold for \$398,000, 5 Spellman Street (four-bed) sold for \$453,400 and 17 Mellish Court (three-bed) sold for \$310,000. As at June 2013, there were a significant number of houses available for sale in Emerald, including a four-bedroom home at River View Estate for \$450,000 and a five-bedroom / five-bathroom house at Nogoia Rise Estate for \$420,000.

Residential property statistics indicating the historical capital growth in Emerald median property prices and associated Year on Year (YoY) changes, along with median monthly prices during in 2012-2013, are presented in Table 23 and Figure 30 following.

Table 23: Emerald Median House Prices 2006-2011

Period	Houses		Units	
	Median Price	Change (YoY)	Median Price	Change (YoY)
2007	\$365,000	7.4%	\$280,000	1.1%
2008	\$357,000	-2.2%	\$283,500	1.3%
2009	\$380,800	6.7%	\$290,000	2.3%
2010	\$385,000	1.1%	\$290,000	0.0%
2011	\$425,000	10.4%	\$300,000	3.4%
2012	\$460,000	8.2%	\$345,000	15%

Source: Realestate.com.au.

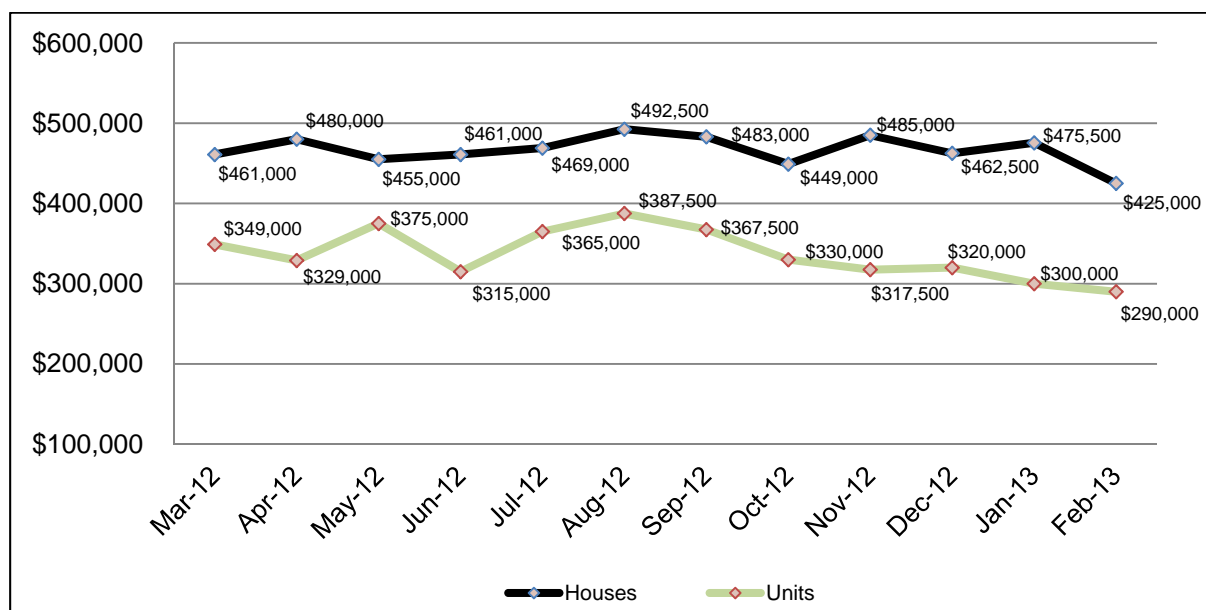


Figure 30: Emerald Median Monthly Property Prices 2012-2013

Source: Realestate.com.au.

4.4.2.3 Median Vacant Land Prices

In the year ending December 2012, the median sale price of vacant land in the Central Highlands LGA was \$160,000 for lots ranging in size from 140 m² to 2,500 m². This represented an increase of 10.0% to the previous year. Currently in Emerald, vacant blocks range in price from \$148,500 for a 699 m² house block to \$600,000 for a five-acre residentially zoned block near the town's new shopping-centre development.

4.4.2.4 Land Valuations

The Queensland Department of Environment and Resource Management's 2012 land valuations (released in March 2013), indicated that Emerald land values had increased by 14.8% since the previous year (from \$135,000 to \$155,000). The broader Central Highlands LGA experienced an increase of 12.6%.

4.4.2.5 Rental Properties

At the 2011 Census, 3.4% of Emerald renters were paying \$650 or more per week, compared to 3.9% for Central Highlands and 2.0% for Queensland. Central Highlands had the highest proportion of households paying less than \$200 per week, followed by Emerald at 30.4% and Queensland at 23.2%. A breakdown of rental repayments for each study area is presented in Figure 31.

It is worth noting that in periods of high demand, high-end rental prices tend to rise sharply, while there remains a core of cheaper rental accommodation for those not earning high incomes. This pool of lower cost rental accommodation is actually larger by percentage in both Emerald and the Central Highlands than it is across Queensland as a whole.

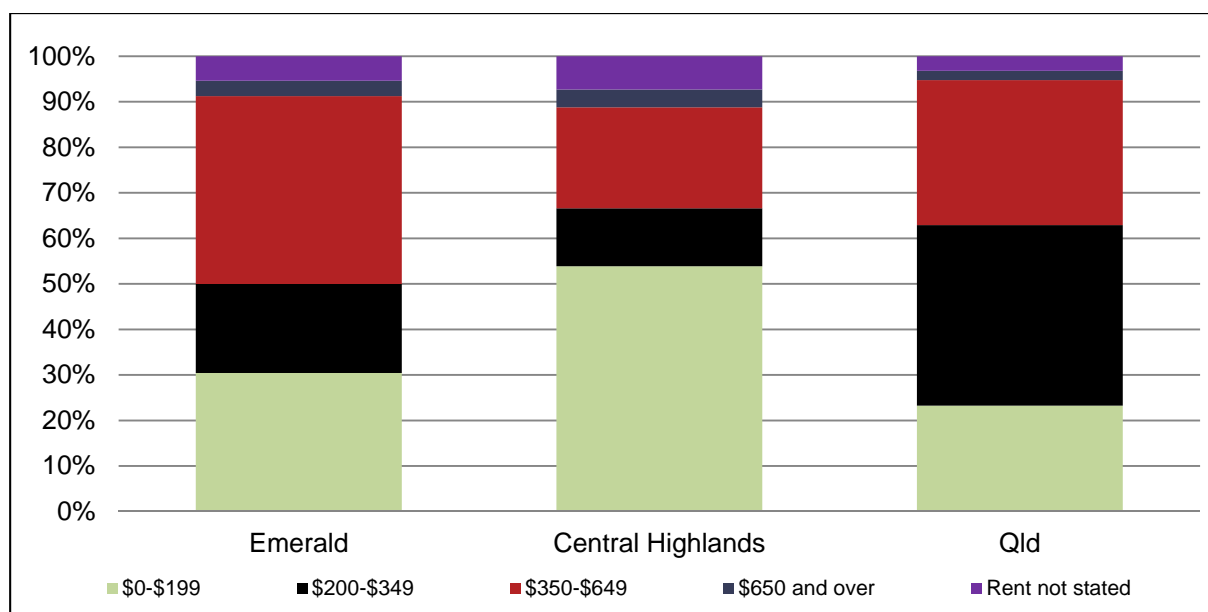


Figure 31: Rental Payments (Weekly) by Study Area 2011

Source: Australian Bureau of Statistics.

More recently, local real estate agents have stated that Emerald's property market has changed significantly during the past year. In mid 2011, there were one or two rentals available at most, whereas currently there are more than 24. Typically, a four-bedroom rental house that was attracting \$700 per week is now advertised for \$560; a three-bedroom house that demanded \$600 per week in early 2011, now receives \$480 a week, if it can indeed be rented.

The downturn in rentals and house sales can be related directly to the downturn in the coal industry, and workforce cutbacks at many local coal mines, as well as BHP Billiton's Gregory mine closure. There is an air of uncertainty concerning the local economy that has flowed on to the local investment market.

4.4.2.6 Housing Affordability Index

A key concern for many regional communities is the impact of additional and well-remunerated mining industry workers on housing affordability. By tracking median house prices against wages and salary information, an housing affordability index can be generated for Emerald, which can be compared with other mining and non-mining Queensland communities.

It is noted that statistics have been drawn from 2011 data. While not entirely representative of current means and averages, the data period is subsequent to the Global Financial Crisis and mining industry downturn and therefore, representative of overall trends.

On the basis of this information, it is apparent that housing is more affordable in both Emerald and Moranbah than in the coastal cities of Townsville and Brisbane, as shown in Table 24.

Table 24: Queensland Housing Affordability Index 2011

Location (by postcode)	Mean Taxable Income	Median House Price	House Price: Mean Income	Median Unit Price	Unit Price: Mean Income
Emerald (4720)	\$69,392	\$425,000	6.12	\$300,000	4.32
Moranbah (4744)	\$86,186	\$629,500	7.30	\$474,000	5.50
Townsville (4810)	\$64,886	\$535,000	8.25	\$392,500	6.05
Brisbane (4000)	\$73,425	\$682,500	9.30	\$446,000	6.07

Source: Australian Taxation Office and realestate.com.au.

House prices in Emerald are robust but when expressed as a multiple of mean income, they remain affordable compared to nearby towns and major cities. The index shows that houses in Emerald are 16.2% more affordable than in Moranbah, 25.8% more affordable than in Townsville and 34.2% more affordable than houses in Brisbane.

4.4.3 Housing Availability

In recent times, Emerald was marketed throughout Australia as an area with huge potential. This encouraged strong support from investors, many of whom lived elsewhere in Australia. However, with the onset of the global financial crisis and recent job losses, many investors have been trying to sell their properties.

While there are many more houses available for sale than a year ago, prices have flattened. Additionally, there is an abundance of developed land and 'house and land' packages available in new estates, such as 'Mayfair Ridge' with 500 lots and 'Highfields' with 1000 lots.

Local real estate agents advised that the Central Highlands Regional Council also developed a large industrial estate with a significant number of 4,000m² blocks. They said that this had not been successful and had the potential to be developed as a residential area, if required.

4.4.3.1 Residential Building Approvals

In the 12 months to 30 March 2013, 495 approvals for dwelling units (384 in Emerald) in new residential buildings were granted by Central Highlands LGA, with a total value of \$131.7 million (\$95.7 million for Emerald). A summary of building approvals for each study area is presented in Table 25.

Table 25: Building Approvals: 12 months to March 2013 by Study Area

Building Type	Emerald	Central Highlands	Qld
Dwelling units in new residential buildings	384	495	28,479
Residential building value (a)	\$95,689	\$131,712	\$8,170,425
Non-residential building value	\$28,626	\$107,402	\$6,640,631
Proportion residential value	77.0%	55.1%	55.2%

(a) Includes alterations, additions and conversions.

Source: Queensland Office of Economic and Statistical Research.

As at June 2013, the following residential development was pending approval or underway in Emerald:

Table 26: Emerald Property Development as at June 2013

Development	No. Units/ Beds	Developer	Status
NRW accommodation	600 beds	ATCO	Pending approval
Palm Grove Estate (Roberts St)	44 town houses	CHRC	Stages 1 and 2 sold. Stages 3 and 4 available. Groundwork commencing early 2013
Highfields Estate (Pilot Farm Rd)	1000 lots	Citricorp	Stage 1 (103 lots) approved; groundwork commencing early 2013
Villas on Rivergum (Rivergum Dve)	115 units	Securcorp	80% Stage 1 units sold. Stage 2 about to be released. Stages 3 – 5 yet to be released
Maranda Heights (Pilot Farm Rd)	238 lots	Portfolio Projects	All sold; construction underway
Echidna Valley (Pilot Farm Rd)	100 lots	TMD Trading	Stage 1 complete and available for sale; Stages 2 to 4 approved; design to be awarded mid 2013
Mayfair Ridge (Mayfair Dve, off Gregory Hwy)	500 lots	Pratt Property Group	Stages 1 to 7 sold. Stages 8, 10 and 11 selling (51 lots). Stage 9 not yet released
Nogoa Rise 5 (Rifle Range Rd)	69 lots	CHRC	Under construction; sale of lots by auction mid 2013

Source: Central Highlands Development Corporation.

If these developments come to fruition, Emerald could increase its current housing and unit stock by more than 50%, from 3,843 (2011 Census) to almost 6,000. When compared to Emerald's projected resident population growth by 2021 (42.6%) and coupled with the coal industry downturn, Emerald appears to be prepared for any short to medium-term housing availability pressure.

4.4.3.2 Constraints to Development

Emerald has no obvious property development constraints as there is good availability of appropriately zoned vacant blocks and a number of existing houses available for purchase or rental. Local residents advise that the only barrier to development is the uncertainty of whether or not this Project and others will proceed.

4.4.4 Short-Term Accommodation

According to the Queensland Government's *Bowen Basin Population Report 2012*, the camp/village was the predominant non-resident worker (NRW) accommodation type across the Bowen Basin as at June 2012, housing some 22,150 workers on shifts (88.0%). Hotels/motels (8.0%), caravan parks and other accommodation (3.0%) made up the rest of the accommodation profile. In the Central Highlands LGA, 79.7% of NRWs resided in camps. Ongoing coal mining development in the region is expected to increase demand for temporary accommodation into the future. Refer to Table 27 for a summary of the 2012 Bowen Basin NRW shift workers accommodation profiles.

Table 27: Bowen Basin NRW Shift Workers by Accommodation Type 2012

Accommodation	Banana	Central Highlands	Isaac	Whitsunday (Bowen)	Bowen Basin
Camp/village	1,140	4,450	16,105	460	22,150
Hotel/motel	255	1,020	490	275	2,035
Caravan park	195	115	535	0	845
TOTAL	1,590	5,585	17,125	735	25,035

Source: Bowen Basin Population Report 2012.

4.4.4.1 Accommodation Villages

Accommodation villages vary in design, from a drilling camp to a major village. In 2012, there were 69 villages in the Bowen Basin, including 20 small camps (less than 100 beds), 30 medium camps (100-499 beds), 14 large camps (500-999 beds) and five very large camps (1,000+ beds). The total sleeping capacity of these villages was 27,565 beds. Overall availability of Bowen Basin camp accommodation was relatively low at 6.9%; while Central Highlands' 510 available beds equated to 8.7% capacity. For a summary of camp bed availability by LGA in 2012, refer to Table 28.

Table 28: Bowen Basin Accommodation Camp Bed Availability by LGA 2012

Beds	Banana	Central Highlands	Isaac	Whitsunday (Bowen)	Bowen Basin
Occupied by NRWs	1,140	4,450	16,105	460	22,150
Vacant and available	35	510	1,145	200	1,890
Balance (a)	145	905	2,260	215	3,525
TOTAL BEDS	1,315	5,860	19,515	875	27,565
Vacant and available as percentage	2.7%	8.7%	5.9%	22.9%	6.9%

(a) Includes beds occupied by visitors other than NRWs or otherwise unavailable to prospective guests. Unavailable beds could include those held for mining and gas workers under permanent booking arrangements but not actually occupied by NRWs at the time of the survey. Source: Surat Basin Population Report, 2011.

There are a number of additional NRW accommodation developments in progress within the Emerald area, including ATCO's 600-bed development currently under consideration by the Central Highlands Regional Council.

4.4.4.2 Hotels and Motels

Central Highlands hotels and motels had 6.7% availability in 2012 due to NRWs, contractors and associated workers making use of the accommodation on a long-term basis. This was a four per cent increase from the previous year. Table 29 provides a summary of vacant and available hotel / motel rooms by LGA in 2012.

Table 29: Bowen Basin Vacant and Available Hotel/Motel Rooms by LGA 2012

Beds	Banana	Central Highlands	Isaac	Whitsunday (Bowen)	Bowen Basin
Occupied by NRWs	255	1,020	490	275	2,035
Vacant and available	15	100	110	65	290
Balance (a)	155	380	170	780	1,480
TOTAL BEDS	425	1,495	770	1,120	3,810
Vacant and available as percentage	3.5%	6.7%	14.3%	5.8%	7.6%

(a) Includes beds occupied by visitors other than NRWs or otherwise unavailable to prospective guests. Unavailable beds could include those held for mining and gas workers under permanent booking arrangements but not actually occupied by NRWs at the time of the survey.

Source: Surat Basin Population Report, 2011.

4.4.5 Workforce Accommodation

Project employees sourced from outside of the region will either relocate to the local community (Emerald) or operate on a DIDO basis, requiring short-term accommodation in Emerald while working their shifts. Workers will be transported between the project and Emerald by bus.

There will be no camp accommodation for Taraborah. The company will encourage DIDO employees to relocate to the local area, which has the potential to benefit communities through participation in community organisations, sporting and recreation groups and charities.

4.4.6 Community Housing

The Queensland Government has a number of long-term social houses available for rent to low-income families based in Emerald and the Gemfields. These houses are allocated on the basis of need; however, there is a long-term waiting list.

The Central Highlands Regional Council provides seniors accommodation in Emerald and the Gemfields, for people meeting the Queensland Government's social housing criteria. There is a waiting list for the 26 units in Emerald; however, three of 11 units are currently available in Anakie for Gemfields seniors. A further six units are available in Emerald for youth accommodation, which are allocated on the basis of the Department of Housing and Public Works' homeless policy. Anglicare manages five houses in Emerald for crisis/emergency accommodation. There are no current vacancies for these houses, which are also owned by the Queensland Government.

In October 2012, the Central Highlands Regional Council committed to implementing an affordable housing model to alleviate the lack of low-cost housing in Emerald and Blackwater. Based on the Brisbane Housing Company, the model will seek charitable status from the Australian Tax Office and work with the Urban Land Development Authority to realise the project.

4.4.7 Summary of Housing and Accommodation

In all study areas, two-person households were the most common habitation profile, averaging almost 33% of all households. Emerald's next most common household structure was four persons, while single-person households were prevalent in the Central Highlands LGA and Queensland.

In 2011, there were 7,698 separate houses in the Central Highlands LGA (3,176 of them in Emerald), representing 68.0% of all private dwellings, compared to the Queensland figure of 70.4% for separate houses. Central Highlands had the highest rate of unoccupied dwellings at 20.7%, followed by Emerald at 16.4%. Some 56.0% of Emerald residents owned their dwelling (outright or through mortgage), compared to 51.6% for Central Highlands and 63.5% across the state.

Across all study areas, \$1,800-\$2,399 was the most common monthly mortgage repayment bracket in 2011. Only 6.0% of Emerald residents paid mortgages of less than \$1,000 per month, compared to 13.4% in Central Highlands and 17.3% across the state.

From 2007 to 2012, median house prices increased in Emerald by 26.0% (including a 2.2% decrease in 2008), while median unit prices increased by 23.2%. However, the median house price dropped to \$425,000 in February 2013 – a fall of 7.8% in 12 months. Median unit prices fell 16.9% during the same period. While there are many more houses currently available for sale in Emerald than a year ago, prices have reduced, with current averages for a three-bedroom house and land package at around \$400,000.

In 2011, Central Highlands had the highest proportion of rented properties at 44.4%, followed by Emerald at 41.9%.

Data for 2011 land valuations (released in March 2012), indicated that Emerald land values had increased by 15.4% since the previous year (from \$117,000 to \$135,000). In addition, the broader Central Highlands LGA received a greater increase of 30.5%. In the year ending June quarter 2012, the median sale price of vacant land in the Central Highlands LGA was \$160,000.

At the 2011 Census, 3.4% of Emerald renters were paying \$650 or more per week, compared to 3.9% for Central Highlands and 2.0% for Queensland. Central Highlands had the highest proportion of households paying less than \$200 per week, followed by Emerald at 30.4% and Queensland at 23.2%. According to local real estate agents, Emerald's rental property market has changed significantly during the past year. Mid 2011, there were one or two rentals available at most, whereas currently there are more than 24. Typically, a four-bedroom rental house that was attracting \$700 per week is now advertised for \$560.

A traditional concern for many regional communities is the impact of additional and well-remunerated mining industry workers on housing affordability. By tracking median house prices against wages and salary information, an housing affordability index can be generated for Emerald, which can be compared with other mining and non-mining Queensland communities. While house prices in Emerald are robust, they remain affordable compared to nearby towns and major cities when expressed as a multiple of mean income. The index shows that houses in Emerald are 16.2% more affordable than in Moranbah, 25.8% more affordable than in Townsville and 34.2% more affordable than houses in Brisbane.

In the 12 months to 30 September 2012, there were 432 dwelling units in new residential buildings approved in the Central Highlands LGA (300 in Emerald), with a total value of \$96.5 million (\$63.9 million for Emerald). Emerald has no obvious development constraints, since there is good availability

of appropriately zoned vacant-blocks and a solid number of existing houses available for purchase or rental.

Housing availability is also a key mining community concern. In addition to many existing houses coming onto the market as a result of the mining industry downturn, there is an abundance of developed land and 'house and land' packages available in new estates such as 'Mayfair Ridge' with 500 lots and 'Highfields' with 1000 lots. If current developments come to fruition, Emerald could increase its housing and unit stock by more than 50%, from 3,843 (2011 Census) to almost 6,000. When compared to Emerald's projected resident population growth by 2021 (42.6%) and coupled with the coal industry downturn, it appears that Emerald will not suffer from short to medium-term housing availability pressure.

According to the Queensland Government's *Bowen Basin Population Report 2012*, the camp / village was the predominant non-resident worker (NRW) accommodation type across the Bowen Basin as at June 2012, housing some 22,150 workers on shifts (88.0%). Hotels / motels (8.0%), caravan parks and other accommodation (3.0%) made up the rest. In the Central Highlands LGA, 79.7% of NRWs resided in camps. Total capacity of the camps was 27,565 beds. Overall availability of Bowen Basin camp accommodation was relatively low at 6.9%; while within the Central Highlands' 510 available beds equated to 8.7% capacity. Central Highlands hotels and motels had 6.7%% availability in 2012, due to NRWs, contractors and associated workers making use of the accommodation on a long-term basis.

Project employees sourced from outside of the region will either relocate to the local community (Emerald) or operate on a DIDO basis, requiring short-term accommodation in Emerald while working their shifts.

The Queensland Government has a number of long-term social houses available for rent to low-income families based in Emerald and the Gemfields; however, there is a long-term waiting list. The Central Highlands Regional Council provides seniors social accommodation in Emerald and the Gemfields. There is a waiting list for the 26 units in Emerald; however, three of 11 units are currently available in Anakie for Gemfields seniors. A further six units are available in Emerald for youth accommodation; while Anglicare manages five houses in Emerald for crisis/emergency accommodation. There are no current vacancies for the Anglicare houses, which are also owned by the Queensland Government.

5.0 SOCIAL IMPACT AND MITIGATION/OPPORTUNITY ANALYSIS

Table 30 provides a breakdown of all impacts identified during the Taraborah SIA process. The impacts take into account existing social and cultural environments in the region, together with a study of outcomes experienced with comparable projects elsewhere in Queensland. Each impact is rated by:

- **Nature** – type of impact (perceived by the community as positive or negative (P/N))
- **Probability** – likelihood of the impact occurring (high (H), medium (M) or low (L))
- **Consequence** – degree of benefit or harm to affected stakeholders (high, medium or low)
- **Long-term risk** – negative consequence of the impact after mitigation measures have been put in place (high, medium or low).

After initial consultation with key stakeholders, project impact mitigations and opportunities were developed, which have also been included in brief below. Full details of these and supporting management and monitoring programs feature in the *Taraborah Social Impact Management Plan*. Mitigations will ultimately be further developed in consultation with key project and community stakeholders as project planning progresses.

Table 30: Social Impact and Mitigation/Opportunity Analysis

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
CUMULATIVE IMPACTS The regional study areas have been impacted by intensive coal mining, construction and exploration since the mid-1970s. Operating mines that utilise Emerald as a hub for supplies, maintenance, transport and employment include Minerva, Kestrel, Crinum, Ensham and Rolleston. Other potential mining projects in the region include Springsure Creek, Togara North, Minyango, Teresa, Washpool, Baralaba North and South, Arcturus, Dingo West and Orion Downs. In addition, Emerald may become central to the development of the large potential thermal coal mines being developed to the west and north near the town of Alpha. These developments could put pressure on local highways as a result of greatly increased vehicle movements. For example, during construction of the South Galilee thermal coal project 180km west of Emerald, an estimated 7,300 heavy vehicle deliveries will be made to the project, contributing to a 12.8% traffic increase on the Capricorn Highway during 2013. These projects will potentially use Central Highlands housing, infrastructure and community services, and assuming they proceed, will create a range of positive (i.e. employment and business opportunities) and negative (i.e. strain on transport infrastructure and housing affordability/availability) impacts on the region. All such impacts will require overarching (cumulative) strategies to ensure long-term community health and wellbeing. However, in the current economic climate there is uncertainty around viability of all proposed mining developments. The Emerald region has suffered a subsequent slow-down in employment, mining industry support business growth and the housing market. This increased economic capacity and the remote, non-Emerald-based location of a number of the major proposed coal mines (i.e. Galilee Basin) will result in minimal impact on Taraborah operations should all new projects be realised. The downturn has also meant that the phenomenon known as ‘project fatigue’ – where communities surrounded by high levels of resources development are subjected to numerous project and EIS consultation programs – has not been a recent feature in Emerald or its surrounds. This was further supported by sizeable attendance (100+) at Taraborah’s community information session held in Emerald in May 2013.	P/N	M	H	<ul style="list-style-type: none"> • Qld Govt • Central Highlands Regional Council (CHRC) • Local business • Chamber of Commerce (COCs) • Local communities • Other proponents 	<ul style="list-style-type: none"> • Establish a Taraborah Community Reference Group (CRG) – supported by key community influencers, Qld Government and CHRC – to monitor and address cumulative impacts jointly and relatively • With assistance from the CRG, participate in development of a regional planning framework to proactively contribute to and achieve sustainable local communities. Align policy framework with existing government and community planning (i.e. DSDIP’s “Managing the impacts of major projects in resource communities” and CHRC 2022 Community Plan) • Communicate CRG initiatives and outcome to Emerald communities 	M

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
DEMOGRAPHIC IMPACTS <p>Emerald's and Central Highlands' demographic profiles are not expected to experience significant change as a result of the Project.</p> <p>Shenhua's policy is to employ local people wherever possible, which should have a positive impact on average regional household incomes and on individual earning capacities. The company will not be constructing a camp for the Project, as employees from outside of the local area will be expected to relocate to Emerald permanently or utilise short-term accommodation during their shifts. This may put additional pressure on local housing and accommodation availability; however, with the project's modest construction and operations workforce numbers (up to 150 and 350 employees respectively), the impact should not be significant.</p> <p>The cumulative gender composition is likely to move marginally higher toward males during construction phases of the various projects, when mostly single male NRWs move into the area. The gender imbalance is likely to be tempered during operations. As an equal-opportunity employer, Shenhua is committed to employment and promotion practices that encourage female participation and retention.</p> <p>Demand for skilled tradespeople in the resources sector will remain high. This, coupled with higher mining industry wages, will continue to draw people away from other sectors, directly impacting non-resources oriented local businesses.</p>	P/N	M	M	<ul style="list-style-type: none"> CHRC Community organisations Local communities 	<ul style="list-style-type: none"> Utilise the CRG to monitor and develop mitigations for key demographic changes, such as skills shortages for non-resources businesses Work with the CHRC to facilitate the implementation of an affordable housing model in Emerald Communicate Shenhua's local employment commitment to surrounding communities to encourage local participation in the project, including the engagement of minority groups Address industry male-gender bias, with career opportunities for women (who currently only represent 14% of Queensland Resources Council member company employees) Encourage Project employees to relocate to the local area 	L
LANDHOLDER IMPACTS / RURAL LIFESTYLE <p>Shenhua has indicated that it will purchase outright or acquire surface rights of properties directly affected by Taraborah mining operations. Of the 10 registered owners of 20 properties within the Project's MDL boundaries (either entirely or in part), most have indicated that they would sell at the right price.</p> <p>Many landholders expressed concerns about Taraborah-related increases in dust, noise and light levels, with a concomitant devaluation of their land. Some noted past negative protocol experience, such as gates being left open.</p> <p>Several landholders were concerned over the loss of amenity, believing that changes to the region's social fabric will further threaten their rural lifestyle as more construction crews and mining personnel move into the area.</p>	P/N	H	H	<ul style="list-style-type: none"> Landholders Native Title claimants 	<ul style="list-style-type: none"> Facilitate regular meetings with affected landholders to monitor impacts and mitigation success Implement a comprehensive Land-Access Management Plan Encourage landholders to utilise the project's enquiries and complaints management process to ensure concerns and feedback are captured and addressed Implement a strict employee and contractor behavioural code in line with community values. The code would apply to employees and contractors both on and offsite Implement a comprehensive employee and contractor induction process that comprises social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the Project 	M

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
LAND USE IMPACTS The predominant land-use concern was potential Project impact on the local water supply. Landholders feared that Shenhua's drilling into and accessing the aquifer beneath the Project MDL, and the subsequent use of groundwater for mining purposes, would result in bore-water levels decreasing, thereby placing the local area at risk during drought conditions. One landholder expressed concerns about the potential for Project mining to change land drainage characteristics in such a way as to impact local creek flows and induce flooding on affected properties in periods of high rainfall.	N	M	H	<ul style="list-style-type: none"> Landholders Local communities 	<ul style="list-style-type: none"> Implement suitable environmental management practices Regularly and transparently monitor water source and water runoff impacts throughout the life of the Project Encourage landholders to utilise the Project's enquiries and complaints management process to ensure concerns and feedback are captured and addressed 	M
PSYCHOLOGICAL IMPACTS It is difficult to make a general assessment of the psychological impact of the Project and other resource projects across the community, as the prospect of change affects different people in different ways. However, landholders directly impacted by the projects are those who may potentially experience the most mental stress. Many landholders will feel a palpable sense of dislocation and loss when they perceive changes to their local environment as harmful, particularly those who have strong traditional family ties to their properties and the region. Community consultation revealed that a number of landholders were anxious about their future and frustrated about delays, uncertainty and their lives being 'in limbo,' as Shenhua assesses project viability. Specifically stated concerns that have the potential to create personal mental stress and anxiety included the following: <ul style="list-style-type: none"> Retirement plans disrupted; loss of income, decreased property value Water source degradation Road safety risks for residents and their families Noise, vibration, dust, lighting and visual amenity impacts Destruction of good agricultural land. 	N	M	H	<ul style="list-style-type: none"> Qld Govt CHRC Landholders Community organisations Local communities 	<ul style="list-style-type: none"> Facilitate regular meetings with affected landholders throughout the life of the project to monitor impacts and mitigation success Encourage affected persons to utilise the project's enquiries and complaints management process, to ensure that concerns and feedback are captured and addressed Implement a strict employee and contractor behavioural code in line with community values. The code would apply both on and offsite Implement a comprehensive employee and contractor induction process comprising social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the project Investigate counselling services to support directly affected landholders 	L
COMMUNITY VALUES AND LIFESTYLE The Project is not expected to adversely impact Central Highlands' community values and lifestyle. The local community has been significantly shaped by development of the mining industry over the past 40 years. Subsequently, Project development is consistent with the region's more recent history. As Shenhua plans for the majority of its operations workforce to reside or relocate to the Emerald area, there is expected to be no disconnect between the Project employees and the broader community. Conversely, local employment should ensure integration and adoption of community values.	P/N	M	M	<ul style="list-style-type: none"> Qld Govt CHRC Community organisations Local communities 	<ul style="list-style-type: none"> Utilise the CRG to monitor and address impacts relating to community values and lifestyle Facilitate project integration with the community through Project employee participation in community and sporting organisations Implement a comprehensive employee and contractor induction process that comprises social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the project Develop a Taraborah Community Investment Program to contribute to Emerald's and the Central Highlands' health, wellbeing and future 	L

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
RECREATION, LEISURE AND CULTURE <p>While rosters and shift work may preclude Project workers becoming involved in sporting teams and recreational groups to any large degree, their locally residing families should have no such difficulties. Additionally, mine employees may elect to use town sport and recreation facilities, such as swimming pools, cinemas and gymnasiums.</p>	P	M	M/L	<ul style="list-style-type: none"> CHRC Community organisations Local communities 	<ul style="list-style-type: none"> Encourage employees to participate in community and sporting organisations 	L
SOCIAL ORDER <p>Queensland Police reports that Emerald crime statistics have only increased with corresponding population increases. Experience has shown that traditional fears of unruly NRW employees lifting crime rates are largely unfounded. Even towns such as Moranbah and Nebo, where large accommodation camps comprise part of the community, report few incidents of disorder. This can be attributed, in the main, to strict employment conditions and behavioural codes that are imposed on employees as part of their work contracts. As a matter of policy, individuals who display a pattern of anti-social behaviour are identified, counselled, and if necessary, terminated from the project.</p> <p>It is believed that following an initial period of integration by the mine and its employees, and considering the positive contributions that they will make to local communities, negative perceptions associated with the arrival of another construction and mining workforce in the region will be largely dispelled.</p>	N	L	H	<ul style="list-style-type: none"> Qld Govt CHRC Qld Police Community organisations Local communities Project employees 	<ul style="list-style-type: none"> Liaise with Emerald Police to monitor and (where appropriate) address any Project -related impacts on social order Implement a strict employee and contractor behavioural code, in line with community values. The code would apply both on and offsite Implement a comprehensive employee and contractor induction process that comprises social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the project 	L
COMMUNITY FACILITIES AND SERVICES <p>Emerald's considerable community facilities and services are coping with current demand and it is not expected that the Project's small workforce will have any significant impact on capacity. It is anticipated that some community groups will benefit from Taraborah's proposed Community Investment Program as part of the company's policy to give back to the region. As the mine and its workforce become more entrenched, some managers and employees living in the area may choose to join local service clubs for personal development and to volunteer within the community.</p> INDIGENOUS COMMUNITY SERVICES <p>As with many Australian Indigenous communities, health, housing and education are three major issues facing Central Highlands Indigenous people. A shortage of competitively-priced accommodation across the regional community has created a situation where overcrowding is commonplace for Indigenous families, leading to other social and behavioural problems. While some rental properties are available through the Central Highlands Aboriginal Corporation, there are long waiting lists for houses and little prospect of improved availability in the short term. Health workers report the presence of health issues common to many Indigenous people and of difficulties in convincing individuals to consult available health services. Trust and credibility are important to Indigenous people, who would prefer to visit a doctor dedicated to Indigenous health.</p>	P/N	M	M	<ul style="list-style-type: none"> CHRC Community organisations Local communities Indigenous communities Project employees 	<ul style="list-style-type: none"> Through the CRG, monitor and address impacts on local facilities and services As part of a Taraborah Community Investment Program (CIP), partner with key community organisations to ensure longevity of critical services Also via the CIP, partner with state and local governments to support programs that contribute to sustainable Indigenous communities – including health, training, employment and business development initiatives 	L

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
EDUCATION <p>Discussions with the Queensland Department of Education, Training and Employment indicated that enrolment numbers had remained comparatively static (and high) in recent years.</p> <p>It is not anticipated that schools in the study areas will be greatly impacted by the Project in terms of student numbers, particularly during the construction phases. The construction workforce will comprise mostly single males, many of whom will likely be sourced from the Central Highlands region. It is expected that only a small percentage of workforce employees with children, including some mine management, will move to the region on a permanent basis during the construction phases.</p> <p>For the operational phase of the project, it is estimated that many of the Projects employees will be from the local area and others will be encouraged to establish a permanent home in the study areas with their families. A number of employees who move to the area will have school-aged children, but it is not expected that this will create any sudden surge in demand for places at local primary or high schools. Discussions with education personnel indicated that Emerald schools have sufficient facilities and staff capacity to accommodate further enrolments without undue stress.</p> <p>The community's main concern was lack of affordable housing for purchase or rent by teachers. As professionals outside of the mining industry, teaching staff are unable to afford the high accommodation prices (purchase or rent).</p>	P/N	L	L	<ul style="list-style-type: none"> Qld Govt CHRC Local schools Local communities Indigenous communities 	<ul style="list-style-type: none"> Utilise the CRG to keep abreast of changes in population numbers that may affect local schools, especially in relation to affordable housing for teachers 	L
CHILDCARE <p>While it is not expected that the Project will greatly impact local childcare services (due to low workforce numbers), it is understood that this is a key issue for the region.</p> <p>Childcare facilities in Emerald are under pressure, as demand for places significantly exceeds supply. Emerald currently has an estimated waiting list of more than 400 children requiring childcare places. Availability in day-care for babies and toddlers (0 years to 2 years) is a particular problem. The shortage of places is considered to be a significant barrier to workforce participation, particularly for women in the region. A difficulty for the Central Highlands Regional Council and others planning future childcare needs is the cyclical nature of the mining industry and the corresponding fluctuations in workforce requirements.</p>	N	H	H	<ul style="list-style-type: none"> CHRC Community organisations Local communities 	<ul style="list-style-type: none"> Within the CRG, consider current childcare needs and if appropriate, support community strategies to attract childcare services to the region 	M

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
HEALTH SERVICES <p>The Central Highlands region and particularly Emerald, enjoys high levels of health services, including the 38-bed Emerald Hospital, which effectively caters for 3,000 patients each year.</p> <p>Consultation revealed that the Central Highlands had difficulty maintaining enough GPs to meet demand; however, this may be mitigated by the impending Federally-funded \$5 million super clinic. Another identified issue involved mining/construction workers seeking Workcover appointments or applying for medical certificates at Emerald Hospital's emergency department. An underlying issue is the lack of affordable housing for health services staff.</p> <p>Demands by Project personnel on local health services will be limited, particularly in the initial construction phase as employees will be expected to utilise the services of their home-area GP. As families move into the region during the operation phase, demand will step up, but due to the Project's modest workforce numbers, not to the extent that local resources will be unduly stretched. The Project is also assessing the feasibility of an "Adopt a Doctor" program to help fund a GP for the mine and local area.</p>	N	L	M	<ul style="list-style-type: none"> Qld Govt CHRC Emerald Hospital Local communities Project employees 	<ul style="list-style-type: none"> Through the CRG, monitor and address impacts on health services Encourage NRW/DIDO employees and contractors to make use of medical services in their home bases for non-urgent treatment Work with the CHRC to facilitate the implementation of an affordable housing model in Emerald 	L
EMERGENCY SERVICES <p>Despite the many coal mines in the area and Emerald being a host town for resources employees and their families, the Project would be the only coal mine within Emerald Police's jurisdiction. Local police do not envisage any abnormal levels of criminal behaviour as a result of the Project. Rather, past experience indicates that the number of offences rise and fall in accordance with population levels.</p> <p>A specific issue raised by Emerald Police related to coal trains travelling through the township. While grain, other freight and passenger trains move through Emerald currently, longer coal trains are not currently part of the process. Police envisaged road safety problems with coal trains traversing two major roads (and three in total) at level crossings in Emerald.</p> <p>The local ambulance service is currently undermanned, mostly as a result of the two-tier economy, where affordability of housing and cost of living in the region preclude those residents who do not work within the mining industry. This has made recruitment of new officers difficult in terms of replacing those who have left the service or transferred elsewhere.</p>	N	M	H	<ul style="list-style-type: none"> Qld Govt CHRC Emergency services Local communities Project employees 	<ul style="list-style-type: none"> Develop comprehensive Emergency Response and Crisis Management Plans that include direct input from and involvement of, emergency services Implement a detailed Traffic Management Plan in conjunction with emergency services Implement a study into coal train impact on Emerald road use, including investigation of the option for building an underpass in Emerald Ensure that standard "Taroborah" trains are not so long as to traverse (or potentially block if at rest) any two road crossings at the same time Work with the CHRC to facilitate the implementation of an affordable housing model in Emerald Implement a strict employee and contractor behavioural code in line with community values. The code would apply both on and offsite Implement a comprehensive employee and contractor induction process that comprises social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the project 	L

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
PUBLIC AND COMMUNITY TRANSPORT <p>Emerald is well serviced by public transport, including rail, bus, coach and air.</p> <p>There are many private-bus traffic movements in and around Emerald, with mining companies and contractors transporting employees between work and home. Police have mapped bus movements in an effort to better coordinate private transport activities. To assist, a large floodlit car park has been constructed in Hospital Road as a bus pickup point, where mine employees can leave their private vehicles.</p> <p>Emerald airport is undergoing a \$10 million upgrade to be completed in 2013. The Central Highlands Development Corporation advised that the airport was struggling with traffic during the upgrade, with 12 flights in and out per day, and 257,000 passengers per year (most of them in the mining industry).</p> <p>Any Taraborah construction-related impacts on public transport will be addressed in the Traffic Management Report.</p>	N	M	M	<ul style="list-style-type: none"> Qld Govt CHRC Emergency services Local communities Project employees 	<ul style="list-style-type: none"> Through the CRG, monitor and address impacts on public transport services Implement a detailed Traffic Management Plan in conjunction with emergency services 	L
HIGHWAYS AND ROADS <p>The increasing level of traffic on the Capricorn Highway has been exacerbated by a rise in light vehicle traffic volumes created by DIDO activities between coastal centres and the mining towns. The section between Emerald and Taraborah is of questionable quality, with local residents reporting ongoing road maintenance due to structural problems since the highway base is situated on unstable black soil. This section of the highway is currently covered by an 80km/hr speed limit and the sector closest to Emerald has also suffered flood damage. At the Project site, the main issues concern provision of an adequate turning lane for vehicles to safely enter and leave the mine, and possible subsidence of the Capricorn Highway as underground mining proceeds under the road (Shenhua has advised that there will be no subsidence near or under the highway).</p> <p>Another major concern is the potential for coal trains to travel through Emerald, across two level crossings. The length of train and associated wagons may mean that both level crossings (at Selma Road and Opel Street) are blocked at once, especially if the train is stationary. This may create road safety issues when emergency vehicles are prevented from moving between the north and south of Emerald township.</p>	N	M	H	<ul style="list-style-type: none"> Qld Govt CHRC Emergency services Local communities Project employees 	<ul style="list-style-type: none"> Implement a detailed Traffic Management Plan in conjunction with emergency services Implement a study into coal train impact on Emerald road use, including investigation of the option for building an underpass in Emerald Ensure that standard "Taraborah" trains are not so long as to traverse (or potentially block if stationary) any two road crossings at the same time Encourage safe driving behaviour by employees and contractors with education and awareness programs, reiterating the expectation of responsible driving to and from the workplace 	M
UTILITIES <p>Exploratory drilling for the Project indicated that a sufficient quantity of water (with acceptable quality for mining and coal processing operations) could be sourced from the aquifer beneath the project. There is concern that groundwater use will impact on surrounding bores and other water sources critical to affected landholders and the region as a whole.</p> <p>Project construction waste is likely to include green waste, concrete materials, timber, metals, hydrocarbons, sewage, exhaust emissions, tyres and paint materials. Operations waste is expected to include green waste, batteries, hydrocarbons, sewage, exhaust emissions, scrap metal, tyres, water treatment plant waste, tailings and other general waste. Consequently, waste management principles will be employed for the life of the Project, including recycling wherever possible (to external recyclers) and planned disposal of what cannot be recycled either onsite or to a registered waste disposal contractor.</p> <p>While the town of Emerald receives good quality mobile phone and internet reception, mobile phone and internet reception are marginal on the Project site and in the Gemfields to the west of the site.</p>	N	M	H	<ul style="list-style-type: none"> CHRC Utility providers Landholders Local communities 	<ul style="list-style-type: none"> Facilitate regular meetings with affected landholders to monitor impacts and mitigation Liaise directly with CHRC, providers and agencies to monitor and address impacts on water, waste, energy, telecommunications and other utilities Implement suitable environmental management practices Regularly and transparently monitor water source impacts throughout the life of the project Implement a Project Communications Study Refer to Section 4.5 of the EIS for the project's Groundwater Impact Assessment 	M

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
BUSINESS AND ENTERPRISE <p>Local businesses have been under pressure since the Global Financial Crisis and subsequent mining industry downturn, so are actively seeking commercial opportunities.</p> <p>The Project will encourage local businesses to tender for supplies and services during both construction and operation. The project will liaise with the Industry Capability Network (ICN) and local business groups, such as the local Chamber of Commerce and Central Highlands Development Corporation (CHDC), in order to facilitate participation by local suppliers.</p>	P	H	H	<ul style="list-style-type: none"> Qld Govt ICN CHRC COC CHDC Local businesses Indigenous businesses 	<ul style="list-style-type: none"> Work with ICN, CHDC and local business groups to maximise local business skills for project participation Communicate clear prequalification requirements to local businesses and provide mentoring/training where required 	L
TOURISM <p>It is expected that the region will continue to attract visitors, particularly during the winter months when 'grey nomads' are frequent users of the Capricorn Highway. During mine construction, tourists will potentially compete with mine workers for available short-term accommodation (e.g. motels, hotels and caravan parks), while road safety may be further compromised, as recreational vehicles increase the volume of traffic using major road corridors.</p>	N	M	M	<ul style="list-style-type: none"> Qld Govt CHRC COC CHDC Local businesses Local communities 	<ul style="list-style-type: none"> Utilise the CRG to monitor short-term accommodation take-up rates and to develop mitigations if required Encourage safe driving behaviour by employees and contractors with education and awareness programs, reiterating the expectation of responsible driving to and from the workplace Assist with the development of an education program for the recreational vehicle community, particularly in relation to driving protocols when engaging with wide and heavy loads 	L
LOCAL EMPLOYMENT AND TRAINING <p>The Project is openly committed to employing locally. However, lower-than-average unemployment levels in the region, together with an increasing demand for workers from a strong resources industry throughout the state, may lead to a skills shortage for the Project. Unskilled and semi-skilled people working in the region's traditional agricultural and forestry industries may not have the range of experience or skills that can be directly transferrable to the mining industry; however, with adequate training, many could take up positions such as plant operators and tradespersons' assistants.</p> <p>Regional high schools already provide school-based traineeships and apprenticeships and as a local employer, Shenhua will work with education authorities, particularly through the Queensland Minerals and Energy Academy (QMEA), to ensure school curricula are aligned to the skills needs of the project.</p> <p>One of the issues identified for the regional Indigenous population is a lack of formal education, leading to a lack of employment and training opportunities. Shenhua will work with mining industry groups and government authorities to improve retention of Indigenous students at high school, and look to support transition to apprenticeships and traineeships available in the resources sector for both mine construction and operations.</p> <p>As an equal-opportunity employer, Shenhua is also committed to employment and promotion practices that encourage female participation and retention. The company supports the leading practice principles outlined in the Queensland Resources Council's 'Women in Resources' action plan to attract and retain female employees. Overall, women represent 14% of Queensland Resource Council (QRC) member company employees.</p>	P	H	M	<ul style="list-style-type: none"> Qld Govt QMEA CHRC Local businesses Local communities Indigenous communities 	<ul style="list-style-type: none"> Communicate Shenhua's local employment commitment to surrounding communities in order to encourage local participation in the project, including minority groups (e.g. Indigenous groups and people with a disability) Implement schools program (including work experience), with the aim of attracting local students to the project and the mining industry Work with local Indigenous communities to identify potential candidates for apprenticeships, traineeships and general employment Collaborate with Training Queensland and the Kinetic Group (formerly Mining Industry Skills Centre) to help develop a strategy to maximise workforce skills and promote the sustainability of the coal industry in Queensland 	L

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
HOUSING AND ACCOMMODATION <p>The cumulative effects of resources development in the Central Highlands, as well as property speculation, have been impacting housing availability and affordability for some time. While Emerald median house and land prices have recently flattened, many community members are still being priced out of the market. The trend is similar for rental properties. However, with progress of various new residential developments in the local area, Emerald housing and unit stock could potentially increase by more than 50%, which should alleviate local accommodation pressures.</p> <p>In particular, the Project is not expected to have significant impact on housing availability and affordability during the construction phase, as the workforce will most likely operate on a DIDO basis, taking up short-term accommodation during their shifts. For the operations phase, Shenhua will be encouraging its employees who are not already part of the Emerald and surrounding community to relocate to the township. Due to property market softening and the small workforce, the project will have some impact on short-term housing availability through the arrival of new families to the region but is not expected to cause market stress.</p>	N	M	M	<ul style="list-style-type: none"> Qld Govt CHRC Local businesses Local communities 	<ul style="list-style-type: none"> Through the CRG, participate in development of a regional planning framework Utilise the CRG to monitor population growth and corresponding need for housing development Support CHRCs soon-to-be-implemented affordable housing strategy Develop a project-specific Workforce Accommodation Strategy, aligned with the Qld Government's Major Resource Project Housing Policy, which includes rostering, travel to site, local housing, short-term accommodation, DIDO impact, etc. 	M
SHORT-TERM ACCOMMODATION <p>Central Highlands hotels and motels had 6.7% availability in 2012 due to NRWs, contractors and associated workers making use of the accommodation on a long-term basis. This figure represents a four percent increase from the previous year but still reflects a tight market.</p> <p>The estimated construction workforce that will be assigned to the Project is relatively small (150 peak) and is expected to moderately impact short-term accommodation availability; however, for Project operations, employees not already living in Emerald will be expected to relocate permanently to the region and therefore, should not have need to make use of temporary or short-term accommodation.</p> <p>Representatives from various utilities and supplier companies may boost demand for short-term accommodation in the region, particularly during the construction period.</p>	N	H	H	<ul style="list-style-type: none"> CHRC Local businesses Local communities 	<ul style="list-style-type: none"> Utilise the CRG to monitor short-term accommodation take-up rates and to develop mitigations if required Develop a project-specific Workforce Accommodation Strategy that includes rostering, travel to site, local housing, short-term accommodation, DIDO impact, etc. 	M

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
<p>WORKFORCE ACCOMMODATION</p> <p>The Project will operate on a 24-hour, seven-day-a-week basis, with two to three rotating shifts of workers. Rosters have yet to be finalised; however it is anticipated that open-cut employees will work standard 12-hour shifts, while the Project's underground employees will work 10-hour shifts. The construction workforce will utilise short-term accommodation, while operations employees and their families will be expected to relocate to the region.</p> <p>DIDO</p> <p>While Shenhua has committed to employing locally and to encouraging staff sourced from outside of the study areas to relocate to the region, it is envisaged that some will not reside in the Emerald area. These employees will be required to operate on a DIDO basis, whereby they will be based in other Central Highlands centres or further afield, and drive to and from Emerald at the start and completion of each shift (utilising short-term accommodation while on shift and BIDO arrangements to get to the mine site).</p> <p>Currently, the majority of Central Highlands operational resources workers reside in the Central Highlands region; however, Rockhampton and Gladstone have become key residential hubs for the DIDO operational workforce.</p> <p>The DIDO worker has to manage a lifestyle based on regular absences from family, travelling comparatively long distances to and from work, living in confined accommodation and living with a predominantly male population during work periods.</p> <p>Like any additional stress on family life or relationships, DIDO can magnify existing social problems at home or in some cases help to hide them, only for the problems to reappear at a later date. On the positive side, DIDO enables people to take advantage of better wages and conditions in the mining industry, without the need for family to change houses or schools, or to form new social networks. In many cases, it also allows important ties to be maintained with extended family members.</p> <p>A report on workforce turnover in Australian fly-in/fly-out mining operations, conducted by the University of Queensland's Centre for Social Responsibility in Mining, indicated that rosters such as nine-days-on/five-days-off and eight-days-on/six-days-off, were generally associated with lower employee turnover rates; and there was evidence that 14-days-on/seven-days-off rosters could also be managed with a comparatively low turnover rate.</p>	P/N	M	M	<ul style="list-style-type: none"> Qld Govt CHRC Local businesses Community organisations Local communities Project employees 	<ul style="list-style-type: none"> Develop a project-specific Workforce Accommodation Strategy that includes rostering, travel to site, local housing, short-term accommodation, DIDO impact, etc. Implement a strict employee and contractor behavioural code in line with community values. The code would apply both on and offsite Implement a comprehensive employee and contractor induction process that comprises social impact management objectives and how to meet them, as well as training for specific issues that arise throughout the life of the project Encourage Project employees to reside locally 	L
<p>COMMUNITY HOUSING</p> <p>Demand for Emerald rental properties by resources personnel and contractor staff will continue to impact people on low or fixed incomes who do not own their own homes and are currently renting in the region. Relatively high rental levels may preclude this sector from continuing to live where they may have resided for many years and in some cases, this will mean displacement from family, friends and familiar surroundings.</p> <p>There are a significant number of social houses in the Emerald area; however, the majority of these have long wait lists. This creates problems for disadvantaged families, where in some instances, overcrowding has become an issue (particularly for Indigenous families).</p>	N	M	H	<ul style="list-style-type: none"> Qld Govt CHRC Community organisations Indigenous communities Local communities 	<ul style="list-style-type: none"> Utilise the CRG to monitor community housing availability and to subsequently implement regional mitigation programs Look to develop a Taraborah Community Investment Program, in order to contribute to Emerald's and the Central Highlands' health, wellbeing and future 	

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
CULTURAL HERITAGE <p>Native title claimants for the proposed Project area are the Western Kangoulu People and Bidjara #7 People. While no Native Title determination has been agreed over the region containing the project, Shenhua liaises directly with the Western Kangoulu on cultural heritage issues.</p> <p>There are three sites of cultural heritage value located within the general vicinity of the project site. Two have been identified as 'story places or cultural sites', and the third has been classified as 'engravings and paintings'. They are all located south of Lake Maraboon, approximately 20km south of the project site. Consequently, it is not anticipated that project activities will have an adverse impact on sites of significant Indigenous cultural heritage.</p> <p>However, cultural heritage artefact clusters have been identified on the Project site and over half of these artefacts were salvaged and deposited at the Western Kangoulu keeping place, on the Ensham Mine east of Emerald.</p> <p>It is not anticipated that the Project will have a significant impact upon Indigenous cultural use of local flora and fauna since no vegetation community in its entirety will be permanently impacted by Project activities.</p>	P	H	M	<ul style="list-style-type: none"> Qld Govt CHRC TOs Indigenous communities 	<ul style="list-style-type: none"> In conjunction with appropriate Traditional Owners (TOs), implement the Project's Cultural Heritage Management Plan Work with local Indigenous communities to identify potential candidates for apprenticeships, traineeships and general employment 	L
NOISE AND VIBRATION <p>Construction and mining operations will bring increased noise levels to the region around the Project site and the explosives that will be used for blasting during open-cut operations may be heard up to several kilometres away. These noise levels will impact on human amenity, as well as having the potential to distress livestock within the mine's regional footprint. Houses and other structures in the vicinity of mining operations can be impacted by low levels of ground vibration from overburden blasts and heavy machinery operation.</p>	N	M	H	<ul style="list-style-type: none"> Qld Govt Landholders 	<ul style="list-style-type: none"> See Section 4.7 of the EIS 	L
DUST <p>Concerns about dust hazards were expressed by a number of landholders. Several mentioned the hazards of dust from construction and mining operations as a potential health issue, while others were concerned about dust residue affecting the quality of pastures for cattle grazing.</p>	N	M	H	<ul style="list-style-type: none"> Qld Govt Landholders 	<ul style="list-style-type: none"> See Section 4.6 of the EIS 	L
SUBSIDENCE <p>Longwall underground mining will create land subsidence in the northern sector of MDL467. Such subsidence will have limited and manageable impacts upon the Capricorn Highway, Central West rail line, vegetation communities, local dams, landform, livestock, terrestrial and aquatic flora and fauna and underground services. Impacts upon local residents are anticipated to be minimal.</p>	N	H	M	<ul style="list-style-type: none"> Qld Govt Landholders Queensland Rail Department of Transport and Main Roads Telstra NextGen 	<ul style="list-style-type: none"> See Sections 4.2 and 4.8 of the EIS 	L

Impact	Pre Mitigation			Stakeholder	Mitigation / Opportunity	Post Mitigation
	Nature (P/N)	Probability (H/M/L)	Consequence (H/M/L)			Long-term risk (H/M/L)
LIGHTING Because the Project will operate on a 24-hour basis, large banks of lighting will be required to illuminate the mining areas at night. The mine preparation plant and fleet of large mobile equipment will also be well lit. It is envisaged that strong external lighting will also predominate during the mine's construction phase. The extent of this lighting may impact on those properties adjacent to the mining leases.	N	M	H	<ul style="list-style-type: none"> Qld Govt Landholders 	<ul style="list-style-type: none"> See Section 4.2 of the EIS 	L
VISUAL AMENITY The Project, particularly the open-cut mine; will impact on the visual amenity of the area. By its nature, open-cut mining involves the disturbance of land to extract the resource, producing substantial voids and out-of-pit spoil piles. Over time, environmental rehabilitation of spoil will create a new undulating landform profile that is higher than the original surrounding countryside. A buffer zone around the mining operations will partially conceal the pits, infrastructure and mobile equipment from public view but they will, nevertheless, be observed by a number of landholders whose properties are located near the mining lease.	N	M	M	<ul style="list-style-type: none"> Qld Govt Landholders 	<ul style="list-style-type: none"> See Section 4.2 of the EIS 	L
MINE CLOSURE As development of the region's coal resources helps to provide economic diversity and stability, it should be remembered that the resource is finite and will be depleted. Current estimates indicate a mine life of up to 25 years, so it is important that a strategy is developed over the life of the Project, to manage the social impacts leading up to and including the mine's closure. Consideration should also be given to other factors that may influence the closure or major downsizing of the mine prior to this time, including industry restructuring, government policies and/or market forces. Open consultation will be required with other stakeholders to promote long-term economic diversification, so that residents can choose to remain in the region and services can be maintained to a high standard, after the mine has closed. Agriculture will continue to remain important to the region during and beyond the mine project, but it is also essential to support current businesses and attract new ones, in order to build economic resilience and thus viable communities for the longer term. An example of successful economic diversification is demonstrated in the Western Australian mining towns of Kalgoorlie/Boulder, where following the exhaustion of nickel reserves, the community rallied to use their high quality infrastructure to establish a successful mining services sector. Qualities demonstrated by the community in support of such an achievement were self-sufficiency, entrepreneurialism, mutual support and individual initiative.	P/N	H	H	<ul style="list-style-type: none"> All 	<ul style="list-style-type: none"> Implement and communicate to community stakeholders the mine rehabilitation program Through the CRG, support local businesses to maintain their customer bases, post mine decommissioning See Section 3.7 of the EIS 	L

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APPENDIX A: TAROBORAH COMMUNITY ENGAGEMENT PLAN

Taraborah Community Engagement: June/July 2011

INTRODUCTION

Shenhua International Group is proposing to develop the Taraborah coal project, a combined open-cut and underground coal mining operation approximately 22km west of Emerald, in Central Queensland.

The project involves mining a resource of 188 million tonnes at an eventual rate of 2.1 - 2.3mtpa run-of-mine coal for the open cut operation, and 1.9 - 4.9mtpa for the underground operation.

The Taraborah Project will be developed to provide thermal coal for export markets.

An integral part of the EIS process includes the development of a Social Impact Assessment (SIA) and Social Impact Management Plan (SIMP) under guidelines developed by the Department of State Development, Infrastructure and Planning.

Not only is stakeholder engagement essential to preserving and enhancing the project's reputation, it is also a critical component of meeting the Queensland Government's requirements as part of the EIS process. The SIMP forms part of the EIS and will assist the decision-making process. The stakeholder and community engagement strategy is an essential part of the EIS/SIA process, as it will identify and mitigate social impacts that may arise from the project's development.

The community consultation program itself will provide ongoing opportunities for impacted stakeholders, such as landowners, the local community and the regional council, to participate in the process. At the core of consultation activities is an education program about the project itself, including its impacts and benefits. This education activity will focus on the facts of the proposed mine development and the EIS/SIA process – what steps are involved and where stakeholders can have influence, if appropriate. This is essential to ensuring baseline project knowledge is clearly established at the early stages of the EIS and SIA processes.

Opportunities for these 'touch points' with the community are outlined in our detailed strategy. They will involve one-on-one meetings, community information sessions, project fact sheet and other consultation mechanisms, as required, to encourage and facilitate active public consultation throughout the process.



CONSULTATION PROCESS

The community consultation process will identify any broad issues of concern to the local community and interest groups and should continue after the EIS/SIA approval has been awarded, taking it through to the construction and later commissioning of the proposed mine.

The EIS and SIA will summarise results of the community engagement program and provide a summary of the groups and individuals consulted, the issues raised and the means by which the issues will be addressed. This documentation will ensure that an inclusive process has been undertaken to meet Queensland Government requirements and give confidence that the community has been heard and that their issues addressed appropriately – a ‘no surprises’ approach for both Shenhua International Group/IMC and the Queensland Government.

COMMUNICATIONS PLAN

What is our desired outcome?

- To generate stakeholder support for the Taraborah coal project and to pave the way for the successful approval of the EIS and SIMP

What do we want to achieve?

- Gain stakeholder support for the Taraborah mine development
- Build a positive presence in the regional community
- Inspire confidence in State and local governments in the Shenhua Group’s ability to operate in a sustainable manner

Who do we need to talk to?

Government

- Local Government Central Highlands Regional Council
Local Council representatives
- State Government Dept of State Development, Infrastructure & Planning (DSIP)
Dept of Transport and Main Roads (DTMR)
Dept of Housing (DH)
Dept of Education, Training and Employment (DETE)
Queensland Health
Queensland Police Service (QPS)
Queensland Emergency Services
State elected representatives



Landowners

- Directly impacted (24 lots, 15 owners, including QR and Qld Forestry Dept)
- Other landholders (Adjacent to the project and along the railway spur and main line)??

Local community

- Emerald community
- Anakie community
- Local businesses/suppliers, chamber of commerce
- Local community groups (e.g. service clubs, community development association)
- Other mining companies in the area

Special interest groups

- Indigenous groups
- Landcare
- Fitzroy Basin Association

Media

- Local and state

Internal

- Taraborah management and employees

Industry groups

- Qld Resources Council

What are the issues and opportunities?

Issues

- Further infrastructure demands on Emerald and Central Highlands region
- Conflict over competing land usage (farming/grazing)
- Fly-in-fly-out/drive-in-drive-out issues (housing/road safety)
- Environmental concerns from dust, noise close to Emerald
- Potential opposition from gemfields region (Anakie/Sapphire)

Opportunities

- Further job and training prospects for region (including Indigenous)
- Improved infrastructure
- Active local business community
- Supportive regional council
- Supportive regional community

CONSULTATION ACTION PLAN

Action	Stakeholder group	Timeline
1. Foundation activities		
Hold internal meeting with key internal stakeholders to agree on key messages and a positioning strategy.	AARC and Shenhua/IMC representatives	Completed
Develop a set of key messages to provide Shenhua/IMC and AARC with a consistent description of the project.	AARC and Shenhua/IMC representatives	End June
Set up feedback mechanisms, including a hotline, email address, PO box, and stakeholder management system. Establish a complaints procedure to handle stakeholder issues and complaints.	AARC and Shenhua/IMC representatives	Early July
Set up a stakeholder issues/risk matrix to track key opponents/ supporters.	AARC and Shenhua/IMC representatives	June/July
Develop a communication and issues protocol to ensure that all key stakeholders quickly respond to any issue (e.g. negative media coverage/protests/etc.).	AARC and Shenhua/IMC representatives	Early July
2. Communication tools		
Develop Taroborah fact sheet to explain the project and SIA process, including map of area showing proposed mine location. Include facts and figures as well as project and community benefits.	Government – state and local Landowners Local community Special interest groups Media	Early July
Distribute letter from Shenhua/IMC to all stakeholders advising of upcoming community engagement activities	Landowners Local community Special interest groups	June
Develop project collateral, such as project display material (for community meetings) and a specific website featuring key project materials (i.e. fact sheet, etc.).	Government Landowners Local community Special interest groups	July



Action	Stakeholder group	Timeline
3. Community engagement activities		
Attend one-on-one meetings with key landholders to demonstrate commitment to the landholders and allow them to express and record their concerns.	Directly/indirectly impacted landholders	July 16-20
Undertake meetings with key business groups and government stakeholders.	Local businesses Local Government	July 16-20
Advertise and conduct community information session/s in Emerald at a public venue to describe the project and the EIS/SIA process and give any interested parties the opportunity to ask questions.	Local community Landowners Internal	July/August
Distribute questionnaire to gather and monitor feedback.	All stakeholders	July
Develop a sponsorship strategy to provide a clear framework around local future sponsorship support.	Internal/local community	Ongoing

POTENTIAL STAKEHOLDERS

Government	
Local representatives Central Highlands Regional Council: <ul style="list-style-type: none"> Cr Peter Maguire, Mayor Cr Gail Nixon, Deputy Mayor Cr Paul Bell Cr Charlie Brimblecombe Cr Kev Cracknell Cr Gail Godwin-Smith Cr Paul Maundrell Cr Kevin Pickersgill Cr Gai Sypher Barry Ottone, CEO Bradley Duke, GM Community & Development Services 	State and Federal representatives <ul style="list-style-type: none"> Vaughan Johnson, State Member for Gregory (LNP) Kevin O'Dowd, Federal Member for Flynn (LNP)
Media	
Print <ul style="list-style-type: none"> Emerald Central Qld News The Courier-Mail Television <ul style="list-style-type: none"> WIN TV Qld Southern Cross TEN Qld Channel 7 Tmba ABC News 24 	Radio (local) <ul style="list-style-type: none"> Radio 94.7 FM Emerald Radio 4EEE ABC Radio Western Qld Zinc HI Radio

COMMUNITY ENGAGEMENT TOOLS

The table below outlines some of the tools and processes that could be applied to the Taroborah coal project EIS/SIA to maximise effective community engagement. These tools build on some of the strategies outlined in the Consultation Action Plan.

Tool	Objective(s)	Output(s)
Key messages	Ensure consistency in all communication with stakeholders; the messages may change over the project's development, and will guide all communication materials prepared during the life of the project (i.e. newsletters, website, media statements)	<ul style="list-style-type: none"> Key messages for use as the basis of our communication tools and tactics
Project Q&As	Provide a consistent, agreed response when answering questions about the project.	<ul style="list-style-type: none"> Project Q&As agreed and approved by the project team, for use in all interaction with stakeholders
Communication protocols	Identify and document the communication approvals chain, spokespersons and enquiry response process for use throughout the project.	<ul style="list-style-type: none"> Approved and documented communication protocols
Issues register	An issues register ensures the team is prepared to answer difficult issues likely to arise during the life of the project. Issues are identified and responses and key messages prepared and approved by the team. This means all responses are ready to be released to key stakeholders with minimum delay.	<ul style="list-style-type: none"> Issues register
Team contact card	A team contact card is a small wallet-sized card featuring the contact details of each project team member. Should an issue arise, all relevant team contact details are easily accessible on one convenient card.	<ul style="list-style-type: none"> Project team contact card
Key stakeholder briefings/ Community Reference Group (CRG) meetings	Provide a managed and structured forum for active participation in the planning process, and ongoing communication when project is established	<ul style="list-style-type: none"> Record of stakeholder briefing discussions Record of actions taken to respond to concerns/issues
Elected representative briefings	Ensure elected representatives are advised of the project's commencement in a timely manner and kept up-to-date on its progress (i.e. before other key stakeholders and the broader community).	<ul style="list-style-type: none"> Contact report from each elected representative briefing and meeting outcomes Updated issues and opportunities register
One-on-one meetings and briefings with key stakeholders	Build trust and sustained relationships with key stakeholders through face-to-face consultation. Provide timely and accurate project information. Identify and manage issues / opportunities.	<ul style="list-style-type: none"> Contact report from each meeting / briefing and meeting outcomes

Tool	Objective(s)	Output(s)
Website project information/fact sheet/newsletter	Ensure project information is widely accessible to key stakeholders. Communicate project outcomes.	<ul style="list-style-type: none"> Shenhua/Taroborah website updates Taroborah fact sheet Project community newsletter (ongoing) Draft holding statement in preparation for media interest (i.e. only to be released on media approach)
Community information session, including AARC and project representatives	Provide key stakeholders and the broader community with the opportunity to view and discuss project information (i.e. SIA process, mine development plans, employment opportunities, community benefits, etc.).	<ul style="list-style-type: none"> Public display - staffed Summary of feedback from community information session
Monitoring of community engagement	Ensure that the Community Engagement Strategy continues to be relevant to the project, its issues and stakeholders.	<ul style="list-style-type: none"> Summary monitoring report on perceptions of key stakeholder briefing process (based on feedback from interest groups / landowners, special interest groups, and community information session) Summary monitoring report on perceptions of broad community engagement process (based on feedback from above participants via feedback forms)
Consultation and Stakeholder Engagement report	Includes: <ul style="list-style-type: none"> Community Engagement Plan Implementation strategies Communication tools Key stakeholders consulted Issues raised, level of interest Outcomes / evaluation Conclusions. 	<ul style="list-style-type: none"> Brief community engagement report for inclusion in the SIA

APPENDIX B: TAROBORAH COMMUNITY CONSULTATION REPORT



Taroborah Coal Project

APPENDIX B **Community Consultation Report**

Prepared for:
Shenhua International Group Pty Ltd

September 2014



Document History and Status

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	CONSULTATION PROGRAM AIMS	1
2.0	DIRECT CONSULTATION.....	2
3.0	COMMUNITY INFORMATION SESSION	12
4.0	COMMUNICATION MATERIALS	13
4.1	TAROBORAH FACT SHEET.....	13
4.2	TAROBORAH COMMUNITY NEWSLETTER	16
4.3	TAROBORAH Q&A	22

LIST OF FIGURES

Figure 1: Taroborah Fact Sheet.....	13
Figure 2: Taroborah Community Newsletter	16

LIST OF TABLES

Table 1: Summary of Direct Community Consultation.....	2
Table 2: Taroborah Questions and Answers	22

1.0 INTRODUCTION

As part Environmental Impact Statement development for the Taroborah Coal Project, Shenhua International Group Pty Ltd (Shenhua) commissioned AustralAsian Resource Consultants (AARC) to conduct a community engagement process with the aim of ensuring that all stakeholders were made fully aware of project plans and developments.

Through this process, groups, individuals and local authorities potentially impacted by the project were consulted, and opportunities were provided to raise issues of interest and concern.

The consultation process included property owners within the MLA boundaries, those outside of the boundaries, other key stakeholders, and the wider community within the vicinity of the mine. The main methods of community engagement included:

- Conducting face-to-face meetings with directly affected landholders
- Conducting face-to-face meetings with key community leaders and organisations
- Conducting face-to-face meetings with key council and government representatives in Emerald
- Preparing and distributing a project fact sheet
- Distributing a survey to elicit feedback on community issues.

1.1 CONSULTATION PROGRAM AIMS

The major aims of community consultation activities were to:

- Provide an independent forum for stakeholders to air their views
- Identify and prioritise various issues relating to the proposed project
- Enhance relationships between Shenhua and its key stakeholders
- Facilitate development of an ongoing engagement program to maintain long-term relationships and keep community members informed for the life of mine.

2.0 DIRECT CONSULTATION

In November 2012, AARC undertook direct, face-to-face consultation with key Taraborah stakeholders so as to inform the Social Impact Assessment (SIA) and Social Impact Management Plan (SIMP). A summary of issues raised during recent consultation (including from interviews subsequent to November 2012) is included below:

Table 1: Summary of Direct Community Consultation

Stakeholder	Comment
CUMULATIVE IMPACTS	
Emerald Real Estate	<ul style="list-style-type: none"> Emerald's residential property market has changed 'dramatically' in the past 12 months, and particularly in the past three months. Six months ago, there were one or two rentals available at most, whereas today, they have around 24 rental houses available on their books Four of five other real estate agencies in Emerald have similar stories. Typically, a four-bedroom rental house that was fetching \$700 a week is now advertised for \$560 a week; a three-bedroom house that demanded \$600 a week now receives \$480 a week, if it can be rented The downturn in rentals and house sales can be directly related to the downturn in the coal industry, and workforce cutbacks at many local coal mines, as well as Gregory mine's closure. There is an air of uncertainty that has flowed on to the local investment market Emerald was marketed throughout Australia as an area with huge potential. This encouraged strong support from investors, many of whom live elsewhere in Australia. However, with the onset of the global financial crisis and recent job losses, many investors have been trying to sell their properties While there are many more houses available for sale than a year ago, prices have not reduced significantly – rather they have flattened, with current averages for a new three-bedroom house and land package at \$400-\$500,000. There is plenty of developed land and 'house & land' packages available in new estates, e.g. 'Miranda Heights' with 400 lots, 'Highfields' with 103 lots The Central Highlands Regional Council has also developed a large industrial estate with lots of 4000m². This has not been successful as an industrial estate and has the potential to be developed as a residential area, if required

Stakeholder	Comment
Qld Dept Transport and Main Roads	<ul style="list-style-type: none"> • The road between Emerald and Taraborah is of a reasonable quality, with the exception of around 5km of flood-damaged highway close to Emerald, where the speed limit is currently reduced to 80kph. Issues at the mine site will be provision of an adequate turning lane for vehicles to safely enter and leave the mine, and possible subsidence of the Capricorn Highway as underground mining proceeds under the road • There are many bus traffic movements in and around Emerald, with mining companies and contractors bussing employees between work and home. Police have mapped bus movements in an effort to better coordinate bus activities. To assist, a large floodlit car park has been constructed on Hospital Road as a bus pickup point, where mine employees can leave their private vehicles
Central Highlands Regional Council	<ul style="list-style-type: none"> • Council pointed out the complexities of the region in terms of planning for the future. While the predominantly mining-based communities of Emerald, Blackwater, Capella and Tieri were experiencing unprecedented growth, other communities were experiencing limited growth or slow decline • This divergence has created divisions within the community and impacted on Council's capacity to maintain services, develop social networks and sustain consistent economic viability across the region • Issues for the region and specifically for Taraborah include: <ul style="list-style-type: none"> ○ Water – is drilling into the aquifer under Taraborah proven science? Will it deprive landholders of their needed water supply? What compensation plan is in place if the aquifer fails? How is water apportioned during drought conditions? What technology does IMC plan to use to optimise water usage on site? Has sourcing the water by pipeline from Lake Maraboon been considered? These concerns are shared by virtually all the landholders who were interviewed ○ Rail transport – there is no history of coal movement through Emerald town and the Mayor has been quite vocal in his opposition to such a development; both the Council and local police raised safety concerns over long coal trains blocking both rail crossings (at Selma Rd and Opel St), effectively cutting off the town between north and south. Any rail upgrade will need to include the rail bridge over the Nagoa River, which currently carries passengers, cattle and grain on the existing line ○ Housing affordability and availability – Emerald operates a two-tier economy and those living outside of the mining industry 'bubble' are most at risk. State Government workers, Council employees and retail staff are caught in the house price and rental spiral. While a downturn in the coal industry has seen an easing in house availability and rentals over the past three months, the situation has had a detrimental effect on choice, diversity and growth opportunities
Landholder I	<ul style="list-style-type: none"> • Concerned about increased traffic using the Capricorn Highway – particularly the amount of traffic that the Alpha coal developments will add to mix

Stakeholder	Comment
COMMUNITY VALUES, INFRASTRUCTURE AND SERVICES	
Landholder A	<ul style="list-style-type: none"> • Children attend school in Emerald and are collected at the property gate by a school bus (there are two bus runs to collect from local properties) • Emerald Hospital has good reputation, although there is a high turnover of doctors, who appear to use Emerald for training • There are many young families in Emerald and as a result, Emerald Hospital maternity services are well utilised. The hospital also operates a health clinic at Sapphire • They rarely visit the Gemfields, only to show visitors the region.
Landholder F	<ul style="list-style-type: none"> • Concerned about road quality and increased traffic on the Capricorn Highway • Expressed concern for loss of amenity. Landholder believes that the region's social fabric has already changed detrimentally and will only get worse as more miners and construction crew move into the area • Also concerned about increased living costs – e.g. landholder has been using the same engineering-related company for many years but now has difficulty getting service as the mining industry has top priority
Emerald Police	<ul style="list-style-type: none"> • Emerald police station has 20 uniformed officers and two traffic branch officers • Uniformed staff numbers have remained static for the past five years, despite a substantial increase in Emerald's population • Emerald police area of involvement extends to Teresa Creek to the north, Taraborah to the west, Comet to the east and halfway to Springsure to the south • Despite the number of coal mines in the region, Taraborah would be the only mine in Emerald Police's jurisdiction • Crime statistics have increased with population, along with increased road use and hotel activity. Common offences include speeding, drink driving and drunken/disorderly behaviour • Taraborah impact would depend on where the construction workforce will be located and whether the camp will be wet or dry. It will also depend on potential use of private vehicles to travel to and from the mine • Emerald police raised the issue of coal trains travelling through Emerald. While grain, other freight and passenger trains move through Emerald currently, there are no coal trains. These longer trains would potentially cause road safety problems by traversing two major Emerald road crossings at the same time
Qld Dept Transport and Main Roads	<ul style="list-style-type: none"> • Major concern is the potential for coal trains to travel through Emerald, across two level crossings. There are no other coal trains passing through Emerald. The length of train may mean that both level crossings (at Selma Road and Opel Street) are blocked at once, especially if the train is stationary. This will create road safety issues

Stakeholder	Comment
Emerald Hospital	<ul style="list-style-type: none"> • The Study Area is serviced by Emerald Hospital, a 38-bed facility that provides medical services for an average 3,000 patients a year. Services available to the community include medical and surgical, specialist clinics, clinical support and allied health. More acute cases or patients requiring emergency surgery are sent to larger hospitals in Rockhampton or Brisbane via the RFDS or rescue helicopter • The hospital has a Level 3, low-risk birthing facility, catering for around 360 births a year (2011). This is consistent with the high proportion of women in the region of child-bearing age. The median age of Emerald's population is 29 years, 8 years below the Australian average • The rural town of Springsure and small towns within the Gemfields region 40km to the west of Emerald have a mostly older population who have grown up in the area or have moved there because of its affordability. Their relative isolation has created logistical problems to deliver adequate health services. In response, Qld Health provides a primary health service clinic five days a week in the town of Sapphire in the Gemfields area. Similarly, a Multipurpose Health Service operates five days a week in Springsure, which is 65km south of Emerald • For aged care in the region, Blue Care operates the Avalon Aged Care facility in Emerald, which offers 20 high-care and 30 low-care beds. This two-tier arrangement allows 'ageing in place', a service that permits residents to remain at the facility as their care needs change. In Springsure, the Multipurpose Health Service Centre contains a 15-bed aged-care wing • The Emerald region is serviced by 16 General Practitioners (GPs), many of whom use a telemedicine service for advice and direction from the larger Queensland hospitals • Emerald Hospital staff made the point that mining/construction workers seeking Workcover appointments or applying for medical certificates should visit their own GP either in Emerald or in the case of FIFO workers, in their home ports. The Emergency Dept at Emerald Hospital should not be used for non-emergency visits of this kind, which put increased pressure on an already busy facility
Emerald Ambulance	<ul style="list-style-type: none"> • Emerald ambulance currently comprises three vehicles and eight officers, who are on a 24-hour roster • The approved manning complement is 15 officers but because of the difficulty of replacing people as they leave, Emerald ambulance is currently undermanned by seven officers. This can mainly be attributed Emerald's two-speed economy, where affordability of housing and cost of living in the region preclude those residents who do not work within the mining industry • The ambulance centre is currently located next to the hospital in north Emerald but because this area is flood-prone, the Department of Communities is planning to move the centre to the soon-to-be-vacated QFRS building in Egerton Street in the centre of town. This has created its own problems, with the Central Highlands Regional Council strongly opposed to the new location because it would prefer to see the ambulance service and QFRS located in a common facility that is readily accessible to and from all parts of town. (The QFRS is moving from Egerton St to a site in the SE of town near the airport – which will be cut off in the event of future flooding) • A single ambulance and officer are based in Anakie to service the Gemfields region

Stakeholder	Comment
Qld Dept Education, Training and Employment	<ul style="list-style-type: none"> • Emerald is an important education centre for the region, serviced by three state primary schools, a state secondary school, three independent colleges and the Capricorn School of Distance Education. Post secondary, Emerald offers educational facilities such as the Central Queensland Institute of TAFE, Central Queensland University Emerald Campus and the Emerald Agricultural and Pastoral College • The Gemfields region has a small primary school with two teachers • There are no boarding facilities in Emerald schools – for secondary school boarding, students from Emerald attend Rockhampton (Boys) Grammar School, Rockhampton Girls Grammar School and The Cathedral College, also in Rockhampton • Despite the recent downturn in the coal industry, student numbers in Emerald schools remain reasonably static (and high) • The major issue relating to attracting teachers to Emerald relates to affordability of housing for purchase and rent. The two tier economy means that those working outside the mining industry (and salaries) are unable to afford the artificially high rents, unless they are subsidised • This issue has driven some families away from the larger population centres to areas where there are inadequate educational, health and welfare facilities. As a result, there are some pockets of children in need
Central Region Fire and Rescue Service	<ul style="list-style-type: none"> • Region has seven fire and rescue stations and 13 QFRS trucks around the Central Highlands, including the Emerald station • The area covered extends past Taroborah along the Capricorn Highway west to the Drummond Range, up to Carnarvon and east to the Dawson River • The Emerald fire station has two fire and rescue vehicles, supported by a staff of one full-time fire-fighter and a pool of 20 auxiliary fire-fighters • Emerald QFRS operates from a new fire station located in the southeast of town near the airport • A rural fire service works in parallel with the QFRS to contain rural bush and grass fires. This service has vehicles and volunteer teams centred at 'Iona' property on the Capricorn Highway (near Taroborah) and two units in the Gemfields • The range of emergencies involving the QFRS includes road-crash rescue, industrial accidents, hazardous materials releases and residential and town grass fires. The QFRS also supports the disaster response and recovery efforts of the district and local disaster management groups • The QFRS expects mining companies to introduce fire mitigation measures, including fire breaks, around their operational infrastructure
Qld Department of Aboriginal and Torres Strait Islander and Multicultural Affairs	<ul style="list-style-type: none"> • Key issue for Central Queensland Indigenous communities is employment • Many opportunities to source labour (both Indigenous and non-Indigenous) from communities such as Woorabinda, Alpha, Winton and Blackall (look west!) • DATSIMA can support projects 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

Stakeholder	Comment
Central Highlands Aboriginal Corporation	<ul style="list-style-type: none"> • Central Highlands Aboriginal Corporation is an Emerald-based group with the primary role of managing and delivering housing services to the Aboriginal community • Funded by the Queensland Government, the corporation owns eight properties – seven houses and a complex of four units • There are many families on the waiting list for low-cost accommodation but few suitable houses become available • While competitively-priced housing availability is a problem for the broader Emerald community, the situation is exacerbated in the Indigenous community where overcrowding in existing houses is a constant issue, often with up to three families to a single house • There are between 70 and 80 Indigenous people in Emerald town and its environs, most of whom belong to the Western Kangoulu People
Central Highlands Community Health Centre (Indigenous Health Education)	<ul style="list-style-type: none"> • Two community-based health officers responsible for health education within the Central Highlands Aboriginal community • One specialises in child and youth health, while the other is a chronic disease care coordinator. Both positions are funded by the Queensland Government • They visit schools in the region to monitor Indigenous health levels. Currently they are targeting ear infections through a program called 'Deadly Ears'. If a diagnosis is made, a referral is organised to a local GP through the child's parents or guardians • A government-funded immunisation program for Indigenous children has recently been discontinued because of budget cuts, although local GPs are offering to continue this service for free for children under 16 years • There is also a cardiac program for adult Aborigines to educate them about the dangers of smoking, etc. to their general health, and particularly the risk of heart attack. This program includes an annual visit by a health team, including a cardiologist, to examine at-risk clients • Apart from heart problems, various health issues endemic in the wider Indigenous community (e.g. diabetes, dietary problems) are evident to health workers, but for various reasons, professional staff experience difficulties in organising people to visit health services in the region for assistance
Country Women's Association	<ul style="list-style-type: none"> • FIFO and mining industry downturn are negatively impacting Emerald • The town has a lot to offer (including schools, TAFE, healthcare, sports, etc.) but houses are not selling • The floods have also had an impact with high insurance premiums • There is strong community spirit in the area with residents attending and supporting local events and initiatives • Community support groups are effective, including the Neighbourhood Centre, Lions, Rotary and respite and aged care facilities • Emerald has a deficiency in childcare services, doctors (particularly specialists) and long-term teaching staff • Local roads are of average quality (Emerald to Rockhampton and Emerald to Anakie) but emergency services are good

Stakeholder	Comment
ECONOMIC IMPACTS	
Central Highlands Development Corporation	<ul style="list-style-type: none"> Central Highlands Development Corporation is the lead economic development agency for the Central Highlands region. Their goal is to work collaboratively with business, industry, government and community to enhance local business capability and increase regional awareness. Sandra says Emerald has become an important training hub for mining apprentices, with BMA, Rio Tinto and Lennons providing accommodation units for this purpose. A further number of single-persons units are being built to accommodate people to satisfy increased training demands. Issues raised by Sandra regarding Emerald's economic development include: <ul style="list-style-type: none"> Accommodation availability and affordability – few houses have been available, although this has now eased, rents are still comparatively high Lack of childcare facilities – childcare centres have waitlists, so women with children are especially disadvantaged Healthcare – there is a difficulty keeping enough GPs to meet the market – this may change with the impending arrival of more GPs and the construction of a \$5M GP super clinic, supposed to commence with Federal Government funding Public transport – the airport is just coping with traffic at its upgraded facilities, with 12 flights in and out a day, and 257,000 passengers passing through each year – the majority in high vis!
DIRECT IMPACTS	
Landholder A	<ul style="list-style-type: none"> Family has owned small cattle and goat property for 10 years Landholder is a tradesperson, works at local mine Best of both worlds, lives in a peaceful area with good farming conditions – just 15 minutes from town with good amenities Area's black soil land responds very well to forage crops, which, in turn, produces good cattle fattening conditions Aware of and concerned about potential subsidence from the underground mine Also concerned about noise, lighting, dust and water usage (they have a good aquifer on their property and are not keen to share it with the mine) Main concern is that they are in limbo until Shenhua makes a decision. It is difficult for them to commit to making improvements without greater certainty of future land use Not keen to sell property Understand that if they did sell, they would receive market value plus 10%

Stakeholder	Comment
Landholder B	<ul style="list-style-type: none"> Owned small lot for 10 years; runs beef cattle Planned to build a permanent retirement home on property but on hold until Taroborah decision Hearing about Taroborah for 5-7 years; doesn't expect any decision soon If project does going ahead, concerned about noise, dust, lighting and traffic – all of which will impact quality of life and quality of cattle Will not share bore water with mine as water is a limited resource and there isn't enough to go around Not likely that landholder will be able to sell property on the open market at a fair price while there is prospect of a coal mine looming
Landholder C	<ul style="list-style-type: none"> Long connection with area (45+ years) Previous bad experience with another mine buying property at what landholder believe was an unfair price New property supports cattle Landholder resides in Emerald Wants nothing to do with coal mines or coal mining companies and would sell if the price was right – looking for 'top market' price
Landholder D	<ul style="list-style-type: none"> Born in Emerald, strong connection to the area Owned current small property for 23 years – it supports pigs, cattle and horses Soil quality is poor Due to health problems, landholder want to sell for the right price Moved to the area for peace and quiet, as well as proximity to Emerald. Mine would impact retirement plans
Landholder E	<ul style="list-style-type: none"> Owned 5,500-acre cattle (600-800 head) property for 42 years Property is outside lease area; however, concerned about coal dust on grasses impacting cattle, noise from the open-cut and process plant operations, truck and car movements on local roads, and impact of the mine's bore on the water table (on which the landholder depends)

Stakeholder	Comment
Landholder F	<ul style="list-style-type: none"> • Lived in the area for 22 years • Operate a 4,200ha cattle (900 head) property 20km west of Taraborah • Also grow wheat and sorghum • Main concern is impact on water – if mine bores for water and disturbs the aquifer that services the entire region's properties, everyone will suffer • Believe that drilling work on a nearby property has already had bad consequences for water availability • Creek that flows through landholder's property flooded during the 2010/11 wet season; landholder is worried that any interruption to the flow of water on the flood plain to the north of Taraborah will create worse flooding on their property and homestead • Concerned about dust and noise from construction and mining (already has child with respiratory problems)
Landholder G	<ul style="list-style-type: none"> • Owned 2,500ha cattle and cropping property for 24 years • Also operates a local bus service • Not opposed to the mine and is keen to sell at the right price or would lease to Taraborah and landholder would continue current businesses • Expected to be hired by Taraborah for contract work, supplying backhoes, trucks, etc.
Landholder H	<ul style="list-style-type: none"> • Two 260ha properties south of the Capricorn Highway • Purchased as an investment and leased for cattle grazing and cropping • Landholder feels that they have been messed around by Shenhua/IMC and would rather not talk to them unless the company puts forward a sensible offer to buy both properties. Happy to discuss an offer or leaseback arrangement • Led to believe that Taraborah was imminent but they have not heard anything for a long time
Landholder I	<ul style="list-style-type: none"> • Owned 2,000ha cattle (600 head) property for six years, though landholder has long-term connection with Central Highlands region • Reside in Rolleston • The majority of property's water supply is drawn from three dams but in times of low supply (drought) landholders uses a bore that is located on an adjoining stock route. Landholder suggests that Shenhua should test the flow rate of the bore now, so that it might be compared to (decreased) flow rates in the future • Suspicious of mining company bona fides, which was reinforced by Taraborah exploration people leaving gates open on the property • Concerned about coal dust on grasses that cows won't eat, noise that scares cows and affects their condition, and trains making noise and creating dust both day and night

Stakeholder	Comment
Landholder J	<ul style="list-style-type: none"> • Purchased 40,500ha cattle (700 head) property to retire there • Not anti-mining but concerned that as a neighbour, landholder would be subject to noise, dust, light and reductions in land values • Not currently residing at the property but planned to do so as soon as possible – however, Taraborah has put their plans on hold • Aware of concerns about coal trains passing through Emerald town, but says that there are probably practical ways around it if people put their minds to it • Particularly concerned about mine runoff getting into local streams and polluting cattle water supply • Also concerned about mine damaging the aquifer that is shared by the properties around the region. ‘Once it’s damaged, it’s too late to go back’ • Suggested that increased traffic flows on the Capricorn Highway will wreck the road between Emerald and the Drummond Range. Blames poor road bases laid on black soil for severe road undulations in the 80km/hour section just west of Emerald. Landholder drives truck “regularly on that road, and it’s hard to keep control.”
Landholder K	<ul style="list-style-type: none"> • 40,000ha cattle property (1,100 head + 500 calves) • Lives in Rolleston • Major concern is water quality for cattle, which landholder believes will be compromised if the mine drills into the aquifer that feeds properties in the region • Specifically mentions that quality of water in Retreat Creek will be affected by mine runoff • Landholder’s product (meat) is EU-credited and supplies a supermarket chain, which adds up to beef product being of superior quality. Concerned about quality being threatened if a mine arrives on the doorstep • Property produces high quality beef because of the good average rainfall, good grasses and a high carrying capacity for the region – one beast to five acres • Hopes that Shenhua is sufficiently flexible to consider a purchase/leaseback arrangement so that landholder can continue to conduct business in the area with minimal disruption

3.0 COMMUNITY INFORMATION SESSION

A community information session was conducted on 16 May 2013 at the Emerald Town Hall to provide community members with background on the Taroborah project and to listen to stakeholder issues and concerns. Attending were senior IMC representatives and AARC staff.

Invitational letters were distributed to key stakeholders and the meetings were advertised in the local media (*CQ News*) a week prior to the event – ultimately attracting around 100 attendees.

A 'questions and answers' document (refer Section 4) was prepared prior to the sessions to ensure consistency in responses to expected queries. A summary of information session feedback follows:

- Both directly and indirectly affected landholders indicated their concern about Taroborah's potential impact on local water sources
- A number of landholders advised that they were ready to sell at the right price
- Other landholders were concerned at the impacts the mine would have on their farming businesses (including noise, dust, road traffic and rail traffic)
- Central Highlands Regional councillors raised concerns regarding Taroborah's impact on water, rail transport and housing affordability, as well as highlighting the area's 'two-tier' economy (i.e. miners and everyone else, including council workers)
- A number of community members expressed concern about the coal industry downturn and the resulting impact on Emerald and surrounds. Subsequently, these people welcomed the proposed Taroborah operation and the jobs and business opportunities it would bring
- Many attendees were from local businesses or were interested in job opportunities at the mine
- Emergency services representatives were mainly concerned about rail and road traffic, particularly with long coal trains passing through Emerald and increased traffic on roads such as the Capricorn Highway (parts of which are already in poor condition)

4.0 COMMUNICATION MATERIALS

4.1 TAROBORAH FACT SHEET

A fact sheet was prepared to inform key stakeholders about the Taroborah coal project, including the community consultation process, a map of the planned expansion, and background facts and figures on the project. The fact sheet was distributed to stakeholders with the feedback form (survey), and handed out during face-to-face consultation.

Figure 1: Taroborah Fact Sheet





Facts and Figures

General

Location

The project is located approximately 22km west of Emerald, in central Queensland

Size of Project Area

10,667 hectares (Exploration Permit for Coal area)

Local Government Area

Central Highlands Regional Council

Owner

Shenhua International Group Pty Ltd

Mining Method

Taraborah is currently planned to be a combined open-cut and underground operation, which would use truck-and-excavator and longwall extraction methodologies. However, feasibility of the open-cut operation is still being investigated

Production

Up to 2.3mtpa of run-of-mine coal for the open cut operation and up to 5.1mtpa for the underground operation

Duration

Up to 12 years for the proposed open-cut operation and approximately 16 years for the underground mine (development would commence six years after the open-cut start-up). It is expected that a further three years would be required for construction and rehabilitation

Employment

Construction and operation workforces are expected to peak at around 130 and 240 respectively

Coal Preparation

Onsite coal handling and processing plant

Rail Transport

Product coal will be railed some 370km to Gladstone via the Blackwater and Central West rail systems

What is the EIS process?

Shenhua has contracted AustralAsian Resource Consultants (AARC) to undertake the EIS. Key steps include:



Need more information?

For further information on the Taraborah coal project, please contact Dave Thomas of IMC on **07 3226 9100** or dthomas@imcmining.com.au. To speak to someone about the mine EIS process, contact Dr Paul Jackson at AARC on **07 3217 8772**.

More information on the broader EIS process is available on the Queensland Department of Environment and Heritage Protection website: www.ehp.qld.gov.au.

Feedback Form

This feedback form will help us to gather information on what you value about your area and the potential changes that may result from the Taraborah development. Please take the time to fill out this survey form and return it to the following address:

Reply Paid, Taraborah Coal Project, PO Box 2371, Toowong DC QLD 4066

Your postcode

What do you like about living in this area?

What don't you like about living in this area?

What are the major issues facing your community at the moment?

How do you think the Taraborah project will affect the lifestyle of your community?

Do you have any other comments about the Taraborah coal project?

If you would like to be on the Taraborah mailing list to receive project updates, please provide the following information:

Name:

Preferred contact address (postal or email):

4.2 TAROBORAH COMMUNITY NEWSLETTER

The first *Taroborah News* was distributed to stakeholders and Emerald residents in May 2013, with the next issue due for release by September 2013. The newsletter includes interviews with key project and community representatives, as well as updates on the project.

Figure 2: Taroborah Community Newsletter





Dave Thomas Project Manager

What's your role on the project?

I manage the process of developing the project, from initial exploration and geological studies through to project design and feasibility analysis, tenement management, Government and community liaison, environmental management and project permitting.

What's your background?

I am a mining engineer, originally from the farming state of Iowa, USA. I have been working in the resources industry since 1982, originally in the gold and industrial minerals (potash and borate) sectors, and in the coal sector since 1986. I moved to Australia with my family in 1997 and have worked in all of the coal basins in this country.

What is the hardest part of your job?

Balancing the needs of the project with the rights and needs of the land owners and the mining regulations. Happily, I think this balancing act has been fairly successful.

What will be the effect on the community?

The Taroborah project provides a great opportunity for the mine's development to become an asset for the community.

I believe that the Taroborah project provides a great opportunity for the mine's development to become an asset for the community.

Given Taroborah's relatively close proximity to the regional hub of Emerald, Shenhua see the opportunity to provide employment for local citizens and engage local contractors with suitable qualifications. Shenhua will also encourage their employees recruited from elsewhere to move to Emerald with their families rather than operate on a fly in/fly out basis.

Shenhua will investigate ways to enhance the local community and attract the necessary workforce, such as providing training for local employees and contractors to meet the required skill sets; enhancing existing education, medical and daycare facilities; and investing in regional sports through sponsoring local teams and programs.

What do you hope to achieve?

Well, obviously, we hope to develop a world-class coal mining operation that achieves high productivity and low cost of mining. Importantly, we aim to combine this achievement with minimising impact on the surrounding ecological and social environments.

How will you mark success at Taroborah?

Success at Taroborah will be the development of a world-class coal mining operation that causes minimal harm to the environment, while creating employment opportunities for local citizens and businesses and enhancing the welfare of the Emerald community.

How do you relax at the end of the day?

After a day's work, I enjoy going home to have a couple of drinks with my wife, eat dinner with the kids, watch a bit of television or play some board games with the family, and read with my youngest daughter before she goes to bed. And hopefully the employees at Taroborah will be able to enjoy these same things.

Protecting the community and

A concern for every community where a large project is being developed is what impact that project will have upon the community and the environment.

Not every impact is a bad one. Increased employment, development and the opportunities for new businesses are some of the positive impacts that large projects bring to a community and the surrounding district. But poorly planned projects can have negative impacts as well. These should be a concern for the community, and also for companies develop-

ing projects.

Shenhua take these matters very seriously. We want to make sure the benefits of what we are doing are shared by as many in the Emerald community as possible. We also want to make sure that we minimise the potential to inconvenience the community, or to cause detriment to the environment.

We want to make sure the benefits of what we are doing are shared by as many in the Emerald community as possible.

This is a tricky task. Any coal mine which produces up to 5 million tonnes of coal each year is going to be a substantial operation. During the life of the mine, the objective is to contain the impacts as much as possible to the confines of the mining lease, and to minimise the impacts outside the lease. While the mine is operating, we also have to plan for its eventual closure, and take steps to ensure that as far as possible there is little lasting evidence of its operation.

However, our concern to do the right thing, on its own, is not the sole mechanism regulating the project's operations. The State Government has established a framework for mining developments, and provided legislation that we must comply with. The Federal Government has also passed environmental legislation that imposes obligations on us in the way we develop the mine. We take all of this seriously, and are diligent about complying.

The starting point is the baseline collection of data on the project. Shenhua has spent the past five years exploring and analysing the Taraborah area to identify where the coal is, as well as the specifics of its occurrence and how it has been deposited. This has also helped us better understand the environment around, under and above the coal deposit. As we have explored, we have disclaimed parts of the exploration tenement, and narrowed our



and the environment

focus on viable coal deposits.

Although some people might have wanted us to do this exploration faster, we wanted to get it right, and that takes time. We now think we have a good understanding of the coal deposit, as well as the surrounding underground environment. We are, however, continuing to monitor the local underground water systems, which is one of our key priorities.

In January 2012, Shenhua prepared an Initial Advice Statement, or IAS. This document lets the Government and the community know the sort of project we are considering, as well as identifying all the potential impacts, and the legislation with which we must comply.

Also at that time, we prepared a draft Terms of Reference for an Environmental Impact Statement, or EIS. This document proposes to the Government and the community what we think the impacts are, and what we will need to address as we prepare the EIS.

The draft Terms of Reference were made available to every group that might have an interest in the project. These people included not just landholders and people living near the mine, but also Council, community groups such as Agforce, the Chamber of Commerce, and environmental groups. It was also circulated to various Government departments and made available to the general public on the Department of Environment and Heritage Protection's website.

Once the community comments had been received and considered, and the final Terms of Reference issued by the Government in August 2012, we began preparing the EIS in earnest.

As we have done so far throughout the EIS

process, we intend to continue working with the community to make sure we understand your concerns. We will, as far as possible,

use your feedback to shape the project, and what we plan to do.

All of this consultation, as well as the work of our environmental scientists

and engineers, will lead to the preparation of a draft EIS. Again, we will give the community the opportunity to read what we propose to do, and make submissions, before a final report is given to the Government. Only after the EIS is completed will the Government decide whether to let our project go ahead or not, and what conditions it will impose upon the operation.

So, how can you get involved? You can come along to a community information session – there is one planned to be held in Emerald on 16 May 2013 – or you can write to us or call us for further information, or just

to have a chat. Details of how to contact us are in this newsletter.

You can also tell us about yourself. If you are part of a community group in the district, feel free to tell

us about what you do. The same applies to local businesses. For us to be good neighbours, we need to know who our neighbours are. Remember, we are happy to talk to everybody, not just those people who feel they might be affected by the project in some way.

At Shenhua, we really do want to do the right thing by the community. In future editions of this newsletter we will keep you informed about the project, and some of the new and different things we plan to do to make a positive contribution to the Central Highlands.

*During the life of the mine,
the objective is to contain the
impacts as much as possible to
the confines of the mining lease.*

*For us to be good neighbours,
we need to know who our
neighbours are. Remember, we
are happy to talk to everybody.*

Louisa Dufty

Director of Nursing/Operations

Manager, Emerald Hospital

What are the challenges in providing medical services in a regional town?

Isolation and distance from specialist services will always be a challenge; however, the development of "telemedicine" is helping. An ongoing challenge is attracting permanent senior medical officers with proceduralist skills as well as skilled rural nursing and midwifery staff to provide the community with the same level of care as they would receive in any larger coastal city.

Do you see any additional challenges for a rural town close to a large mining operation?

Workers in town who are fly in/fly out and get sick don't know any of the GPs. So they come to the emergency department, which creates a traffic jam of people with GP-type issues where acutely unwell people need to be the priority for care. If all of the mines would "adopt" a GP practice then their workers would have a local GP who they would get to know. The Emerald GP would be able to work closely with a worker's hometown GP and the outcome would be a continuous flow of care between home and Emerald for any ongoing health problems.

What about a model of a live-in workforce, who are likely to be younger, some with children?

Younger age demographics are well and healthy generally. Young families need access to family GP, antenatal and birthing services. All those services are available in Emerald and are of a very high standard.

Talking about birthing service, can you care for a woman who has a premature birth?

If a woman presented in preterm labour, which is 35 weeks or less, staff follow the guidelines and organise a transfer of care to a higher level facility, either Rockhampton or Brisbane depending on how early. If a preterm baby was



borned at Emerald Hospital, there are flying specialist services that can fly in and assist the hospital doctors and midwives until the Retrieval Services from Brisbane can arrive and airlift mother and baby to a tertiary level of care.

What about demand for physiotherapy, occupational therapy, rehab, those types of services due to the mining population?

Residents can access a large range of allied health services in Emerald. Some of the mines also contract dietitians, personal trainers and physio visits. The workers report a high degree of satisfaction with the level of advice and support they receive from these allied health services.

Young families need access to GP, antenatal and birthing services. All those services are available in Emerald and are of a very high standard.

If you had a magic wand, what would you like to do here?

I'd like to provide a "known midwife" model of care for all women. At the moment, Emerald is able to provide this for 50% of births. Under

this model, women are allocated a midwife who becomes their primary carer for all antenatal care, for birth and for postnatal care in the home. With many people living away from their normal family support system, the model works especially well. The women are really happy and feel well supported, the midwives come here to work because we have the model, and because the family doesn't have to travel away there is no lost time from work apart from the parental leave the men have off.

Community information session

Emerald residents and others interested in or affected by the project are invited to be included in the community consultation program. The next community information session is happening soon:

Date: Thursday, 16 May 2013

Time: 3pm – 7pm

Location: Supper Room
Emerald Town Hall
Egerton Street
Emerald

Contact us

Please contact us if you would like more information or to get involved.

Email: info@taroborah.com.au

Call: 1800 647 446

Post: GPO Box 2579
Brisbane QLD 4000



4.3 TAROBORAH Q&A

A document detailing potential stakeholder questions and Shenhua answers was produced for use at the community information session. This document has been reproduced below:

Table 2: Taroborah Questions and Answers

Where is the Taroborah project?

Taroborah is located some 22 km west of the central Queensland town of Emerald.

What is the Taroborah project?

The Taroborah project is proposed be an underground and open-cut thermal coal mining operation.

How much coal will be produced?

The project will involve mining a resource of approximately 190 million tonnes of coal, although the final method of carrying out the mining is yet to be determined. The proposed mine centres on an underground operation, producing up to 5.1 mtpa of run-of-mine coal. There may be an additional open-cut operation, which would produce up to 2.3 mtpa of run-of-mine coal.

Who owns the project?

The Taroborah coal mine tenement (MDLA467) is owned by Shenhua International Group Pty Ltd, a Brisbane-based subsidiary of Henan Shenhua Group Co Ltd. Henan Shenhua is a major Chinese multi-industrial and multi-regional company that is mainly engaged in coal exploration and mining, electricity generation and electrolytic aluminium production.

When will the project commence and what is the development timeline?

At this stage, a firm commitment to the project development timeframe has not been made and will depend on future coal-industry economics. However, the earliest the project could expect to commence would be end 2015, with a total construction time of approximately 18 months.

Where will Taroborah coal be processed?

Coal will be processed onsite before being transported to Gladstone port via the Central West and Blackwater rail systems.

What Native Title arrangements are in place?

There are no registered native title claimants for the project area. Shenhua has a Cultural Heritage Management Agreement in place with the local Western Kangoolu people and continues to liaise directly with them on all cultural heritage matters.

What is the expected life of the project?

Taroborah has an estimated mine life of up to 25 years, including construction and rehabilitation periods.

Will Taroborah provide any benefits to the local region?

It is estimated that up to \$60 million a year will be spent in the region through wages and purchase of supplies. Shenhua will give preference to sourcing supplies and services regionally and will include local businesses in supply chains wherever possible.

Taroborah will also generate employment opportunities for people located in the region. Mine job opportunities are expected to encourage new residents to the area which will underpin growth in local communities.

Shenhua is also investigating suitable public services arenas for possible direct funding.

Will the project provide local businesses with procurement opportunities?

Yes. Shenhua will implement targets for local procurement to ensure that regional businesses are afforded opportunities to support the Project. Shenhua is assessing the feasibility of implementing business support programs. This would help local business owners to acquire the relevant standards (i.e. governance, etc) and management systems (i.e. safety, environment, quality, etc.) required to participate in the resources industry. Shenhua is also considering whether these benefits can be provided to business owners not directly involved with the mining industry.

How can I take advantage of the business opportunities created by the mine?

Once the EIS is completed, it will outline business opportunities directly associated with the mine, such as providing goods and services, as well as other business opportunities in Emerald that have been identified by Shenhua's studies. All of this information will be publicly available for free. Shenhua is also considering setting up a business liaison office to help local businesses take advantage of these opportunities.

How many jobs will Taraborah generate?

Construction and operation workforces are expected to peak at around 150 and 360 respectively.

Additional jobs will be created among the businesses in Emerald and the region that supply goods and services to the mine.

Does the project intend to provide jobs and training opportunities for local residents?

Yes. Wherever possible, Shenhua will actively source employees from the local area. However, it is not anticipated that the local employment pool will sustain the Project, so Shenhua will also recruit from across the Central Highlands, central Queensland and if required, further afield.

In addition to standard recruitment practices (such as utilising the services of employment agencies and advertising in local media) Shenhua will work with local Indigenous communities to identify and engage potential trainees and employees for the Project.

The company will also work with entities such as Skills Queensland and other Registered Training Organisations to implement a broad spectrum of training programmes, so as to attract, develop and retain skilled and unskilled workers. Business as usual will include traineeships, apprenticeships and graduate programs, as well as participation in local school-to-work initiatives, as appropriate

Will Taraborah be a Fly-In/Fly-Out or Drive-In/Drive-Out operation?

Shenhua would prefer that all Taraborah employees live locally (Emerald); however, it is expected that some employees and contractors (particularly during the shorter-term construction phase) will operate on a Drive-in/Drive-Out or Fly-in/Fly-Out basis, utilising local short-term accommodation during their periods on site.

Where will the workforce and their families live?

Shenhua intends to actively recruit employees from the local area. Therefore, it is expected that the majority of full-time Taraborah employees and their families will already live in or will relocate to Emerald. Shenhua is still investigating accommodation options for the construction phase of the Project, whether it be a temporary construction camp onsite or in Emerald, or reliance on existing facilities in Emerald.

How do I apply for a job at the mine?

Shenhua is not currently recruiting but will be doing so once it is ready to commence construction. Further jobs will be available once the mine nears start-up.

The company is committed to local employment and will establish a personnel department to undertake recruitment and training when it is ready to start hiring. It will also begin working with entities such as Skills Queensland and other Registered Training Organisations to train potential employees before that time. We will keep the community informed of opportunities by announcements in the local media and by newsletters to households.

How will Shenhua manage inappropriate employee behaviour?

While Shenhua does not expect to experience community impacts as a result of negative employee behaviour, prior to Project start-up, Shenhua will have in place a strict employee Code of Conduct that will form part of each worker's employment conditions. The code will include expectations of acceptable behaviour that will apply both at work and in the local community. If an employee breaches the Code of Conduct, disciplinary measures will be put in place, including employment termination in extreme cases.

Will Shenhua build new infrastructure to the support the mine (roads, water supply, power, housing, etc.)?

Road and rail turnoff lanes/tracks will be constructed to connect the Project site to local transport infrastructure (Capricorn Highway and Central West railway). Water supply for the mine will be predominantly sourced from groundwater (to be pumped for the mine workings) and an existing rainwater runoff catchment dam. While more detailed studies are required to be undertaken to provide the final configuration, electrical power will most likely be sourced from the substation near Emerald, with a powerline run to site along the existing road/rail corridor. A backup generator will also be installed onsite to provide emergency power if required.

Will Taraborah put pressure on local infrastructure and services (housing, medical, emergency services, childcare, schools, etc.)?

Due to its modest size, it is not expected that Taraborah will put undue pressure on local infrastructure or services. However, to ensure minimal impact on housing availability and affordability (a significant and well-publicised resources community issue), Shenhua has commissioned a study to assess Emerald's current housing availability and affordability status. This study will ultimately inform Taraborah's Workforce Accommodation Strategy.

The Project will also utilise its community reference group to work with local community members in identifying and where possible, mitigating impacts upon local infrastructure and services.

How many landholders will be affected by the mine?

There are 19 registered lots within the MDLA467 tenement boundary (either entirely or in part), with 11 registered landholders, including Qld Rail and Qld Department of Transport. Of the private landholders, five live on, or have tenants living on, their land and are expected to be impacted to varying degrees by the Project. A further four landholders of properties adjacent to the MDLA reside within 10 km of the proposed mine surface and open-cut area, and may be impacted to some extent.

Will Shenhua acquire land for the project?

Shenhua will either purchase properties directly affected by the mining activities or acquire surface rights. These arrangements will be subject to discussions with each affected landholder. (Surface rights provide the mining lease holder with use of the land for the term of the lease, with the land reverting to the original landholder when the lease is relinquished by the proponent).

Has an environmental study been completed?

A comprehensive environmental study is currently being undertaken as part of the Environmental Impact Statement process.

What happens to vegetation and topsoil removed as part of the mining process?

Native vegetation and topsoil will be removed as part of the mining process. The topsoil will be stockpiled separately for future use in progressively rehabilitating the land as mining takes place and once mining has been completed.

Will the mine create any dust/noise hazards for local property owners?

As part of the EIS process, Shenhua has completed monitoring of existing noise and dust levels at sensitive sites around the tenement area. The Environmental Authority for the Project will use this background data to set allowable dust, particulate, vibration and noise levels at these sites around the mine and will require that mine-site emissions are monitored. If levels exceed the set limits, then mitigation methods will be employed to resolve such problems.

Will there be 24-hour work?

Yes. Taraborah will operate on a 24-hours-per-day and seven-days-per-week basis.

Will the mining area be lit up at night?

Yes. Lighting will be required to illuminate areas that are being mined at night, while the coal handling and preparation plant will also be well lit. Lighting levels will be monitored throughout the life of the Project, with mitigation measures, such as natural light barriers, put in place when required.

How much water is required by the mining and processing activity?

Annual water requirements for the Project are estimated to be 400-500 megalitres. The majority of this water will be recycled for further use.

Where will you source this water?

Exploratory drilling at Taraborah indicated that water could be sourced from an aquifer beneath the Project site. There is concern that groundwater use will impact surrounding bores and other water sources critical to affected landholders and the region as a whole. Shenhua is currently undertaking groundwater studies in order to assess the potential impact and establish the best course of action.

What happens to the water after it is used?

A system of water recycling will be employed for the mine-water pump-out and coal handling and preparation plant water streams in order to minimise the volumes of 'fresh' water required and waste water generated for mine operations. In any event, waste water will be stored in surface catchments for particulate settlement and treatment as required before reuse or release.

What will be the impact of mining activity on public roads?

While Taroborah will not be a large traffic generator, there will be more traffic on local roads than is the case now. There will be periods of relatively high traffic movements, particularly during the construction period when components for mine plant and equipment are delivered to site.

Movements of wide loads will be subject to traffic regulations, some of which will require vehicle escorts. Traffic management will form an integral part of Taroborah's project management planning, prior to and at start-up, and for the life of the mine.

With regard to light-vehicle movement, Shenhua plans to bus the majority of its employees to and from the mine site for their designated shifts.

How and where will the coal be transported?

Taroborah coal will be transported by train using the existing Central West and Blackwater railway systems to port(s) at Gladstone. The surface of the coal that is deposited in rail wagons will be profiled and veneered (sealed with a polymer coating) before leaving the mine to minimise any coal loss and coal dust generation during transport.

How many trains will be required per day?

When the mine is fully operational, there will be an average of six train movements a day through Emerald; three trains from the mine to Gladstone and three trains returning back to the mine.

How fast will the trains be travelling through Emerald?

The speed of trains through Emerald has not been determined but will be regulated by the appropriate authorities based on track conditions, train loads, etc. From experience, it is expected that a maximum speed of around 50 kph will be set.

What will happen to the Taroborah site after the mine closes?

Progressive and final rehabilitation, including revegetation of the site, is an integral part of modern mining practice, and will be required as part of the Environmental Authority for the project. At the end of mining operations, it is expected that all infrastructure will be removed from the mine site and the land returned to its present activity of cattle grazing.

Where is the Taroborah EIS process up to?

The assessment and approval of the mine is governed by the Mineral Resources Act and the Environmental Protection Act.

Shenhua must be granted a Mining Lease by the State Government before Taroborah mining can commence. However, before this can happen, the mine must be granted an Environmental Authority by the Department of Environment and Heritage Protection. The Environmental Authority is approved following successful completion of an Environmental Impact Statement (EIS), which describes potential Project-related impacts on the environment and community, and demonstrates that sound environmental and social impact management procedures have been developed for the mine.

At this stage of the assessment and approval process, Shenhua are undertaking the EIS. As part of this undertaking, Shenhua is liaising with local and state agencies to ensure project plans are aligned with regional, local government and community planning.

Where do I go for further information?

Shenhua has commenced publishing a newsletter to keep the local community informed of developments. We will also establish a website where you can go to find information as you need it. For further information, please contact the Taroborah project team on 1800 647 446 or info@taroborah.com.au.





Taroborah Coal Project

Social Impact Management Plan

Prepared for:

Shenhua International Group Pty Ltd

September 2014



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TABLE OF CONTENTS

TABLE OF CONTENTS.....	II
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	5
1.1 PURPOSE	5
1.2 OBJECTIVES	5
1.3 STRUCTURE.....	6
2.0 PROJECT SUMMARY	7
2.1 LOCATION.....	7
2.2 WORKFORCE	9
2.3 CONTRIBUTION TO REGIONAL DEVELOPMENT	9
3.0 EXISTING SOCIO-ECONOMIC ENVIRONMENT	10
3.1 SIA STAKEHOLDER ENGAGEMENT	10
3.2 LANDHOLDER PROFILE.....	10
3.3 COMMUNITY PROFILE	11
3.4 DEMOGRAPHIC PROFILE	13
3.5 INDIGENOUS DEMOGRAPHIC PROFILE	14
3.6 HOUSING AND ACCOMMODATION PROFILE	15
4.0 STAKEHOLDER ANALYSIS	18
5.0 ONGOING STAKEHOLDER ENGAGEMENT	23
5.1 COMMUNITY LIASON OFFICER (CLO).....	23
5.2 COMMUNITY CONSULTATION COMMITTEE.....	24
5.3 GENERAL COMMUNICATION	24
5.4 TARGETED COMMUNICATION.....	25
6.0 SOCIAL IMPACT MANAGEMENT	27
7.0 SOCIAL IMPACT MONITORING AND EVALUATION	39
7.1 MONITORING FRAMEWORK.....	39
7.2 SIMP REVIEW	41
8.0 DISPUTE RESOLUTION	42
8.1 ENQUIRIES AND COMPLAINTS MANAGEMENT SYSTEM	42
8.2 CONFLICT RESOLUTION	44
9.0 REFERENCES	45

LIST OF FIGURES

Figure 1: Taroborah Project Location	8
Figure 2: Taroborah Enquiries and Complaints Management Process	43



LIST OF TABLES

Table 1: Taroborah Study Areas.....	9
Table 2: Key Stakeholders and Impact Areas.....	18
Table 3: Summary of Taroborah SIMP Actions	27
Table 4: Social Impact Monitoring Framework Example	39
Table 5: Enquiries and Complaints Register.....	42

LIST OF APPENDICES

Appendix A: Workforce Management Plan	A
Appendix B: Indigenous Participation Plan	Appendix B
.....	Indigenous Participation Plan

LIST OF ABBREVIATIONS

AARC	AustralAsian Resource Consultants
ABS	Australian Bureau of Statistics
CCC	Community Consultation Committee
CDEP	Community Development Employment Program
CHDC	Central Highlands Development Corporation
CHMP	Cultural Heritage Management Plan
CHRC	Central Highlands Regional Council
CIP	Community Investment Program
CLO	Community Liaison Officer
CQID	Central Queensland Indigenous Development Ltd
DCCSDS	Queensland Department of Communities, Child Safety and Disability Services
DEHP	Queensland Department of Environment and Heritage Protection
DETE	Queensland Department of Education, Training and Employment
DHPW	Queensland Department of Housing and Public Works
DIDO	Drive-In/Drive-Out
DSDIP	Queensland Department of State Development, Infrastructure and Planning
DTMR	Queensland Department of Transport and Main Roads
EAP	Employee Assistance Program
EIS	Environmental Impact Statement



FIFO	Fly-In/Fly-Out
FMP	Fatigue Management Plan
GRP	Gross regional product
ha	hectare
ICN	Industry Capability Network
km	kilometre
LGA	Local government area
MDL	Mineral Development Licence
Mtpa	Million tonnes per annum
MOU	Memorandum of Understanding
NRW	Non-resident worker
QAS	Queensland Ambulance Service
QMEA	Queensland Minerals and Energy Academy
QFRS	Queensland Fire and Rescue Service
QR	Queensland Rail
QRC	Queensland Resources Council
ROM	Run of Mine
Shenhua	Shenhua International Group Pty Ltd
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
TAFE	Technical and Further Education

EXECUTIVE SUMMARY

Shenhua International Group Pty Ltd proposes to develop a new coal project in Queensland's Bowen Basin. The Taroborah Project is located some 22 kilometres west of Emerald and falls within the boundaries of the Central Highlands Local Government Area.

The proposed Project will involve mining a resource of approximately 190 million tonnes of thermal coal, at an eventual rate of up to 2.28 million tonnes per annum of run-of-mine coal for the open-cut operation, and up to 5.75 million tonnes per annum for the underground mine.

Coal will be processed onsite before being transported to Gladstone port via the Central West and Blackwater rail systems. The Project has an estimated mine life of up to 24 years, including construction, commissioning, operation, decommissioning and rehabilitation periods. Taroborah is currently managed under Mineral Development Licence No 467, which exhibits an area of 7,966 hectares.

It is proposed that the Project will be a combined open-cut and underground operation, with a duration of some seven years for the open-cut and 17 years for the underground mine (underground development will commence four years after open-cut start-up).

Shenhua understands that the Taroborah Project has potential to impact on the local region. The company is, therefore, committed to working closely with all stakeholders to take advantage of the many expected positive impacts and opportunities or to mitigate any negative impacts, so as to ensure sustainable development of both the Project and the region.

The driver of the social impact management process is the Social Impact Assessment. Through this assessment, a comprehensive picture of the existing socioeconomic environment for the Project was obtained and included the following baseline information:

- The Project area and surrounds are used predominantly for cattle grazing and cropping;
- Local residents value their relaxed lifestyle, safe environment, friendly people, involvement in sports, high level of volunteerism and the fact that their environment is a good place to raise children;
- Emerald is an important education centre for the region, serviced by three state primary schools, a state secondary school, three independent colleges and the Capricorn School of Distance Education. Childcare facilities in Emerald are under pressure, as demand for places significantly exceeds supply;
- Health services across the region appear adequate, although fly-in fly-out employees who work at local mines have been placing pressure on hospital facilities for non-emergency situations;
- Emerald Police Station is supported by 20 uniformed police officers and two traffic-branch officers, Emerald's ambulance service currently comprises three vehicles and eight officers working on a 24-hour roster, and the local fire station has two fire and rescue vehicles, supported by a staff of one full-time fire fighter and a pool of 20 auxiliary fire-fighters;
- Local water supply is supported by the Nogoa Mackenzie Water Supply Scheme, where the central feature is conservation of water from Nogoa River by Fairbairn Dam, which lies 19 kilometres upstream (south) of Emerald;
- The agriculture, resources, tourism and construction sectors account for the largest number of businesses in the region, and contribute significantly to the Gross Regional Product;
- From 2006 to 2011, Emerald's population grew by 12 %, constituting 46 % of the Central Highlands population;



- About one third of Emerald and Central Highlands residents earned a gross income of \$1,000 per week or more in 2011 (35.8 % and 33.7 % respectively), while only 14.8 % of Emerald households earned less than \$1,000 per week;
- In 2011, 46.3 % of Emerald residents had achieved Year 12 or equivalent, compared to 48.0 % for Queensland. In the same year, some 35.5 % of the Emerald population aged 15 years and over had a tertiary qualification, compared to 36.5 % for Queensland;
- At 2.4 % and 2.8 % respectively, 2013 June-quarter Emerald and Central Highlands unemployment rates were more than half that of Queensland (6.0 %);
- The main industry of employment for the regional study areas was mining, with Emerald at 22.6 % and Central Highlands at 26.0 %, compared to all of Queensland at 2.6 %;
- There are low numbers of Aboriginal or Torres Strait Islander people representing the overall community, which aligns with state statistical averages that indicate low Indigenous representation in higher education and home ownership. However, in 2011, Indigenous individual weekly incomes in Emerald and Central Highlands featured significantly more in the \$1,000+ earnings bracket than in Queensland. In turn, state-wide Indigenous unemployment was at 18.0 % in the same year, compared to 7.7 % for Emerald and 8.0 % for Central Highlands;
- While house prices in Emerald are robust, they remain affordable compared to nearby towns and major cities, when expressed as a multiple of mean income; and
- In addition to many existing houses coming onto the market as a result of the mining industry downturn, there is an abundance of developed land and 'house and land' packages available in new estates.

As well as baseline data, the stakeholder engagement process also identified a number of potential social impacts, along with a series of recommended mitigation strategies. The key impacts identified have been summarised as follows:

- Cumulative;
- Changing demographic profile;
- Landholder and land degradation;
- Psychological change due to the Project;
- Pressure on community values, lifestyle, leisure and culture;
- Changes to social order;
- Pressure on community facilities and services, particularly education, childcare, health and emergency services;
- Increased traffic on highways, roads and public transport, particularly relating to public safety;
- Impact on road traffic of coal trains travelling through Emerald, particularly with respect to emergency services vehicles;
- Use of local utilities, especially water;
- Opportunities for local business and enterprise (including procurement);
- Opportunities for tourism and other local industries;
- Opportunities for local training and employment;
- Housing and accommodation availability and affordability;

- Availability of short-term accommodation (including motels);
- Cultural heritage management;
- Environmental impacts, such as noise and vibration, dust, lighting and visual amenity; and
- Mine closure.

Assessment of the current regional environment was obtained through engaging with several key stakeholder groups as follows:

- Queensland Government;
- Central Highlands Regional Council;
- Landholders (including directly and indirectly impact landholders and Native Title claimants);
- Community (including residents of Emerald and surrounds);
- Community services (including local education, health, emergency services, childcare and community support organisations);
- Local business and industry (including the Central Highlands Development Corporation and Queensland Resources Council); and
- Project proponent (including Shenhua and IMC employees).

Through implementing a comprehensive Social Impact Management Plan, Shenhua will undertake ongoing consultation and communication, combining general communication tools, such as newsletters, with tailored stakeholder liaison, such as reference and working groups. Shenhua will deliver the following seven social impact management strategies (and associated strategy elements), to mitigate identified Project impacts:

1. Cumulative Impact Management/Regional Development Strategy

2. Community Safety and Wellbeing Strategy

- Demographic changes;
- Community values and lifestyle;
- Recreation and leisure;
- Social order; and
- Public safety.

3. Community Infrastructure and Services Strategy

- Health services;
- Emergency services;
- Education;
- Childcare;
- Highways and roads; and
- Utilities.

4. Landholder Engagement Strategy

- Land tenure and use;
- Psychological impacts; and

- Cultural heritage.

5. Local Content Strategy

- Business and enterprise (including tourism);
- Employment and training; and
- Mine closure.

6. Housing and Accommodation Strategy

- Housing availability and affordability;
- Short-term accommodation; and
- Workforce accommodation.

7. Employee Engagement Strategy.

Each strategy is supported by a series of actions that will be measured against performance indicators and timelines. Quarterly reports will form part of the Project's social monitoring and evaluation framework, which will also incorporate Shenhua's enquiries / complaints process.

The entire SIMP process will be overseen by the Project's Community Liaison Officer, who will implement annual reviews of the plan for reporting to the Queensland Government's SIA unit.

1.0 INTRODUCTION

The Taraborah Social Impact Management Plan (SIMP) will guide the management of social impacts identified through the Environmental Impact Statement (EIS) process, under the *Environment Protection Act 1994*.

In line with the *Sustainable Resource Communities Policy 2008*, a Social Impact Assessment (SIA) was completed as part of the EIS process, in which social impacts were identified for both Project construction and operation phases. The SIMP reinforces key SIA findings and recommendations, while further developing mitigation measures to be implemented by Shenhua International Group Pty Ltd (Shenhua).

This SIMP is an evolving document, which will be updated on an annual basis and adapted to address future changes in both community and Queensland Government requirements.

1.1 PURPOSE

The purpose of this SIMP is to define the roles of Shenhua, government and the community in mitigating and managing social impacts throughout the life of the Project.

The SIMP also aims to:

- Reflect the findings and recommendations of the Project's SIA, including results of engagement with stakeholders;
- Present a summary of SIA findings, including analysis of the existing social and cultural area;
- Summarise for all stakeholders the potential positive and negative project impacts, proposed mitigation and management strategies, and implementation actions; and
- Promote an active and ongoing role for communities, local authorities and all levels of government through Project construction, operation and decommissioning.

1.2 OBJECTIVES

Shenhua takes a proactive and transparent approach to engaging the communities surrounding its projects. Since the Project's inception, the company has been developing solid relationships with affected landholders and residents in Emerald and surrounds.

Subsequently, Shenhua's objectives in implementing this SIMP are to:

- Maintain open and constructive stakeholder and community relationships throughout the life of the Project;
- Achieve stakeholder and community acceptance of and participation in the Project;
- Provide timely information to key stakeholders about project progress and initiatives;
- Ensure early identification, as well as effective and timely management, of potential issues;
- Minimise project delays resulting from stakeholder and community dissatisfaction;
- In conjunction with key stakeholders, develop sustainable communities and local businesses; and
- Protect Shenhua's social licence to operate.



1.3 STRUCTURE

The structure of this report is aligned with the Queensland Coordinator General's Social Impact Management Plan guidelines (September 2012) and comprises of eight sections, as detailed below:

- Project summary;
- Existing socio-economic environment;
- Stakeholder analysis;
- Stakeholder engagement;
- Social impact management;
- Social impact monitoring and evaluation; and
- Dispute resolution.

2.0 PROJECT SUMMARY

The proposed Taroborah Project will involve mining a resource of approximately 190 million tonnes of thermal coal, at an eventual rate of up to 2.28 Mtpa of run-of-mine (ROM) coal for the open-cut operation, and up to 5.75 Mtpa ROM for the underground mine. Coal will be processed onsite before being transported to Gladstone port. The Project has an estimated mine life of up to 24 years, including construction, commissioning, operation, decommissioning and rehabilitation periods.

Taroborah is currently managed under Mineral Development Licence No 467 (MDL467), which exhibits an area of 7,966 hectares (ha). Proposed major project activities will include:

- Open-cut mining, via hydraulic excavator and dump truck, in the southern part of the proposed mining area;
- Underground mining, via longwall mining extraction techniques, in the northern part of the proposed mining area;
- Processing of mined coal at a coal handling and preparation plant, including coal sizing, handling and washing; and
- Transporting of coal to the port of Gladstone via the Central West and Blackwater rail systems.

2.1 LOCATION

The Project site is located 22 kilometres (km) west of Emerald, in central Queensland (refer to Figure 1 for Project location details). The Project extends north and south of the Capricorn Highway and Central West rail system, and is entirely located within Central Highlands Regional Council boundaries.

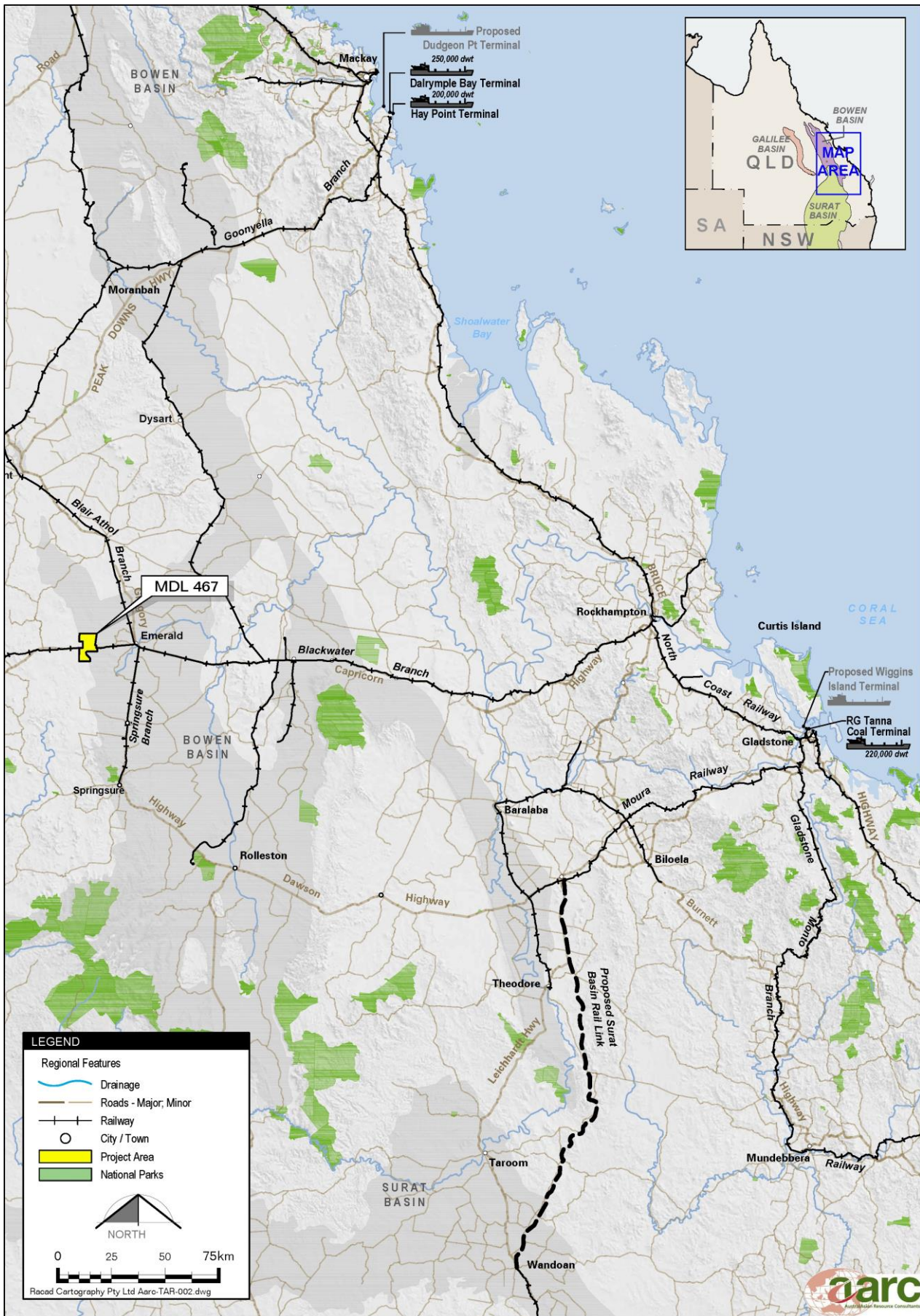


Figure 1: Taraborah Project Location

2.1.1 Social Impact Area

Three social impact study areas were created to ensure adequate coverage of the region and to provide up-to-date and accurate statistics for the Project area (refer to Table 1 for details of these study areas and associated Australian Bureau of Statistics (ABS) resident population data):

Table 1: Taroborah Study Areas

Study Area	2011 Census Title	2011 Population
Emerald	Emerald Statistical Area Level 2	13,218
Central Highlands	Central Highlands Local Government Area	28,715
Queensland	Queensland	4,332,739

Source: ABS 2011

The Emerald study area represents the major township nearest to the Project, while the Central Highlands Local Government Area (LGA) provides a broader view of regional localities.

2.2 WORKFORCE

The construction workforce is expected to peak at 150 employees. Wherever possible, priority will be given to people from local communities to join the construction workforce. However, it is expected that many workers will have to be sourced from outside the local area and operate on a drive-in / drive-out (DIDO) basis. These employees may require short-term accommodation in Emerald and will be bussed to and from the Project before and after their shifts.

Mine operations are expected to commence in 2018, with a peak operations workforce of approximately 350. The Project will operate on a 24-hour / seven-day-a-week basis. The open-cut operation will involve three rotating shifts of workers (two mining and one maintenance). Rosters are yet to be finalised, but it is expected that open-cut employees will work industry standard 12-hour shifts. The underground mine will support two 10-hour production shifts per day, with a third 8-hour shift dedicated to maintenance also proposed. During the operations phase, any non-local employees will operate on a DIDO basis, with many expected to ultimately choose to relocate to the area.

In addition to the permanent mine employees, a varying number of contractors will be used for undertaking intermittent and one-off tasks.

2.3 CONTRIBUTION TO REGIONAL DEVELOPMENT

In addition to multimillion-dollar capital expenditure, the Project will generate regional benefits including:

- Local training and employment opportunities;
- Local procurement opportunities;
- Flow-on benefits, such as improved roads and other government and community services; and
- Community investment.

3.0 EXISTING SOCIO-ECONOMIC ENVIRONMENT

The following sections provide a summary of the existing socio-economic environment encountered during the SIA.

3.1 SIA STAKEHOLDER ENGAGEMENT

In addition to Shenhua's and IMC's ongoing stakeholder liaison during the past few years, as part of the SIA process, AustralAsian Resource Consultants (AARC) implemented an engagement plan to keep the local community informed about key developments and timelines associated with the proposed project. The plan was also used to collect and analyse information about those social and cultural issues that are likely to have the most pronounced Project impacts upon local and regional stakeholders.

Specific initiatives included mail distribution to potentially affected stakeholders of a literature package containing a project fact sheet and reply-paid questionnaire. Additional copies of the information package were delivered personally to business owners, state government offices, local government representatives and general community members.

Face-to-face consultation with directly affected landholders was undertaken in November 2012, while a broader community information session was held in Emerald in May 2013, attracting some 150 attendees.

Shenhua has also implemented a quarterly community newsletter that is distributed throughout Emerald and its surrounds. The first edition of the *Taraborah Project Newsletter* was published in May 2013 and the second edition in September 2013. The Project's free-call number – 1800 647 446 – and E mail contact address has been in operation since April 2013; while, the Taraborah website is currently under construction so as to provide more timely and detailed information to stakeholders.

3.1.1 Project Fatigue

The perceived mining industry downturn has had significant impact on Bowen Basin communities, including Emerald. While there is potential for major Galilee Basin projects to come to fruition in the future, recent mine closures (i.e. Gregory open cut) have negatively impacted the Central Highlands economy, particularly in the areas of employment and real estate. Consequently, the general Emerald community opinion of the proposed Taraborah Project has been favourable. Residents believe that the Project has potential to inject economic positivity into the region through jobs and business involvement.

Subsequently, the phenomenon known as 'project fatigue' – where communities surrounded by high levels of resources development are subjected to numerous project and EIS consultation programmes – has not been a feature in Emerald or its surrounds.

3.2 LANDHOLDER PROFILE

The Project area and surrounds are used predominantly for cattle grazing and cropping. A small section of land in the northeast area of the MDL467 lease boundary has been designated by the Queensland Government as a Strategic Cropping Land Protection Area, although this land occurs as a sandstone ridge with moderate timber and is suitable only for cattle grazing. Other areas of land within the lease boundaries have been designated Strategic Cropping Land Trigger Areas.

Lot areas range from approximately 65 ha to more than 2,500 ha. A number of smaller allotments are utilised as retirement blocks / hobby farms, while the larger allotments are used for commercial



pastoral businesses. Five homesteads are located on properties within the MDL467 boundary; however, many of the other lots have no residence on site.

There are 21 properties within the Project's MDL467 boundary (either entirely or in part), with 11 registered owners, including Queensland Rail and the Department of Transport and Main Roads. Properties directly affected by the eventual Mining Lease will either be purchased by the proponent, or surface rights will be acquired where applicable. These arrangements will be subject to discussions with each affected landholder. Surface rights arrangements will provide the mining lease holder with use of the land for the term of the lease, with the land reverting to the original owner when the lease is relinquished by the proponent.

The number of families directly and indirectly affected by the proposed Project is estimated at 20, including:

- Nine families that are principal leaseholders under the Taraborah MDL;
- Two families resident on the properties located on the MDL; and
- Eleven families living on or owning properties adjacent to the MDL.

3.2.1 Cultural Heritage

Native title claimants for the proposed Project area are the Western Kangoulu People (lodged in May 2013 – Federal Court file number QUD229/2013) and Bidjara #7 People (lodged in November 2012 – Federal Court file number QUD644/2012). While no Native Title determination has been agreed over the region containing the Project, Shenhua has liaised directly with the Western Kangoulu People on cultural heritage issues since 2008, as they were previous claimants.

A cultural heritage map of Queensland indicates three sites of Indigenous cultural heritage value located within the general vicinity of the Project site. Two are identified as 'story places or cultural sites', and the third is classified as 'engravings and paintings'. They are all located south of Lake Maraboon, approximately 20 km south of the Project site.

A recent field assessment of Aboriginal archaeological places and artefacts was conducted by the Western Kangoulu People in conjunction with Cultural Heritage Management Australia in September 2013 within MDL467 and south of the Capricorn Highway. This field assessment was conducted across specific areas of the site that will be impacted by the Project, in order to identify items of Aboriginal cultural heritage, record and assess three previously recorded sites, salvage as many artefact scatters or isolated artefacts as possible and develop a set of detailed management recommendations for Aboriginal cultural heritage values.

The Project's Historic Heritage Management Plan also identified seven non-Indigenous cultural heritage sites during a field survey that was conducted in November 2011. None of these sites were assessed as demonstrating significance at a State or local level, as set against criteria provided in Section 35 of the *Queensland Heritage Act 1992*.

Consequently, it is not anticipated that Project activities will have an adverse impact on sites of significant Indigenous or non-Indigenous cultural heritage.

3.3 COMMUNITY PROFILE

The Central Highlands was originally home to many Indigenous peoples, including the Western Kangoulu People, who are registered Native Title claimants over the area where the proposed Project will be located.



The region's European roots are tied to a rural lifestyle; however, this is changing with the economic diversity that the expanding mining and construction industries are bringing to the area. A number of landholders who will be impacted by the Project have endured and survived years of rural hardship, including a prolonged period of drought, and the prospect of having to share their land (and especially their water supply), with a mining operation, is unpalatable to many of them.

The transition from a traditional agricultural profile to a combination of mining and agricultural industries is a key social, cultural and employment consideration. Some local stakeholders have expressed concerns about potentially disparate values when combining traditional agricultural populations with mining populations. Concerns were also expressed that the lure of highly-paid mining salaries would cause employment transition away from traditional industries and hence, result in a loss of identity for the region.

Direct community consultation and the Central Highlands 2022 Community Plan revealed that local residents value their relaxed lifestyle, safe environment, friendly people, involvement in sports, high level of volunteerism, and that their environment is a good place to raise children.

Queensland Police statistics for Emerald (over a five-year period) indicated that there has been a general downward trend in offences against the person (homicide, assault, sexual offences, etc.). Assaults dropped in number from 71 to 58 since 2007, while sexual offences decreased by 45% over the same period. Conversely, during the past five years, unlawful entries and general theft offences increased by 17% and 62% respectively.

Council prioritised various key infrastructure and community service goals for the region, including:

- Planning and delivering a regional road network that is well maintained and interconnected for safe and effective movement of people and products;
- Developing and maintaining reliable, affordable and integrated regional transport services, networks and systems including public transport options;
- Planning for and providing access to reliable, affordable high-speed telecommunication systems and services;
- Planning and delivering energy and power to meet economic development, community and environmental requirements; and
- Planning and providing for land availability to deliver a diverse range of quality housing and accommodation options for people living in or relocating to the region.

Emerald is an important education centre for the region, serviced by three state primary schools, a state secondary school, three independent colleges and the Capricorn School of Distance Education. The Gemfields region is serviced by the Anakie State School, which opened in 1885. Emerald also offers tertiary educational facilities such as Technical and Further Education (TAFE), university and the Emerald Agricultural and Pastoral College.

Childcare facilities in Emerald are under pressure, as demand for places significantly exceeds supply. Emerald currently has an estimated waiting list of more than 400 children requiring childcare places. Availability in day-care for babies and toddlers (0 years to 2 years) is a particular problem.

Health services across the study areas appear adequate, although fly-in fly-out (FIFO) employees who work at local mines have been placing pressure on hospital facilities for non-emergency situations. In addition, the local ambulance service is grossly undermanned, mostly as a result of the two-tier economy, where affordability of housing and cost of living in the region have traditionally precluded those residents who do not work within the mining industry.

A good standard of sport and recreational facilities is currently available in the region. These facilities play an important role in the way of life and connection to the outdoors that is evident across the region.



Emerald is serviced by plane, train and bus services into and out of the region. The increasing level of traffic on the highway is problematic and is exacerbated by a rise in light-vehicle traffic volumes created by DIDO activities between coastal centres and the mining towns. The State Government has committed \$100 million to maintaining and improving the Capricorn Highway from 2011 to 2014.

Competitively-priced housing is an ongoing issue in mining-affected communities, where higher-than-average salaries have had a flow-on effect in terms of house prices. Inflated house prices and rentals have had a negative impact on those who are not employed by the mining industry. The downturn in the mining industry has potentially reversed this trend. Additionally, the Central Highlands Regional Council is planning to implement an affordable housing program, which could future-proof the region.

Central Queensland Indigenous Development (CQID) was established in November 2004 as a not-for-profit organisation responsible for regional coordination and management of the region's Community Development Employment Projects (CDEP) program. CQID coordinates and delivers services in Indigenous training and employment, child safety, community support, family support, alcohol and other drugs services, community and economic development projects. CQID has offices in the communities of Rockhampton, Gladstone, Emerald, Woorabinda, Longreach and Bundaberg.

There will be a shift in the industry profile of the region, as more people are employed in the resource industries. The traditional industries – agriculture, fisheries and forestry – will continue to be important employers in the study areas, but a more diverse economy will create new jobs and a need for different skills sets. Employment opportunities in construction, manufacturing, tourism, education, training and the retail trade, already important to the region, should strengthen. Significantly, the equal opportunity policies practiced by mining and associated industries will provide more job opportunities for women.

Agriculture, resources, tourism and construction account for the largest number of businesses in the region, and contribute significantly to the Gross Regional Product (GRP). In 2010 / 11, the Central Highlands regional economy contributed \$4.56 billion to the state. Of this total, the mining industry accounted for 70%, contributing \$3.2 billion, despite the low percentage of registered mining businesses.

3.4 DEMOGRAPHIC PROFILE

In 2011, Emerald had a resident population of 13,576, which represented approximately 46 % of the broader Central Highlands LGA population (29,533). The Queensland Office of Economic and Statistical Research population projections to 2031 indicated that Emerald will grow by an average annual rate of three per cent over the 20-year period from 2011.

On 2011 Census night, counted populations were higher than resident populations in all study areas. While Emerald and Queensland experienced modest visitor influxes at 5.8 % and 2.9 % respectively, Central Highlands showed a 17.5 % increase. Further research indicated that communities such as Blackwater and the Gemfields were significant contributors to the larger regional enumerated population. There was a notable increase in enumerated males aged 25 to 64 in the Central Highlands region, potentially indicating FIFO / DIDO employees; as well as an increase in counted 65 to 74-year-old males and females, which could represent grey nomads.

The local government area had more male than female residents, and an age structure that followed the same general trend as Queensland. In 2011, the key differences were in the 0 – 9 and 25 – 34 age groups, where Emerald and Central Highlands were up to three per cent above the Queensland average.

Both regional study areas recorded significantly lower ethnic-diversity characteristics than for Queensland. According to the 2011 Census, 78.3 % of Emerald residents were born in Australia; while 80.6 % of Central Highlands residents were Australian born.



Both Emerald and Central Highlands featured significantly more mobility (over five years) than Queensland, with Emerald at 56.9 % and the broader regional area at 49.5 %.

About one third of Emerald and Central Highlands residents earned a gross income of \$1,000 per week or more in 2011 (35.8 % and 33.7 % respectively). This was in comparison to Queensland, where less than one quarter of the population was in this income bracket (22.4%). Only 14.8 % of Emerald households earned less than \$1,000 per week, compared to Central Highlands at 21.4 % and Queensland at 36.9 %.

A lower number of people with a disability were recorded across the Central Highlands than for Queensland. At the time of the 2011 Census, there were 636 Central Highlands residents in need of assistance for a profound or severe disability, which equated to 0.33 % of the Queensland population of individuals with a disability.

There are positive health and wellbeing indicators for Emerald and the Central Highlands region, including:

- A major emergency hospital with good service offerings in Emerald, as well as hospitals in Blackwater and Springsure;
- Queensland Ambulance Service (QAS) stations in Emerald, Anakie, Blackwater, Capella, Duaringa, Springsure and Tieri; and
- In 2011, just 2.2 % of Central Highlands residents were in need of assistance with a profound or severe disability.

In 2011, the majority of Emerald and Central Highlands students were in primary school (34.2 % and 33.9 % respectively), which was in line with Queensland statistics (29.6 %). For those leaving or who had left school, 46.3 % of Emerald residents had achieved Year 12 or equivalent, compared to 41.2 % for Central Highlands and 48.0 % for Queensland. Some 35.5 % of the Emerald population aged 15 years and over had a tertiary qualification, compared to 32.1 % for Central Highlands and 36.5 % for Queensland. Across all study areas, engineering and related technologies was the most popular tertiary field in 2011.

At 2.2 %, 2011 Emerald and Central Highlands unemployment rates were more than half that of Queensland (5.5 %). The main industry of employment for the regional study areas was mining, with Emerald at 22.6 % and Central Highlands at 26.0%, compared to all of Queensland at 2.6 %. All regional study areas had higher proportions of managers, technicians and trades workers, and machinery operators and drivers, indicative of the area's prevalent mining industry.

3.5 INDIGENOUS DEMOGRAPHIC PROFILE

At the time of the 2011 Census, there were 1,021 persons in the Central Highlands LGA who stated that they were of Indigenous origin – 441 of these resided in Emerald. This equated to 3.3 % and 3.6 % of the general Emerald and Central Highlands populations respectively.

The median age across all study areas indicated a young Indigenous population. Almost half of Emerald, Central Highlands and Queensland Indigenous residents were 19 years or younger in 2011; while only 8.8 % of Emerald's Indigenous residents were 50 years or older, compared to Central Highlands (11.0 %) and Queensland (13.2 %).

Indigenous individual incomes in Emerald and Central Highlands in 2011 featured significantly more in the \$1,000+ earnings bracket than in Queensland. Respectively, 48.7 % and 47.4 % of Emerald and Central Highlands Indigenous residents earned \$600 or more per week, compared to 30.5 % for Queensland.

Indigenous households in Emerald and Central Highlands were more affluent than those across Queensland. In 2011, some 32.2 % and 31.4 % of Emerald and Central Highlands Indigenous households earned \$2,500 or more per week, which was commensurate with general population household incomes in these study areas (39.8 % and 35.2 % respectively). In contrast, only 10.1 % of Queensland Indigenous households were in this income bracket.

At the time of the 2011 Census, there were 29 Indigenous persons in need of assistance for a profound or severe disability across the Central Highlands LGA, which equated to 0.4 % of the Queensland Indigenous population of people with a disability.

In 2011, the majority of Queensland's Indigenous students were in primary school, with Emerald and Central Highlands (34.9 % and 43.0 %) in line with Queensland statistics (39.9 %).

Some 35.3 % of Emerald's Indigenous residents had completed Year 12 or equivalent in 2011, compared to 35.7 % for Central Highlands and 29.7 % for Queensland.

In 2011, 24.0 % of Queensland's Indigenous population had achieved tertiary qualifications, compared to 36.5 % for the general population. The majority of tertiary qualified Indigenous persons in the study areas had achieved certificate level.

Indigenous unemployment in Queensland was at 18.0 % in 2011. Indigenous unemployment figures for Emerald and Central Highlands were significantly lower at 7.7 % and 8.0 % respectively. All study areas' Indigenous employment rates were more than one-third higher than for their corresponding general populations.

In 2006, the largest industry of Indigenous employment in the Central Highlands LGA was mining (20.6 %), while 'labourer' was the most prevalent profession in all study areas: 24.8 % in the Central Highlands and 26.6 % in Queensland.

3.6 HOUSING AND ACCOMMODATION PROFILE

In all study areas, two-person households were the most common habitation profile, averaging almost 33 % of all households. Emerald's next most common household structure was four persons, while single-person households were prevalent in the Central Highlands LGA and Queensland.

In 2011, there were 7,698 separate houses in the Central Highlands LGA (3,176 of them in Emerald), representing 68.0 % of all private dwellings, compared to the Queensland figure of 70.4 % for separate houses. Central Highlands had the highest rate of unoccupied dwellings at 20.7 %, followed by Emerald at 16.4 %. Some 56.0 % of Emerald residents owned their dwelling (outright or through mortgage), compared to 51.6 % for Central Highlands and 63.5 % across the state.

Across all study areas, \$1,800 - \$2,399 was the most common monthly mortgage repayment bracket in 2011. Only 6.0% of Emerald residents paid mortgages of less than \$1,000 per month, compared to 13.4 % in Central Highlands and 17.3 % across the state.

From 2007 to 2012, median house prices increased in Emerald by 26.0 % (including a 2.2 % decrease in 2008), while median unit prices increased by 23.2 %. However, the median house price dropped to \$425,000 in February 2013 – a fall of 7.8 % in 12 months. Median unit prices fell 16.9 % during the same period. While there are many more houses currently available for sale in Emerald than a year ago, prices have reduced, with current averages for a three-bedroom house and land package at around \$400,000.

In 2011, Central Highlands had the highest proportion of rented properties at 44.4 %, followed by Emerald at 41.9 %.

Data for 2011 land valuations (released in March 2012), indicated that Emerald land values had increased by 15.4 % since the previous year (from \$117,000 to \$135,000). In addition, the broader Central Highlands LGA experienced a greater land value increase of 30.5 %. In the year ending June quarter 2012, the median sale price of vacant land in the Central Highlands LGA was \$160,000.

At the 2011 Census, 3.4 % of Emerald renters were paying \$650 or more per week, compared to 3.9 % for Central Highlands and 2.0 % for Queensland. Central Highlands had the highest proportion of households paying less than \$200 per week, followed by Emerald at 30.4 % and Queensland at 23.2 %. According to local real estate agents, Emerald's rental property market has changed significantly during the past year. Mid 2011, there were one or two rentals available at most, whereas currently there are more than 24. Typically, a four-bedroom rental house that was attracting \$700 per week, is now advertised for \$560.

A traditional concern for many regional communities is the impact of additional and well-remunerated mining industry workers upon housing affordability. By tracking median house prices against wages and salary information, an housing affordability index can be generated for Emerald, for comparison with other mining and non-mining Queensland communities. While house prices in Emerald are robust, they remain affordable compared to nearby towns and major cities when expressed as a multiple of mean income. The index shows that houses in Emerald are 16.2 % more affordable than in Moranbah, 25.8 % more affordable than in Townsville and 34.2 % more affordable than houses in Brisbane.

In the 12 months to 30 September 2012, there were 432 dwelling units in new residential buildings approved in the Central Highlands LGA (300 in Emerald), with a total value of \$96.5 million (\$63.9 million for Emerald). Emerald has no obvious development constraints, since there is good availability of appropriately zoned vacant-blocks and a solid number of existing houses available for purchase or rental.

Housing availability is also a key mining community concern. However, in addition to the fact that many existing houses are coming onto the market as a result of the mining industry downturn, there is an abundance of developed land and 'house and land' packages available in new estates such as 'Mayfair Ridge' with 500 lots and 'Highfields' with 1,000 lots. If current developments come to fruition, Emerald could increase its housing and unit stock by more than 50 %, from 3,843 (2011 Census) to almost 6,000. When compared to Emerald's projected resident population growth by 2021 (42.6%) and coupled with the coal industry downturn, it appears that Emerald will not suffer from short to medium-term housing availability pressure.

According to the Queensland Government's *Bowen Basin Population Report 2012*, the camp / village was the predominant non-resident worker (NRW) accommodation type across the Bowen Basin (as at June 2012) housing some 22,150 shift workers (88.0 %). Hotels / motels (8.0 %), caravan parks and other accommodation (3.0 %) constituted the balance of employee housing in the region. In the Central Highlands LGA, 79.7 % of NRWs resided in camps, with a total capacity of 27,565 beds. Overall availability of Bowen Basin camp accommodation was relatively low at 6.9 %; while the Central Highlands' 510 available beds equated to 8.7 % capacity. Central Highlands hotels and motels had 6.7 % availability in 2012, due to NRWs, contractors and associated workers making use of the accommodation on a long-term basis.

Taraborah employees sourced from outside the region will either relocate to the local community (Emerald) or operate on a DIDO basis, requiring short-term accommodation in Emerald while working their shifts.

The Queensland Government has a number of long-term social houses available for rent to low-income families that are based in Emerald and the Gemfields; however, there is a long waiting list for such properties. The Central Highlands Regional Council provides senior residents with social accommodation in both Emerald and the Gemfields. While there is a waiting list for the 26 units in Emerald, three of 11 units are currently available in Anakie for Gemfields seniors. A further six units are available in Emerald for youth accommodation; while Anglicare manages five houses in Emerald for crisis / emergency accommodation. There are no current vacancies for the Anglicare houses, which are also owned by the Queensland Government.

4.0 STAKEHOLDER ANALYSIS

The following table summarises Taroborah's key stakeholders and their specific impact areas of interest.

Table 2: Key Stakeholders and Impact Areas

Stakeholder	Impact Area
Federal Government	
Key portfolios	<ul style="list-style-type: none"> • Economic flow-on effect of project • Regional economic development • Federal road network
State Government	
Department of Aboriginal and Torres Strait Islander and Multicultural Affairs	<ul style="list-style-type: none"> • Pressure on general and Indigenous community services • Local training and employment opportunities (including Indigenous) • Housing affordability and availability • Cultural heritage
Department of Agriculture, Fisheries and Forestry	<ul style="list-style-type: none"> • Impact on agricultural industries
Department of Communities, Child Safety and Disability Services	<ul style="list-style-type: none"> • Social order • Pressure on general and Indigenous community services • Pressure on local community organisations • Housing affordability and availability
Department of Community Safety and the Queensland Police Service <ul style="list-style-type: none"> • Emergency Management Queensland • Queensland Ambulance Service • Queensland Fire and Rescue Service • Queensland Corrective Services • Queensland Police 	<ul style="list-style-type: none"> • Changing demographic profile (i.e. increased population) • Pressure on emergency services • Social order • Road safety • Project safety
Department of Education, Training and Employment	<ul style="list-style-type: none"> • Education programs • Pressure on education resources • Pressure on childcare services • Traineeship and apprenticeship programs • Local training and employment opportunities (including Indigenous)
Department of Energy and Water Supply	<ul style="list-style-type: none"> • Local water source impact
Department of Environment and Heritage Protection	<ul style="list-style-type: none"> • Cultural heritage • Environmental impact
Department of Housing and Public Works	<ul style="list-style-type: none"> • Housing affordability and availability

Stakeholder	Impact Area
Department of Natural Resources and Mines	<ul style="list-style-type: none"> Regional economic development Cumulative impacts / benefits Pressure on regional infrastructure (i.e. rail) Housing affordability and availability Local training and employment opportunities Impact of DIDO workforce Project safety
Department of State Development, Infrastructure and Planning	<ul style="list-style-type: none"> Cumulative impacts / benefits Regional economic development Pressure on regional infrastructure Local business (procurement) opportunities
Department of Tourism, Major Events, Small Business and the Commonwealth Games	<ul style="list-style-type: none"> Impact on tourism industry Local business (procurement) opportunities
Department of Transport and Main Roads	<ul style="list-style-type: none"> Pressure on local road networks, and road access and upgrade requirements Pressure on rail services
Queensland Health	<ul style="list-style-type: none"> Changing demographic profile (i.e. increased population) Pressure on health services
Local Government	
Central Highlands Regional Council (CHRC) CHRC Councillors	<ul style="list-style-type: none"> Regional economic development Pressure on regional infrastructure Cumulative impacts / benefits Changing demographic profile (i.e. increased population) Impact on community identity and values Pressure on local education providers Pressure on childcare services Pressure on local health services Social order Pressure on local road networks and road access and upgrade requirements Pressure on local infrastructure and services (water, waste, public transport, public space) Local business (procurement) opportunities Impact on other industries (agriculture, tourism, etc.) Local training and employment opportunities Housing affordability and availability Regulatory controls for temporary/workforce accommodation Impact of DIDO workforce Environmental impact

Stakeholder	Impact Area
Landholders	
Directly impacted landholders	<ul style="list-style-type: none"> • Land use • Land access • Impact on community identity and values • Impact on property value / livelihood - land purchase / lease negotiations and compensation arrangements • Property security • Psychological impact • Environmental impact (noise, dust, lighting, visual impact, weed and pest management) • Safety and access impacts of road closures, road upgrade requirements and increased traffic • Local training and employment opportunities • Access to information • Mine closure / rehabilitation
Indirectly impacted landholders	<ul style="list-style-type: none"> • Impact on community identity and values • Impact on property values • Property security • Environmental impact (noise, dust, lighting, visual impact, weed and pest management) • Safety and access impacts of road closures, road upgrade requirements and increased traffic • Local training and employment opportunities • Access to information
Western Kangoulou People	<ul style="list-style-type: none"> • Impact on community identity, values and wellbeing • Cultural heritage • Local training and employment opportunities • Access to information
Community Services and Organisations	
Health services <ul style="list-style-type: none"> • Emerald hospital • General practitioners • Dentists • Allied services • Aged-care facilities 	<ul style="list-style-type: none"> • Changing demographic profile (i.e. increased population, change in age or gender structure) • Pressure on services • Safety and access impacts of road upgrade requirements and increased traffic • Impact of DIDO workforce
Education services <ul style="list-style-type: none"> • Schools • Tertiary education providers • Training organisations 	<ul style="list-style-type: none"> • Changing demographic profile (i.e. increased population) • Pressure on services
Community organisations	<ul style="list-style-type: none"> • Changing demographic profile (i.e. increased population) • Impact on community values, lifestyle and culture

Stakeholder	Impact Area
	<ul style="list-style-type: none"> • Pressure on services • Low-cost housing availability • Social order • Local training and employment opportunities • Environmental impacts • Social investment opportunities (i.e. sponsorships)
Community	
Emerald residents	<ul style="list-style-type: none"> • Cumulative impacts / benefits • Impact on community identity and values • Pressure on education resources • Pressure on childcare services • Pressure on health services • Pressure on emergency services • Social order • Pressure on local road networks • Safety and access impacts of road upgrade requirements and increased traffic • Pressure on local infrastructure and services • Pressure on local community organisations • Local training and employment opportunities • Housing affordability and availability • Impact of DDO workforce • Environmental impact • Access to information
Indigenous communities and organisations	<ul style="list-style-type: none"> • Impact on community identity and values • Pressure on Indigenous community services • Local Indigenous business (procurement) opportunities • Local training and employment opportunities • Housing affordability and availability • Access to information
Local Business and Industry	
Other resources proponents	<ul style="list-style-type: none"> • Regional economic development • Cumulative impacts / benefits • Competitive employment market
Local businesses Central Highlands Development Corporation (CHDC)	<ul style="list-style-type: none"> • Regional economic development • Cumulative impacts / benefits • Changing demographic profile (i.e. increased income) • Pressure on childcare services • Pressure on local infrastructure and services (water, waste, public transport, public space) • Local business (procurement) opportunities

Stakeholder	Impact Area
	<ul style="list-style-type: none"> • Impact upon other industries (agriculture, tourism, etc) • Local training and employment opportunities • Competition for local labour • Housing affordability and availability • Impact of DIDO workforce
Queensland Resources Council	<ul style="list-style-type: none"> • Cumulative impacts / benefits • Local training and employment opportunities • Sustainable resources industry development • Taxes and royalties • Impact of DIDO workforce • Project safety
Project	
Employees	<ul style="list-style-type: none"> • Pressure on health services • Pressure on emergency services • Impact of DIDO work arrangement (including camp accommodation and roster system) • Road safety • Project safety

5.0 ONGOING STAKEHOLDER ENGAGEMENT

Shenhuo has been consulting with Taraborah stakeholders for a number of years and will continue to do so. Ongoing engagement will be undertaken to agree and finalise project SIMP objectives and mitigation strategies with the following stakeholders:

- Central Highlands Regional Council (CHRC);
- Industry Capability Network Qld (ICN);
- Landholders (including Traditional Owners);
- Local community organisations;
- Local community services;
- Local businesses and industry groups;
- Queensland Department of Aboriginal and Torres Strait Islander and Multicultural Affairs;
- Queensland Department of Agriculture, Fisheries and Forestry;
- Queensland Department of Communities, Child Safety and Disability Services (DCCSDS);
- Queensland Department of Education, Training and Employment (DETE);
- Queensland Department of Energy and Water Supply;
- Queensland Department of Environment and Heritage Protection (DEHP);
- Queensland Department of Housing and Public Works;
- Queensland Department of Natural Resources and Mines;
- Queensland Department of Police and Community Safety;
- Queensland Department of State Development, Infrastructure and Planning (DSDIP);
- Queensland Department of Transport and Main Roads (DTMR);
- Queensland Health;
- Queensland Rail (QR);
- Queensland Resources Council (QRC); and
- Training Queensland.

This consultation will generally be facilitated through the Project's Community Reference Group.

5.1 COMMUNITY LIASON OFFICER (CLO)

The Project team will include the role of Community Liaison Officer (CLO) to oversee all stakeholder integration and communication processes. The incumbent will reside in Emerald and will be responsible for implementing, monitoring, evaluating and reporting on SIMP performance. This will include a vital contribution to the enquiries / complaints management and conflict resolution processes, detailed in Section 8.

5.2 COMMUNITY CONSULTATION COMMITTEE

Shenhua will establish and facilitate the Taroborah Community Consultation Committee (CCC), which will comprise of representatives from a number of the aforementioned stakeholders. The CCC's purpose will be to explore specific project-related impacts and general community wellbeing, and to consider appropriate mitigation and opportunity strategies in response. The group will meet quarterly and will act as a conduit between the Project and its key stakeholders, for information sharing, review and feedback.

Development of a charter, terms of reference and membership structure, as well as objectives and strategies, will be undertaken by Shenhua prior to the establishment of the CCC. It is intended that nominations be held biennially to allocate positions on the CCC and that make-up of the group will reflect the diversity of project stakeholders.

The CCC will also provide advice regarding the Taroborah Community Investment Program (CIP), which will provide funding opportunities for community groups and charitable organisations in the region.

5.3 GENERAL COMMUNICATION

Transparent and regular liaison will be the cornerstone of Shenhua's ongoing stakeholder engagement strategy. To maintain this approach and to meet its social impact management objectives, the company will employ the following broad communication tools:

Newsletter

Shenhua will continue to communicate Project updates and initiatives, CCC progress and other such information to stakeholders via the *Taroborah Project Newsletter*.

1800 Number

Shenhua has an open contact policy and welcomes persons to contact the company via its toll-free number: 1800 647 446.

Enquiries and Complaints Management Process

A formal enquiries and complaints process will be established to respond to stakeholder feedback about any operational procedures or issues relating to Taroborah development (refer to Section 8 for details).

Notifications

For specific land access, traffic management or other notification requirements, Shenhua will communicate with directly affected stakeholders in writing.

Local Media

All notification information, as above and including CIP sponsorship opportunities, and business and employment opportunities, will be advertised through local media outlets to ensure appropriate stakeholder reach.



Site Tours and Events

Tours of the Project will be conducted for key stakeholder groups to provide firsthand information and to engender trusting and transparent relationships between Shenhua and local stakeholders. The tours will be held regularly and will be tailored for each individual tour group (i.e. landholders, local government, schools and broader community members).

Various major events will also be held to support Shenhua's commitment to integrating with community life. These may include family fun days, charity events and support of existing community celebratory initiatives.

5.4 TARGETED COMMUNICATION

In addition to the above general communication tools, Shenhua will tailor a specific engagement strategy for each key stakeholder group as follows:

5.4.1 Government

As well as working with state and local government to achieve CCC objectives, Shenhua will work with CHRC and relevant state government departments to progress such community interests as local employment, improved community services, traffic management and various Project approvals.

5.4.2 Landholders

Shenhua will encourage landholder participation in the CCC and will support the Taraborah CLO in maintaining regular one-on-one contact with directly affected stakeholders. The CLO will also ensure that all landholder (and general community) enquiries and complaints are managed in a fair and timely manner (refer to Section 8 for details).

5.4.3 Community

The CCC will be used to maintain an ongoing dialogue with community stakeholders that will underpin future discussions on the impacts associated with the Project and to develop partnerships that will add value to local communities. This approach will also cover CIP opportunities (such as sponsorships and donations), on which the CCC will provide advice to Shenhua when appropriate.

5.4.4 Indigenous Communities

Shenhua will continue to work with representatives of the Western Kangoolu community to finalise a Cultural Heritage Management Plan for the Project. Where possible, the company will also be looking to Indigenous representatives and associated organisations to identify and realise Indigenous training and employment opportunities at Taraborah. Additionally, as part of Taraborah's Indigenous engagement intent, Aboriginal (specifically Western Kangoolu) history and traditions will be included in employee induction materials.

5.4.5 Business and Industry

With input from the CCC and ICN, Shenhua will develop a Local Content Plan that will include identifying existing local business capacity to participate in the project (through procurement), and developing strategies to address any capacity gaps. The company will also assess any opportunities to support local businesses to participate in the Project. The CCC will also play a crucial role in impact



identification and mitigation development, including but not limited to the areas of traffic management, non-resources industries and competition for labour.

5.4.6 Employees and Contractors

Employees will be encouraged to act as advocates for the Project, whether they reside locally or operate on a DIDO basis. This will include a comprehensive induction process comprising a strict code of conduct (in line with community values). Employees will also be requested to participate in community safety, land access, and enquiries / complaints management training.

More broadly, staff will be encouraged to participate in community life and integrate with local residents through community service organisations (e.g. school Parents and Citizens Associations, Country Women's Association, Lions, Rotary, Apex, etc.) and sporting organisations. Additionally, the site management team will be encouraged to reside in the community.

6.0 SOCIAL IMPACT MANAGEMENT

In addition to stakeholder engagement initiatives, a number of Project mitigations and opportunities were identified in the Taroborah SIA. The following table details implementation strategies for key mitigations and opportunities, as well corresponding performance indicators, timeframes and responsibilities. Each strategy will be developed into a full implementation plan post project approval but prior to project start-up.

Table 3: Summary of Taroborah SIMP Actions

Action	Performance Indicator	Timeframe*	Responsible Party
6.1 CUMULATIVE IMPACTS/REGIONAL DEVELOPMENT <p>The regional study areas have been impacted by intensive coal mining, construction and exploration since the mid-1970s. There are many operating mines in the region, along with many more proposed operations. Combined, these projects will potentially put strain on local roads, community infrastructure and housing affordability and availability. While the recent mining industry downturn has created uncertainty around both existing and potential mining projects, there is still a requirement for long-term management of cumulative impacts and regional growth.</p> <p>A key role of the Taroborah Community Consultation Committee (CCC) will be to identify and where possible contribute to addressing cumulative impacts jointly with other CCC members, such as key government, business and community stakeholders.</p>			
CCC to assist Shenhua to contribute to managing cumulative impacts in line with the Qld Department of State Development and Infrastructure Planning's guide to <i>Managing the impacts of major projects in resource communities</i> , July 2013.	<ul style="list-style-type: none"> Joint industry, government and community approach to managing local cumulative impacts 	1 year Ongoing	Shenhua, DSDIP, other proponents
Through the CCC, investigate opportunities to access government funding (e.g. Royalties for Regions) to address cumulative impacts.	<ul style="list-style-type: none"> Funding submissions produced Funding secured 	1 year Ongoing	Shenhua
CCC to assist Shenhua's understanding of regional planning issues that may be relevant to the company and where the company could contribute to potential solutions. The CCC to also advise Shenhua on any specific issues research to inform SIMP initiatives and to identify potential relevant regional planning projects in line with the Central Queensland Regional Plan	<ul style="list-style-type: none"> Research completed; opportunities identified and assessed 	1 year Ongoing	Shenhua, DSDIP, other proponents

Action	Performance Indicator	Timeframe*	Responsible Party
With assistance from the CCC, identify opportunities to support realisation of objectives in CHRC's 2022 Community Plan. Within the Plan's five desired outcomes – resourceful vibrant community, integrated quality infrastructure, diverse prosperous economy, healthy natural environment and proactive open governance – there are a number of areas that Shenhua could consider to contribute to community wellbeing. These include in the areas of community safety, improved transport infrastructure, business mentoring and environmental protection projects	<ul style="list-style-type: none"> Contribution towards CHRC achieving Community Plan objectives 	1 year Ongoing	Shenhua, CHRC
Communicate CCC outcomes and project progress to the broader community	<ul style="list-style-type: none"> Community awareness of, participation in and satisfaction with CCC performance 	9 months Ongoing	Shenhua

6.2 COMMUNITY SAFETY AND WELLBEING

Potential impacts on local demographics (e.g. changes in age and gender structures), community values, recreation and leisure pursuits, social order (e.g. impact of non-resident workers) and public safety (particularly road safety) combine to inform Shenhua's community safety and wellbeing strategy. This section has been divided into three main action plans around community integration, community investment and community safety.

Community Integration

Through the CCC, monitor and where possible, mitigate impacts of demographic changes such as gender imbalance, aged care for potential increased ageing population, skills shortages for non-resource businesses, etc.	<ul style="list-style-type: none"> Demographic changes identified and mitigation strategies put in place 	1 year Ongoing	Shenhua, CHRC
Gain increased understanding of community values and lifestyle ideals through direct information gathering.	<ul style="list-style-type: none"> Community satisfaction with level of project integration 	6 months Ongoing	Shenhua, CHRC
Encourage Taraborah employees to relocate to the local area. Assess and then implement incentive initiatives, such as high-quality, family friendly accommodation and housing, salary incentives, Employee Assistance Program, etc.	<ul style="list-style-type: none"> Maximised numbers of employees residing locally 	6 months / 18 months Ongoing	Shenhua
Encourage project personnel to integrate with the local community through participating in community and sporting organisations. Implement volunteer program, where employees support local not-for-profit organisations during work hours.	<ul style="list-style-type: none"> Maximised participation in community organisations Community satisfaction with level of personnel participation 	6 months Ongoing	Shenhua

Action	Performance Indicator	Timeframe*	Responsible Party
Community Investment			
Implement the Taroborah CIP. Ensure operational transparency through seeking advice on the CIP charter and selection process from the CCC. Commit an annual budget and communicate to all concerned. Notify CIP opportunities using local media.	<ul style="list-style-type: none"> CIP established Charter and selection processes tabled with CCC 	6 months	Shenhua
With advice from the CCC, implement CIP opportunities via an 'identification, evaluation and selection' process. Focus on key local concerns such as community services, childcare and public safety.	<ul style="list-style-type: none"> Community participation in CIP 	9 months Ongoing	Shenhua
Ensure transparency of the program through annual reporting to the CCC	<ul style="list-style-type: none"> CIP report to at least one CCC meeting per year 	1 year Ongoing	Shenhua
Assess opportunities to partner with key community organisations to maintain local community and Indigenous services.	<ul style="list-style-type: none"> Community satisfaction with community services 	2 years Ongoing	Shenhua
Community Safety			
Work with Emerald Police to monitor any Taroborah impact on social order and then implement behaviour-based solutions (refer to Section 6.67 Employee Engagement for details).	<ul style="list-style-type: none"> Social order impacts identified and fully mitigated (refer to Section 6.7 for employee behaviour mitigations) 	Start-up Ongoing	Shenhua, Emerald Police
Implement comprehensive Traffic Management Plan and accompanying community notification system, with support from road agencies and emergency services. Ensure that any traffic changes / road closures are clearly communicated: via mail to directly affected stakeholders and published in local media for broader notification.	<ul style="list-style-type: none"> Traffic Management Plan implemented Zero traffic incidents on public roads Community satisfaction with notification times and information Community satisfaction with level of disruption 	Before project start-up Ongoing	Shenhua, CHRC, DTMR, emergency services
Implement employee safety education and awareness programs (including driver training, social impact awareness, etc.) with support from local emergency services.	<ul style="list-style-type: none"> Safety education program developed and implemented Zero traffic-related incidents on public roads 	3 months Ongoing	Shenhua, emergency services
Assess development of a recreational driver training program, particularly with respect to engaging with wide and heavy loads. Communicate program via local media.	<ul style="list-style-type: none"> Program implemented and communicated 	1 year Ongoing	Shenhua, local tourism companies

Action	Performance Indicator	Timeframe*	Responsible Party
6.3 COMMUNITY INFRASTRUCTURE AND SERVICES <p>The majority of Emerald's considerable community facilities and services are coping with current demand and it is not expected that Taroborah's small workforce will have any significant impact upon service capacity. However, there are some services that broadly require attention, such as childcare, health services and roads, which can be considered through the CCC.</p>			
Through the CCC, investigate opportunities to access government funding (e.g. Royalties for Regions) to improve local services and infrastructure.	<ul style="list-style-type: none"> Funding submissions produced Funding secured 	1 year Ongoing	Shenhua
Education and Childcare			
Within the CCC, consider current childcare needs and if appropriate, support community strategies to attract childcare services to the region	<ul style="list-style-type: none"> Appropriate number of providers in Emerald 	18 months Ongoing	CCC, Shenhua, CHRC
Health and Emergency Services			
Within the CCC, work with health and emergency services providers to identify and mitigate any impacts on health infrastructure that may arise.	<ul style="list-style-type: none"> Impacts identified and support or collaboration concluded 	Ongoing	CCC, Shenhua, Qld Health, allied and local health services
Also through the CCC, identify opportunities to attract additional health and emergency services in the region.	<ul style="list-style-type: none"> Existing emergency services augmented 	2 years Ongoing	CCC, Shenhua, Qld Health, allied and local health services
Investigate feasibility of introducing an "Adopt a Doctor" program to help fund a GP for the mine and local area. This will directly mitigate perceived Project impacts upon health services for non-life-threatening situations.	<ul style="list-style-type: none"> Program implemented 	6 months Ongoing	Shenhua, Qld Health, allied and local health services
Encourage non-resident workers (NRWs) to use their home-based medical services for personal and non-life-threatening consultations.	<ul style="list-style-type: none"> Low use of local health services by NRWs 	6 months Ongoing	Shenhua
With support from emergency services, develop, implement and maintain full emergency response and crisis management procedures for the Project. These procedures will include detailed roles and responsibilities and resources, as well as a training program hinged on both desktop and real-life emergency simulations.	<ul style="list-style-type: none"> Emergency response and crisis management procedures implemented Emergency response training implemented 	Start up Ongoing training	Shenhua, emergency services

Action	Performance Indicator	Timeframe*	Responsible Party
Evaluate feasibility of supporting the local Queensland Fire and Rescue Service (QFRS) and local Queensland Ambulance Service (QAS) with Taraborah's mine rescue team and equipment, should a major emergency require.	<ul style="list-style-type: none"> Taraborah contribution to significant fire service emergencies Memorandum of Understanding (MOU) for shared services agreement 	6 months Ongoing	Shenhua, QFRS, QAS
Highways and Roads			
Through the CCC, work with DTMR and CHRC to identify and potentially mitigate Project and broader impacts on local roads.	<ul style="list-style-type: none"> Impacts identified and mitigated by lead agencies 	6 months Ongoing	CCC, Shenhua, CHRC, DTMR
With support from Queensland Rail (QR), Aurizon and road agencies, implement a study into coal train impact upon Emerald road use, including investigation of the option for building an underpass in Emerald.	<ul style="list-style-type: none"> Study completed Agreed actions implemented 	Start-up Ongoing	Shenhua, QR, Aurizon, QAS, DTMR, CHRC
Utilities			
Regularly and transparently monitor Project impacts upon water resources throughout the life of the Project, and then communicate results to key stakeholders (i.e. via the <i>Taraborah Project Newsletter</i>).	<ul style="list-style-type: none"> Number / nature of stakeholder enquiries / complaints Water use article in at least one <i>Taraborah Project Newsletter</i> per year 	Before project start-up Ongoing	Shenhua
Through the CCC, liaise with CHRC, service providers and agencies to monitor and address general impacts on water, waste, energy, telecommunications and other utilities.	<ul style="list-style-type: none"> Impacts identified and mitigated by lead agencies 	1 year Ongoing	CCC, Shenhua, CHRC, agencies
Implement a project communications study to identify deficiencies and impacts associated with Taraborah communications and information technology needs	<ul style="list-style-type: none"> Study implemented 	6 months Ongoing	CCC, Shenhua CHRC, agencies
6.4 LAND ACCESS AND USE <p>The predominant landholder concern regarding Taraborah was potential impact on the local water supply. Landholders feared that Shenhua's drilling into and accessing the aquifer beneath the Taraborah MDL, and the subsequent use of groundwater for mining purposes, would result in bore-water levels decreasing, thereby placing the local area at risk during drought conditions. At a more personal level, community consultation revealed that a number of landholders were anxious about their future and frustrated about delays, uncertainty and their lives being 'in limbo,' as Shenhua assesses project viability.</p> <p>Through strict land access management programs and regular and tailored communication through various channels, Shenhua will endeavour to minimise Project impacts on these important stakeholders, while maximising landholder understanding of Project objectives and activities.</p>			

Action	Performance Indicator	Timeframe*	Responsible Party
Land Access			
Maintain regular liaison with directly affected landholders to enable timely issues identification and resolution.	<ul style="list-style-type: none"> Scheduled liaison program with directly affected landholders implemented 	Before project start-up Ongoing	Shenhua, landholders
Investigate counselling services to support directly affected landholders who are struggling with the psychological impacts of change to their environment. Consider extending Employee Assistance Program telephone counselling services to directly affected landholders.	<ul style="list-style-type: none"> Telephone counselling services investigated 	Start-up Ongoing	Shenhua
In conjunction with local landholders, agree and implement a full Land Access Management Plan. This will include weed and pest management, gate and fence access protocols, and landholder contact. Key aspects of the plan will be incorporated into the employee induction program.	<ul style="list-style-type: none"> Plan implemented Landholder satisfaction with access procedures and how they are adhered to by project employees 100% employees and contractors inducted in landholder-related protocols 	Before project start-up Ongoing	Shenhua, landholders
Finalise and communicate to landholders Taraborah's site-specific environmental Project commitments, especially mechanisms to measure and mitigate impacts around water, dust, noise, vibration and light.	<ul style="list-style-type: none"> Implementation of site-specific environmental commitments that modify the model mining conditions Impacts monitored and communicated to landholders 	Before project start-up Ongoing	Shenhua
Implement and communicate to landholders the Project's: <ul style="list-style-type: none"> Enquiries and complaints management process (refer to Section 8 for details) Employee and contractor Code of Conduct and employee and contractor Induction Program (refer to Section 6.7 for details) Traffic Management Plan (refer to Section 6.2 for details) 	<ul style="list-style-type: none"> Programs implemented Landholder awareness of process and programs Structured landholder satisfaction assessment of employee and contractor behaviour 	Before project start-up Ongoing	Shenhua

Action	Performance Indicator	Timeframe*	Responsible Party
Land Use			
Regularly and transparently monitor water-source impact throughout the life of the Project, and then communicate results to key stakeholders (i.e. via the <i>Taroborah Project Newsletter</i>).	<ul style="list-style-type: none"> Number / nature of stakeholder enquiries / complaints Water use article in at least one newsletter per year 	Before project start-up Quarterly Ongoing	Shenhua
Finalise Taroborah's Cultural Heritage Management Plan, in conjunction with the appropriate Traditional Owners (TOs).	<ul style="list-style-type: none"> Industry-standard Cultural Heritage Management Plan (CHMP) in place All cultural heritage impacts mitigated in line with TO requirements and government legislation 	Before project start-up Ongoing	Shenhua, TOs
Implement a Progressive Mine Rehabilitation Program with a mandate to return mined land to its original standard. When the mine is operating, communicate Program progress via the <i>Taroborah Project Newsletter</i> at least annually.	<ul style="list-style-type: none"> Rehabilitation targets set and achieved All government regulations adhered to without penalty and with minimum liability Rehabilitation progress featured in the <i>Taroborah Project Newsletter</i>, at least annually Landholder and community awareness of program 	Before project start-up 1 year / annual Ongoing	Shenhua

Action	Performance Indicator	Timeframe*	Responsible Party
6.5 LOCAL CONTENT <p>Local businesses have been under pressure since the Global Financial Crisis and subsequent mining industry downturn, and are therefore actively seeking new commercial opportunities. These businesses will be encouraged to tender for supplies and services during both Project construction and operation. Shenhua will liaise with ICN and local business groups, such as the CHDC, to facilitate participation with local suppliers.</p> <p>Shenhua is openly committed to local employment; however, low unemployment levels in the region, together with a projected demand for skilled workers from the broader resources industry throughout the state, is expected to lead to a skills shortage for the Project. Unskilled and semi-skilled people working in the region's traditional agricultural and forestry industries may not have the range of experience or skills that can be directly transferrable to the mining industry; however, with adequate training, many could take up positions such as plant operators and tradespersons' assistants.</p> <p>Taraborah's detailed Local Content Plan will outline Shenhua's approach to local training and employment, local business participation through procurement and Indigenous participation.</p>			
Develop and implement a detailed Local Content Plan for Taraborah, with support from ICN, the Central Highlands Development Corporation (CHDC) and other key industry and employment organisations. The plan will include the following actions:	<ul style="list-style-type: none"> Plan developed and implemented 	Before project start-up Ongoing	Shenhua, ICN, CHDC
Business Participation			
Communicate to local businesses Shenhua's commitment to local procurement via the <i>Taraborah Project Newsletter</i> and in local media.	<ul style="list-style-type: none"> Community awareness of procurement opportunities 	Before project start-up	Shenhua
Develop and communicate fair and equitable prequalification guidelines to local businesses (i.e. minimum safety, environment and quality standards).	<ul style="list-style-type: none"> Maximised local procurement for life of Project 	6 months Ongoing	Shenhua, ICN, CHDC
Work with business support entities such as DSDIP, ICN, CHDC and CHRC to maximise local business capacity for project participation. Assess feasibility of implementing a local business mentoring program.		1 year Ongoing	Shenhua, ICN, CHDC, CHRC
Through the CCC, monitor and (where possible) address impacts on non-mining-sector (i.e. agriculture, tourism) employment.	<ul style="list-style-type: none"> Community satisfaction with impact on non-mining-sector recruitment and retention 	6 months Ongoing	Shenhua, CCC
Utilise the CCC to monitor short-term accommodation take-up rates and to develop mitigation actions if required and possible.	<ul style="list-style-type: none"> Community satisfaction with short-term accommodation availability 	3 months Ongoing	Shenhua, CCC

Action	Performance Indicator	Timeframe*	Responsible Party
Training and Employment			
Implement schools program (including work experience), with the aim of attracting local students to the Project and mining industry.	<ul style="list-style-type: none"> Program implemented 	1 year Ongoing	Shenhua, local schools
Work with DETE, schools and the Queensland Minerals and Energy Academy (QMEA) to further align parts of the local high school curriculum with required resources industry skills.	<ul style="list-style-type: none"> Change in curricula 	2 years Ongoing	Shenhua, DETE, local schools, QMEA
Work with Training Qld, the Kinetic Group and similar organisations to assess and meet Taraborah employment needs with local residents.	<ul style="list-style-type: none"> Maximised employment for life of the Project sourced locally with incremental targets 	1 year Ongoing	Shenhua, Training Qld, Kinetic Group
Provide and communicate to the regional community ongoing training and employment opportunities (including apprenticeships and traineeships, as well as administrative, technical and service roles).		1 year Ongoing	Shenhua
Work with DETE and DCCSDS to identify initiatives to enhance training and employment opportunities for women and people with a disability, where possible.	<ul style="list-style-type: none"> Shenhua Equal Opportunity policy applied to the Project Agree and achieve employment target 	6 months Ongoing	Shenhua, DETE, DCCSDS
Indigenous Participation			
Further develop and then implement the Taraborah Indigenous Participation Plan (refer Appendix B).	<ul style="list-style-type: none"> Plan implemented 	Before project start-up Ongoing	Shenhua, Indigenous communities, DATSIMA
Work with the Qld Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA) to identify, implement and communicate Indigenous training and employment opportunities (including apprenticeships and traineeships, as well as administrative, technical and services roles).	<ul style="list-style-type: none"> Offer Indigenous traineeships / apprenticeships Maximised Indigenous employment for life of the Project 	1 year Ongoing	Shenhua, Indigenous communities, DATSIMA
Work with local Indigenous communities to identify potential candidates for training and employment at Taraborah.			
Provide two days' cultural leave annually for Indigenous employees to attend and / or participate in culturally significant events.	<ul style="list-style-type: none"> Cultural leave included in employment conditions 	Before project start-up	Shenhua

Action	Performance Indicator	Timeframe*	Responsible Party
Include cultural awareness training (with particular focus on Traditional Owners' history and customs) in Taraborah's mandatory employee induction program.	<ul style="list-style-type: none"> Cultural awareness component of induction program implemented 	Before project start-up Ongoing	Shenhua, TOs
6.6 HOUSING AND ACCOMMODATION <p>The cumulative effects of resources development in the Central Highlands, as well as property speculation, have been impacting housing availability and affordability for some time. However, with the mining industry downturn this pressure has significantly lessened in recent months. In addition, progress of various new residential developments in the local area means that Emerald housing and unit stock could potentially increase by more than 50%.</p> <p>Regardless of local trends, the Project is not expected to have significant impact upon housing availability and affordability during the construction phase, as the workforce will most likely operate on a DIDO basis, taking up short-term accommodation during their shifts. For the operations phase, Shenhua will be encouraging its employees who are not already part of the Emerald and surrounding community, to relocate to the township.</p> <p>The Project's Local Housing and Accommodation and Workforce Accommodation Strategies will address key impacts around this important contributor to community wellbeing.</p>			
Local Housing and Accommodation			
Through the CCC, identify opportunities to support improved emergency, seniors, crisis and youth housing availability and youth support.	<ul style="list-style-type: none"> Reduced emergency, seniors, crisis and youth accommodation waiting lists 	18 months Ongoing	Shenhua, Qld Govt
Workforce Accommodation			
<p>Develop a Workforce Accommodation Strategy that:</p> <ul style="list-style-type: none"> Details commitment and plan to realise local employment Encourages placement of key management roles in Emerald as permanent residents Encourages all employees not already resident in Emerald to settle in the local district <p>The strategy will also outline the Project's :</p> <ul style="list-style-type: none"> Short-term accommodation program for the construction workforce Accommodation rules (applying to short-term accommodation) General employee behaviour codes DIDO impact. 	<ul style="list-style-type: none"> Strategy implemented Maximised Taraborah operations employees residing in Emerald region Community satisfaction with Taraborah workforce impact on local housing availability and affordability 	Project start-up Ongoing	Shenhua, CHRC

Action	Performance Indicator	Timeframe*	Responsible Party
6.7 EMPLOYEE ENGAGEMENT Employee wellbeing and behavioural management will be critical to the Taroborah Project's success, as well as to Shenhua's relationship with local stakeholders. As such, Shenhua will implement proactive Employee Support and Employee and Contractor Behaviour Strategies to achieve a safe and motivated workforce that respects and is integrated with the local community.			
Employee Support			
Reduce likelihood of occupational fatigue and diminished wellbeing associated with DIDO through implementing a comprehensive Fatigue Management Plan (FMP). The plan will include family / community-friendly rosters, particularly for the construction phase.	<ul style="list-style-type: none"> FMP implemented Seven days-on-seven-days-off roster system or similar implemented 	Project start-up	Shenhua, employees, contractors
Provide an Employee Assistance Programme (EAP) to support employees in issues that impact upon workplace performance and continuity of focus during shifts and rosters (including phone access to qualified psychologists and social workers).	<ul style="list-style-type: none"> Assess feasibility of sourcing psychologists and social workers from the local area EAP communicated and made available to all employees 	Project start-up Ongoing	Shenhua, CHRC
Implement a comprehensive internal communications and engagement program that includes regular project updates and regular family-inclusive social functions.	<ul style="list-style-type: none"> Employee satisfaction with employment conditions 	6 months Ongoing	Shenhua
Provide opportunities for families of employees and contractors to regularly visit site.	<ul style="list-style-type: none"> Family-day program implemented and made available to all employees and contractors 	6 months Ongoing	Shenhua, employees, contractors
Employee and Contractor Behaviour			
Implement and enforce employee and contractor Code of Conduct, both for the Project site and within the community.	<ul style="list-style-type: none"> Assessment of employees' code awareness level Demonstrated analysis of cause of stakeholder enquiries / complaints Structured community satisfaction assessment of employee and contractor behaviour 	Before project start-up Ongoing	Shenhua

Action	Performance Indicator	Timeframe*	Responsible Party
Incorporate a social impact component to the Project Induction Program that educates employees and contractors on local community values, public safety, land access and general behaviour expectations.	<ul style="list-style-type: none"> Assessment of awareness level 100% of all employees and contractors inducted 	Before project start-up Ongoing	Shenhua, employees, contractors
Implement accommodation rules to maintain a cohesive workforce, supportive environment and 100% compliance targets for health, safety and behaviour.	<ul style="list-style-type: none"> Accommodation rules implemented Fit for Work Policy implemented 	Before project start-up Ongoing	Shenhua
Encourage employees to participate in local community life through attendance at Central Highlands events and celebrations.	<ul style="list-style-type: none"> Promotion of key local events to employees 	Project start-up Ongoing	Shenhua

* Timeframes are based on Project construction start-up (i.e. 6 months = 6 months post Project construction start-up).

7.0 SOCIAL IMPACT MONITORING AND EVALUATION

7.1 MONITORING FRAMEWORK

A framework has been developed to provide structure and integrity to the Project monitoring and evaluation processes. The monitoring framework will measure key performance indicators (refer to Section 6.0 for details) against baseline SIA data and progressive data. The latter will be sourced with support from the Queensland Government and CHRC, as well as via ongoing project evaluation tools, including:

- CHRC's Central Highlands Community Wellbeing Indicators
- CHRC's biannual Community Satisfaction Surveys
- CCC meeting minutes; and
- Enquiries and complaints reports (refer to Section 8.0 for details), including close-out performance.

A full monitoring framework (an example is presented in Table 4) will be developed prior to Project start-up and reviewed quarterly thereafter.

Table 4: Social Impact Monitoring Framework Example

Mitigation strategy	Performance indicator/target	Resp	Monitoring tools
Cumulative Impacts/ Regional Development			
CCC to assist Shenhua to contribute to managing cumulative impacts in line with the Qld Department of State Development and Infrastructure Planning's guide to <i>Managing the impacts of major projects in resource communities</i> , July 2013.	<ul style="list-style-type: none"> • Joint industry, government and community approach to managing local cumulative impacts 	CCC/ CLO	<ul style="list-style-type: none"> • Baseline SIA data • CHRC Wellbeing Indicators and Community Satisfaction Surveys • Regular liaison with DSDIP and CHRC
Community Safety and Wellbeing			
Encourage Taraborah employees to relocate to the local area. Assess and then implement incentive initiatives, such as high-quality, family friendly accommodation and housing, salary incentives, Employee Assistance Program, etc.	<ul style="list-style-type: none"> • Maximised numbers of employees residing locally 	CLO	<ul style="list-style-type: none"> • Baseline SIA data • Number of employees living locally • CHRC Wellbeing Indicators and Community Satisfaction Surveys • Regular liaison with CHRC • Taraborah Enquiries Register
Community Infrastructure and Services			
Within the CCC, consider current childcare needs and if appropriate, support community strategies to attract childcare services to the region	<ul style="list-style-type: none"> • Appropriate number of providers in Emerald 	CCC/ CLO	<ul style="list-style-type: none"> • Baseline SIA data • Number of childcare centres • CHRC Wellbeing Indicators and Community Satisfaction Surveys • Regular liaison with CHRC

Mitigation strategy	Performance indicator/target	Resp	Monitoring tools
Land Access and Use			
In conjunction with local landholders, agree and implement a full Land Access Management Plan. This will include weed and pest management, gate and fence access protocols, and landholder contact. Key aspects of the plan will be incorporated into the employee induction program.	<ul style="list-style-type: none"> Plan implemented Landholder satisfaction with access procedures and how they are adhered to by project employees 100% employees and contractors inducted in landholder-related protocols 	CLO	<ul style="list-style-type: none"> Baseline SIA data CHRC Wellbeing Indicators and Community Satisfaction Surveys Taroborah Enquiries Register
Local Content			
Develop and implement a detailed Local Content Plan for Taroborah, with support from ICN, the Central Highlands Development Corporation (CHDC) and other key industry and employment organisations.	<ul style="list-style-type: none"> Plan developed and implemented 	CLO	<ul style="list-style-type: none"> Baseline SIA data CHRC Wellbeing Indicators and Community Satisfaction Surveys Regular liaison with ICN, CHDC and other key industry and employment organisations
Housing and Accommodation			
Through the CCC, identify opportunities to support improved emergency, seniors, crisis and youth housing availability and youth support.	<ul style="list-style-type: none"> Reduced emergency, seniors, crisis/youth accommodation waiting lists 	CCC/ CLO	<ul style="list-style-type: none"> Baseline SIA data CHRC Wellbeing Indicators and Community Satisfaction Surveys Regular liaison with DCCSDS, DHPW, CHRC
Employee Engagement			
Implement and enforce employee and contractor Code of Conduct, both for the Project site and within the community.	<ul style="list-style-type: none"> Assessment of employees' code awareness level Demonstrated analysis of cause of stakeholder enquiries / complaints Structured community satisfaction assessment of employee/contractor behaviour 	CLO	<ul style="list-style-type: none"> Baseline SIA data CHRC Wellbeing Indicators and Community Satisfaction Surveys Regular liaison with CHRC Taroborah Enquiries Register

7.2 SIMP REVIEW

Led by the Taroborah CLO, Shenhua will implement annual reviews of the SIMP, in consultation with Project stakeholders, to assess the following elements of this plan:

- Delivery of actions within the specified timeframes;
- Effectiveness of those actions; and
- Improvement strategies to address any performance gaps.

Outcomes of these reviews, along with a compilation of quarterly social monitoring results, will be detailed in a report for DSDIP and other relevant agencies.

8.0 DISPUTE RESOLUTION

8.1 ENQUIRIES AND COMPLAINTS MANAGEMENT SYSTEM

The CLO will be responsible for implementing, monitoring, evaluating and reporting on this SIMP. This will include providing a vital contribution to the enquiries and complaints management and conflict resolution processes.

8.1.1 Frequently Asked Questions

From SIA research and ongoing liaison with Project stakeholders, frequently asked questions (FAQs) and responses will be developed to support the community enquiries and complaints process. The FAQs will cover a broad spectrum of stakeholder queries and feedback, including:

- How do I get a job on the Project?;
- How can I sell my product or service to the Project?;
- A gate has been left open on my property;
- How will the Project manage impact on the Nogoia River?; and/or
- Will the Project sponsor my child's sporting team?

8.1.2 Enquiries and Complaints Management Process

Taroborah's enquiries and complaints process has been designed to ensure that all feedback and concerns are appropriately addressed and responded to. Stakeholder enquiries and complaints will be lodged via the Project's toll-free number and / or website (to be developed) and then entered onto a register (refer to Table 5 for an example), from which weekly reports will be generated by the CLO for the Project Manager. Follow-up actions will be taken and if required, mitigation procedures will be put in place. Daily / monthly enquiries and complaints monitoring reports will be generated via this system and will be made publicly available via the CCC. The enquiries and complaints management process will be refined and maintained for the life of the Project.

Table 5: Enquiries and Complaints Register

Time/date	Details of call received
Name	Name of enquirer / complainant
Address	Residential address of enquirer / complainant
Contact details	Telephone and email details of enquirer / complainant
Received by	Employee who received the call
Enquiry/complaint	Including time/date of any incident
Responsible person	Employee responsible for enquiry / complaint area
Follow up actions	If required, including times and dates
Written advice	If required. Include copy of correspondence in register
Closed out	Including time / date and name of employee closing out enquiry / complaint

The following diagram (Figure 2) outlines the Taroborah enquiries and complaints management process.



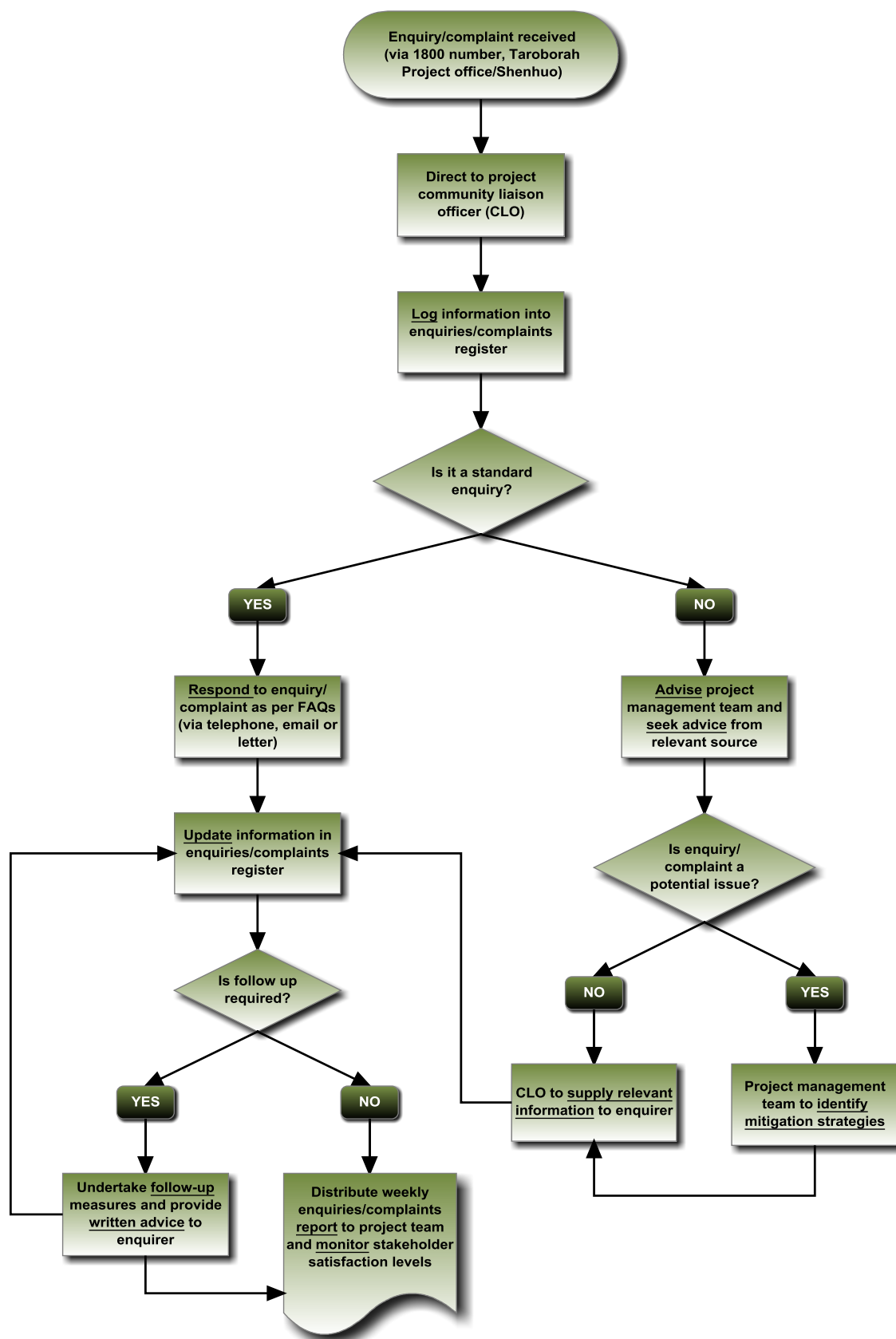


Figure 2: Taroborah Enquiries and Complaints Management Process

8.2 CONFLICT RESOLUTION

If the enquiries and complaints process is unable to resolve a conflict between the Project and a key stakeholder, Shenhua will seek to take a collaborative conflict resolution approach to achieve a joint solution. This will include implementing a small working group comprising complainant and project management representatives, as well as the CLO, who will have training in the areas of conflict resolution and negotiation.

9.0 REFERENCES

2006 Census and 2011 Census, Australian Bureau of Statistics

Bowen Basin Population Report 2012, Queensland Treasury and Trade

Central Highlands 2022 Community Plan, Central Highlands Regional Council, 2011

Major Resource Projects Housing Policy: Core principles to guide social impact assessment, Queensland Coordinator General, August 2011

Office of Economic and Statistical Research, Queensland Treasury

Social impact assessment: Guideline to preparing a social impact management plan, Queensland Coordinator General, September 2012

Sustainable Resource Communities Policy: Social impact assessment in the mining and petroleum industries, Queensland Government, September 2008

Appendix A Workforce Management Plan



Appendix B Indigenous Participation Plan

Appendix A Workforce Management Plan





Taroborah Coal Project

Workforce Management Plan

Prepared for:

Shenhua International Group Pty Ltd

December 2013



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TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	PURPOSE	1
1.2	OBJECTIVES	1
2.0	TAROBORAH WORKFORCE PROFILE	2
2.1	CONSTRUCTION PHASE	2
2.2	OPERATIONS PHASE	2
3.0	WORKFORCE EMPLOYMENT	5
3.1	RECRUITMENT	5
3.2	TRAINING	5
3.3	TRAINING AND EMPLOYMENT ACTION PLAN	5
4.0	WORKFORCE ACCOMMODATION	7
4.1	WORKFORCE ACCOMMODATION ACTION PLAN	7
5.0	WORKFORCE ENGAGEMENT AND BEHAVIOUR	8
5.1	WORKFORCE ENGAGEMENT ACTION PLAN	8
5.2	WORKFORCE BEHAVIOUR ACTION PLAN	9

LIST OF TABLES

Table 1	Indicative Onsite Open-Cut Workforce	2
Table 2	Estimated Peak Onsite Underground Workforce	3
Table 3	Training and Employment Action Plan	5
Table 4	Workforce Accommodation Plan	7
Table 5	Workforce Engagement Action Plan	8
Table 6	Workforce Behaviour Action Plan	9

LIST OF ABBREVIATIONS

BIBO	Bus-In/Bus-Out
DCCSDS	Queensland Department of Communities, Child Safety and Disability Services
DETE	Queensland Department of Education, Training and Employment
DIDO	Drive-In/Drive-Out
DSDIP	Queensland Department of State Development, Infrastructure and Planning
EAP	Employee Assistance Program
EIS	Environmental Impact Statement
FMP	Fatigue Management Plan
KPI	Key Performance Indicator
QMEA	Queensland Minerals and Energy Academy
Shenhua	Shenhua International Group Pty Ltd
TAFE	Technical and Further Education
TO	Traditional Owner
WMP	Workforce Management Plan

1.0 INTRODUCTION

The Taroborah Workforce Management Plan (WMP) will inform management of the Project's workforce in line with the Environmental Impact Statement (EIS) process, under the *Environment Protection Act 1994*.

The WMP is an evolving document, which will be updated on a quarterly basis and adapted to address future changes in employee, community and Queensland Government requirements.

1.1 PURPOSE

The purpose of this WMP is to support Shenhua International Group Pty Ltd (Shenhua) to safely and effectively manage its workforce, as well as any employee-related impacts upon the local community, throughout the life of the Taroborah Project.

1.2 OBJECTIVES

Shenhua takes a proactive approach to attracting, recruiting, engaging and developing its employees. Consequently, Shenhua's objectives in implementing this WMP are to:

- Achieve a motivated, tolerant and safety-focused workforce;
- Implement recruitment and training programs to maintain a consistent workforce, as well as to attract under-represented groups in the mining industry (including unskilled workers and women);
- Provide opportunities for local training and employment; and
- Encourage employees to reside locally and to integrate with the Emerald community and surrounds.

2.0 TAROBORAH WORKFORCE PROFILE

It is proposed that the Taroborah Project will be a combined open-cut and underground operation, with a duration of some seven years for the open-cut and 17 years for the underground mine (underground production will commence five years after open-cut start-up).

2.1 CONSTRUCTION PHASE

The construction workforce is expected to peak at 150 employees. Wherever possible, priority will be given to people from local communities to join the construction workforce. However, it is expected that some workers will have to be sourced from outside the local area and operate on a drive-in/drive-out (DIDO) basis. These employees may require short-term accommodation in Emerald and will be bussed to and from the Project (bus-in/bus-out (BIBO)) before and after their shifts.

2.2 OPERATIONS PHASE

Mine operations are expected to commence in 2018, with a peak operations workforce of approximately 350. The Taroborah Project will operate on a 24-hour/seven-day-a-week basis. The open-cut operation will involve two rotating shifts of workers. Rosters are yet to be finalised, but it is expected that open-cut employees will work industry standard 12-hour shifts (refer to Table 1 for details of the open-cut workforce). The underground mine will support two 10-hour production shifts per day, with a third 8-hour shift dedicated to maintenance also proposed (refer to Table 2 for details of the underground mine workforce). During the operations phase, any non-local employees will operate on a DIDO or FIFO basis, with many expected to ultimately choose to relocate to the area.

In addition to the permanent mine employees indicated in the tables, a varying number of contractors will be used for undertaking intermittent and one-off tasks.

Table 1 Indicative Onsite Open-Cut Workforce

Year	2018	2019	2020	2021	2022	2023	2024
Operators	37	68	63	90	90	90	60
Maintenance	12	22	21	30	30	30	20
Contractors	4	8	8	8	8	8	4
Supervision & Administration	9	13	13	13	13	13	13
Total	62	111	105	141	141	141	97

Source: IMC

Table 2 Estimated Peak Onsite Underground Workforce

	Typical Roster				Total for 2 Rosters
	Day	Evening	Night	Total	
WAGES					
Longwall					
Supervisor	1	1	1	3	5
Operator	2	4	4	10	18
Absentee	1	1	1	3	5
Subtotal	4	6	6	16	28
Development					
Supervisor	2	2	2	6	10
Operator	6	10	10	26	46
Absentee	2	3	3	8	14
Subtotal	10	15	15	40	70
Mine Maintenance					
Longwall					
Fitter	2	1	1	4	6
Electrical	2	1	1	4	6
Development					
Fitter	2	2	2	6	10
Electrical	2	2	2	6	10
Conveyors					
Fitter	1	1	1	3	5
Electrical	1	1	1	3	5
Outbye/diesel					
Workshop	2	1	1	4	6
Fitter	1	1	1	3	5
Electrical	1	1	1	3	5
Subtotal	14	11	11	36	58
Mine Services					
Outbye deputy/pumps	1	2	2	5	9
Beltman	2	2	2	6	10

	Typical Roster				Total for 2 Rosters
	Day	Evening	Night	Total	
Secondary support	4			4	4
Stone dust	2			2	2
Supplies/roadwork	2	2	2	6	10
Surface general	1	1	1	3	5
*Absentees	3	2	2	7	11
<i>Subtotal</i>	<i>15</i>	<i>9</i>	<i>9</i>	<i>33</i>	<i>51</i>
TOTAL WAGES	43	41	41	125	207
STAFF					
General manager	1			1	1
Mine manager	1			1	1
Production manager	1			1	1
Under manager	1	1	1	3	5
Control room operator	1	1	1	3	5
Longwall manager	1			1	1
Maintenance engineer	1			1	1
Electrical engineer	1			1	1
Longwall maintenance manager	1			1	1
Development maintenance manager	1			1	1
Maintenance planner	2			2	2
Prep plant manager					
Tech services manager	1			1	1
Mine engineers	3			3	3
Geologist	1			1	1
Surveyor	2			2	2
Purchasing manager	1			1	1
Human resources manager	1			1	1
Safety/training	2			2	2
Commercial manager	1			1	1
Clerks	3			3	3
TOTAL STAFF	27	2	2	31	35
TOTAL MINE PERSONNEL (wages + staff)	70	43	43	156	242

Source: Pre-Feasibility Mining Study for the Taraborah Project - EPC1011



3.0 WORKFORCE EMPLOYMENT

3.1 RECRUITMENT

Wherever possible, Shenhua will source employees from the local area. This will result in minimal disruption to community fabric; both lifestyle and infrastructure. Regardless of such programmes, it is not anticipated that the local employment pool will sustain the Project, so Shenhua will also recruit from across the Central Highlands, central Queensland and if required, further afield.

In addition to standard recruitment practices (such as utilising the services of employment agencies and advertising in local media) Shenhua will work with local Indigenous communities to identify and engage potential trainees and employees for the Project.

3.2 TRAINING

Unskilled and semi-skilled people working in the region's traditional agricultural and forestry industries may not have the range of experience or skills that can be directly transferrable to the mining industry; however, with adequate training, many could take up positions such as plant operators and tradespersons' assistants.

The company will work with entities such as Training Queensland, Technical and Further Education (TAFE) and various Registered Training Organisations to implement a broad spectrum of training programmes, so as to attract, develop and retain skilled and unskilled workers. Business as usual will include traineeships, apprenticeships and graduate programs, as well as participation in local school-to-work initiatives, as appropriate.

Regional high schools already provide school-based traineeships and apprenticeships and as a local employer, Shenhua will work with education authorities, particularly through the Queensland Minerals and Energy Academy (QMEA), to ensure school curricula are aligned to the skills needs of the Project.

3.3 TRAINING AND EMPLOYMENT ACTION PLAN

A full employee training and development plan will be implemented at Project commencement. The following elements will be included in this plan (refer to Table 3 for details).

Table 3 Training and Employment Action Plan

Action	Key Performance Indicator (KPI)	Timing	Responsible
Implement schools program (including work experience), with the aim of attracting local students to the Project and mining industry.	<ul style="list-style-type: none">Program implemented	1 year after project start-up Ongoing	Shenhua, local schools
Work with the Department of Education Training and Employment (DETE), schools and the QMEA to further align parts of the local high school curriculum with required resources industry skills.	<ul style="list-style-type: none">Change in curricula	2 years after project start-up Ongoing	Shenhua, DETE, local schools, QMEA

Action	Key Performance Indicator (KPI)	Timing	Responsible
Work with Training Queensland, the Kinetic Group and similar organisations to assess and meet the Project's employment needs with local residents where possible.	<ul style="list-style-type: none"> Maximised employment for life of the Project sourced locally with incremental targets 	1 year after project start-up Ongoing	Shenhua, Training Queensland, Kinetic Group
Provide and communicate to the regional community ongoing training and employment opportunities (including apprenticeships and traineeships, as well as administrative, technical and service roles).		1 year after project start-up Ongoing	Shenhua
Work with the Department of State Development, Infrastructure and Planning (DSDIP) and Department of Communities, Child Safety and Disability Services (DCCSDS) to identify initiatives to enhance training and employment opportunities for women and people with a disability, where possible.	<ul style="list-style-type: none"> Shenhua Equal Opportunity policy applied to the Project Agree and achieve employment target 	6 months after project start-up Ongoing	Shenhua, DSDIP, DCCSDS
Identify, implement and communicate Indigenous training and employment opportunities (including apprenticeships and traineeships, as well as administrative, technical and services roles).	<ul style="list-style-type: none"> Offer Indigenous traineeships / apprenticeships Maximised Indigenous employment for life of the Project Appropriate internal mentoring program in place to support Indigenous trainees/employees 	1 year after project start-up Ongoing	Shenhua, Indigenous communities
Work with local Indigenous communities to identify potential candidates for training and employment at Taraborah.			
Include cultural awareness training (with particular focus on Traditional Owners' history and customs) in Taraborah's mandatory employee induction program.	<ul style="list-style-type: none"> Cultural awareness component of induction program implemented 	Before project start-up Ongoing	Shenhua, Traditional Owners (TO)

4.0 WORKFORCE ACCOMMODATION

Employees sourced from outside the region will either relocate to the local community (Emerald) or operate on a DIDO or FIFO basis, requiring short-term accommodation in Emerald while working their shifts. Workers will be transported between the Project and Emerald by BIBO arrangement. There will be no camp accommodation for the Taraborah Project. The company will encourage DIDO employees to relocate to the local area, which has the potential to benefit communities through participation in community organisations, sporting and recreation groups and charities.

4.1 WORKFORCE ACCOMMODATION ACTION PLAN

An action plan for workforce accommodation has been developed and is presented in Table 4.

Table 4 Workforce Accommodation Plan

Action	KPI	Timing	Responsible
<p>Develop a Workforce Accommodation Strategy that:</p> <ul style="list-style-type: none">• Details commitment and plan to realise local employment• Encourages placement of key management roles in Emerald as permanent residents• Encourages all employees not already resident in Emerald to settle in the local district <p>The strategy will also outline the Project's :</p> <ul style="list-style-type: none">• Short-term accommodation program for the construction workforce• Accommodation rules (applying to short-term accommodation)• General employee behaviour codes• DIDO impact.	<ul style="list-style-type: none">• Strategy implemented• Maximised Taraborah operations employees residing in Emerald region• Community satisfaction with Taraborah workforce impact on local housing availability and affordability	<p>Project start-up</p> <p>Ongoing</p>	<p>Shenhuo</p>

5.0 WORKFORCE ENGAGEMENT AND BEHAVIOUR

Employees will be encouraged to act as advocates for the Project, whether they reside locally or operate on a DIDO/FIFO basis. This will include a comprehensive induction process comprising a strict code of conduct (in line with community values). Employees will also be requested to participate in community safety, land access, and enquiries / complaints management training. More broadly, staff will be encouraged to participate in community life and integrate with local residents through community service organisations (e.g. school Parents and Citizens Associations, Country Women's Association, Lions, Rotary, Apex, etc.) and sporting organisations. Additionally, the site management team will be encouraged to reside in the community.

5.1 WORKFORCE ENGAGEMENT ACTION PLAN

In order to engage the workforce, a number of actions have been developed for the Project which are presented in Table 5:

Table 5 Workforce Engagement Action Plan

Action	KPI	Timing	Responsible
Reduce likelihood of occupational fatigue and diminished wellbeing associated with DIDO through implementing a comprehensive Fatigue Management Plan (FMP). The plan will include family / community-friendly rosters, particularly for the construction phase.	<ul style="list-style-type: none">FMP implementedSeven days-on-seven-days-off roster system or similar implemented	Project start-up	Shenhua, employees, contractors
Provide an Employee Assistance Programme (EAP) to support employees in issues that impact upon workplace performance and continuity of focus during shifts and rosters (including phone access to qualified psychologists and social workers).	<ul style="list-style-type: none">EAP communicated and made available to all employees	Project start-up Ongoing	Shenhua
Implement a comprehensive internal communications and engagement program that includes regular Project updates and regular family-inclusive social functions.	<ul style="list-style-type: none">Employee satisfaction with employment conditions	6 months after project start-up Ongoing	Shenhua
Provide opportunities for families of employees and contractors to regularly visit site.	<ul style="list-style-type: none">Family-day program implemented and made available to all employees and contractors	6 months after project start-up Ongoing	Shenhua, employees, contractors

5.2 WORKFORCE BEHAVIOUR ACTION PLAN

A workforce behaviour action plan has been developed for the Project, in order to manage workforce behaviour both on site and in the community. This action plan is presented in Table 6.

Table 6 Workforce Behaviour Action Plan

Action	KPI	Timing	Responsible
Implement and enforce employee and contractor Code of Conduct, both for the Project site and within the community.	<ul style="list-style-type: none"> Assessment of employees' code awareness level Demonstrated analysis of cause of stakeholder enquiries / complaints Structured community satisfaction assessment of employee and contractor behaviour 	<p>Before project start-up</p> <p>Ongoing</p>	Shenhua
Incorporate a social impact component to the Project Induction Program that educates employees and contractors on local community values, public safety, land access and general behaviour expectations.	<ul style="list-style-type: none"> Assessment of awareness level 100% of all employees and contractors inducted 	<p>Before project start-up</p> <p>Ongoing</p>	Shenhua, employees, contractors
Implement accommodation rules to maintain a cohesive workforce, supportive environment and 100% compliance targets for health, safety and behaviour.	<ul style="list-style-type: none"> Accommodation rules implemented Fit for Work Policy implemented 	<p>Before project start-up</p> <p>Ongoing</p>	Shenhua

Appendix B Indigenous Participation Plan



**OUTLINE FOR AN
INDIGENOUS PARTICIPATION PLAN**

Contents

1	Introduction	3
1.1	Project Description	3
1.2	Regional Indigenous Community Profile	3
2	Indigenous Participation Model	5
2.1	Shenhua Approach	5
2.2	Taraborah Indigenous Participation Targets	5
2.3	Research	6
2.4	Indigenous Employment and Training	6
2.5	Indigenous Business Development	8
2.6	Procurement through Indigenous-Owned Businesses	9
2.7	Cultural Integration	10
2.8	Broader Social Investment Opportunities	10
3	External Funding and Resources	11
4	Evaluation and Reporting	11

1 Introduction

This outline Indigenous Participation Plan indicates Shenhua International Group Pty Ltd's (Shenhua's) commitment to maximising Indigenous participation during development and operation of the Taraborah Coal Project.

Shenhua is committed to improving economic outcomes for Indigenous Australians. The company's approach to this objective will be threefold, whereby it will encourage Indigenous participation through:

- Training and employment opportunities
- Procurement opportunities
- Indigenous business development.

This plan is a 'working document' and will be subject to change as the project evolves.

1.1 Project Description

The Taraborah project site is located 22km west of Emerald, in central Queensland. The project extends north and south of the Capricorn Highway and Central West rail system, and is entirely located within Central Highlands Regional Council boundaries.

The proposed project will involve mining a resource of approximately 190 million tonnes of thermal coal, at an eventual rate of up to 2.3 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal for the open-cut operation, and up to 5.7 Mtpa ROM for the underground mine. Coal will be processed onsite before being transported to Gladstone port. Taraborah has an estimated mine life of up to 25 years, including construction, commissioning, operation, decommissioning and rehabilitation.

The project is currently managed under Mineral Development Licence No 467 (MDL467), which exhibits an area of 7,966 hectares (ha). Proposed major project activities will include:

- Open-cut mining, via hydraulic excavator and dump truck, in the southern part of the proposed mining area
- Underground mining, via longwall mining extraction techniques, in the northern part of the proposed mining area
- Processing of mined coal at a coal handling and preparation plant, including coal sizing and washing
- Transporting of coal to the port of Gladstone via the Central West and Blackwater rail systems.

1.2 Regional Indigenous Community Profile

Data from the 2011 Census indicated that 1,021 Indigenous persons lived in the Central Highlands region, 441 of these people resided in Emerald. This respectively equated to 3.3% and 3.6% of the total Emerald and Central Highlands populations. Almost half of Central Highlands and Queensland Indigenous residents were 19 years or younger in 2011; while only 11.0% of Emerald's Indigenous residents were 50 years or older, compared to Queensland's 13.2%. Most local Indigenous people were employed in labouring positions, and 47.4% of Central Highlands Indigenous residents earned \$600 or more per week, compared to 30.5% for Queensland. While Indigenous unemployment in Queensland was at 18.0 % in 2011, Indigenous unemployment in Emerald and the Central Highlands was significantly lower at 7.7% and 8.0 % respectively. However this rate was significantly higher than for the general Emerald (2.2%) and Central Highlands (5.5%) populations in 2011.

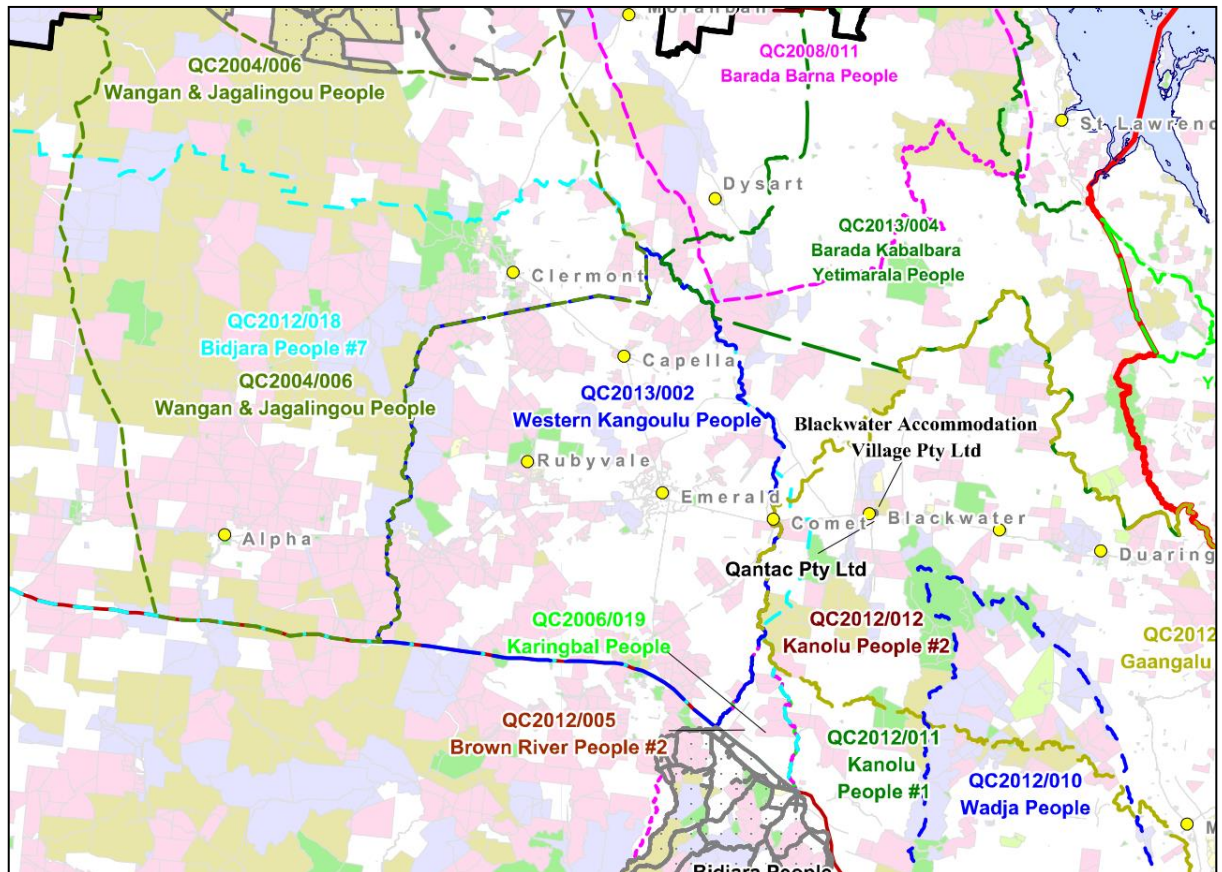
Outline Indigenous Participation Plan

1.2.1 Native Title Claimant Groups

Key Traditional Owner (TO) groups with interests on or around the Taraborah lease include:

- Western Kangoulu People
- Bidjara #7 People.

Native Title Claimant Groups within and surrounding the proposed Taraborah site



Source: National Native Title Tribunal

Native Title claimants for the proposed Taraborah project area are the Western Kangoulu People (lodged in May 2013 – Federal Court file number QUD229/2013) and Bidjara #7 People (lodged in November 2012 – Federal Court file number QUD644/2012). While no Native Title determination has been agreed over the region containing the project, Shenhuo has liaised directly with the Western Kangoulu on cultural heritage issues.

A cultural heritage map of Queensland indicates three sites of Indigenous cultural heritage value located within the general vicinity of the project site. Two are identified as 'story places or cultural sites', and the third is classified as 'engravings and paintings'. They are all located south of Lake Maraboon, approximately 20km south of the project site.

Consequently, it is not anticipated that project activities will have an adverse impact on sites of significant Indigenous cultural heritage.

2 Indigenous Participation Model

To deliver sustainable economic outcomes to Indigenous communities in the Central Highlands region, this plan outlines the basis for ongoing Indigenous engagement, employment and training opportunities, and development of Indigenous business capacity.

2.1 Shenhua Approach

Success for the Taraborah Coal Project will be a contribution to a stronger relationship between Indigenous and corporate Australia, providing real employment for young people. Raised awareness of the needs and expectations of both corporate and Indigenous organisations can potentially drive understanding and empathy for the needs of both. Success cannot be at another party's loss.

2.1.1 Critical Success Factors

The following have been identified as potential key contributors to the success of this Indigenous Participation Plan:

- By forming a Community Consultative Committee, Shenhua will ensure that participation in the project is available at the community level. It will also encourage clear lines of communication from the community through the Community Liaison Officer (CLO) to the broader Taraborah project team
- By supporting high-school-engagement-with-work programs that achieve participation, attendance and performance from Indigenous as well as non-Indigenous students, Shenhua will help to close the gap in practical employment outcomes. Industry has a role to play in offering a regionally based career path for students to aspire to. Shenhua will consider conducting two-way orientations from school to work, and work to school. Traineeships and apprenticeships are real outcomes in this area
- Shenhua will appropriately assess business models and track records of Indigenous as well as non-Indigenous operating organisations for both funding and operational experience. The company may also facilitate support to deliver required levels of competency through business mentors
- Shenhua will access relevant funding opportunities for Indigenous as well as non-Indigenous business support and community capacity building.

2.2 Taraborah Indigenous Participation Targets

In line with Census data indicating that some three per cent of the Central Highlands local government area population is Indigenous, Shenhua will target a similar percentage for direct Indigenous employment on the Taraborah project.

In addition to the direct employment target, Shenhua will also aim for:

- Full-time employment with Indigenous contractors
- Part-time/flexible employment within community organisations, such as short-term labour-hire services.

2.2.1 Estimated Project Personnel Breakdown

Shenhua will develop breakdowns of direct and indirect employees according to classification and origin. These will be communicated once Shenhua has committed to proceeding with the project.

Outline Indigenous Participation Plan

2.2.2 Subcontractor Commitment

Shenhua will expect its Taraborah subcontractors to subscribe to and support the company's systems and philosophies, including its Indigenous participation objectives.

2.3 Research

2.3.1 Community Audit Strategy

Prior to project construction, Shenhua will implement a community audit to identify:

- Skills capacity
- Business development capacity and current levels of support
- Required support levels
- Delivery cost parameters.

As part of this strategy, Shenhua will ascertain community requirements and expectations with respect to achieving business success, and whether communities will accept support from external Indigenous businesses. Key stakeholders will include:

- Traditional Owner groups (i.e. research organisation levels and business capacity)
- Local Indigenous organisations and councils
- Local Indigenous political and cultural representatives
- Vested/interested parties
- Local, State and Federal government representatives (i.e. local coverage, support mechanisms, etc.)
- Regional industry representatives (i.e. Chamber of Commerce)
- Job Services Australia (JSA) providers (i.e. local coverage, community relationships, etc)
- School-based career training and tertiary-level competency providers (i.e. local coverage, community relationships, etc)
- Local Indigenous communities (i.e. linkages, networks and access to resources and support).

2.4 Indigenous Employment and Training

2.4.1 Project Workforce Capacity Building

In this plan, Indigenous employment has been categorised as follows:

- Full-time and part-time employment
- Casual employment from Indigenous businesses
- Labour-hire services through Indigenous businesses or community organisations servicing employment opportunities in line with project requirements
- Project-driven apprenticeships, traineeships and scholarships
- School-to-work transition plans supported by regional economic forums. Local schools will be invited to participate in initiatives to create pathways to a variety of traineeships and employment outcomes.

Historically, these areas have attracted limited uptake unless there has been specific focus on ensuring that culturally appropriate requirements are in place to recognise group dynamics. Shenhua will further promote recognition of Indigenous capacity through facilitating Indigenous participation in development and operation of project employment and training programs.

2.4.2 Jobs Open Days

Shenhua will consider holding jobs open days in Emerald. These events would be designed to promote the project to potential local employees (Indigenous and non-Indigenous), while at the same time supporting positive community interaction.

2.4.3 Training and Employment Pathways

Shenhua will work with the Queensland Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA) and other industry bodies to develop training and employment pathways for local Indigenous people.

2.4.4 External Workforce Capacity Building

In addition to direct employment opportunities on Taraborah project, Shenhua will support external employment initiatives, including:

- Alliances and joint ventures across agreed services
- Subcontract opportunities within developed business capacity
- Labour-hire capacity within pre-existing Indigenous employers or community organisations with developed administrative infrastructure to provide workers and a fee-for-service provision.

These options allow for culturally appropriate and flexible working arrangements that demonstrate ownership within the Indigenous organisation and local Indigenous community. Effectively developing traditional values, along with an identity that Indigenous employees can relate to, has increased success rates in this model. This is a powerful tool when establishing relationships designed to achieve engagement and participation. This model is regarded as a cornerstone of a sustainable working relationship and a critical success factor for an Indigenous business model.

2.4.5 Support Programs

There are many systems in place that facilitate support for both internal and external employment uptake. State and Federal Government funding programs allow for a variety of competency levels and capacity building to engage with a broad scope of community participation.

To allow optimum uptake in each employment category, Shenhua will research and reference a list of funding programs, their aims, objectives, criteria and capacity to deliver the needs of potential employees and business or service providers.

2.4.6 Job Services Australia

For each distinct area of opportunity on the Taraborah project, there is the prospect of engaging the community through Job Services Australia (JSA) network agencies to provide service delivery.

The JSAs deliver funding support to community organisations and Indigenous employers across a range of pre-employment programs. The scope of this support will be explored through the JSAs' ability to service a particular location, with Memoranda of Understanding (MoUs) put in place to ensure ongoing community input. The model benefits both the JSA provider and employers through integrating community labour resources into an employment and training program. This will facilitate

Outline Indigenous Participation Plan

access to salary support programs, new business initiative funds and ongoing support and mentoring funds to supplement community or employer activities.

2.4.7 Schools-to-Work Program

On the Taraborah project, Shenhua will aim to connect industry with high school-based education and training.

After working with teaching staff and local Indigenous communities to survey career plans in local schools, Shenhua will aim to develop two-way relationships with students, where the company provides information on mining and engineering-related career pathways and then potentially offers interactive classrooms on site.

Schools and communities would then work with interested students in developing/revising career plans. These would potentially include work experience, cadetships, traineeships and apprenticeships on the Taraborah project. Yearly career-plan implementation programs would be developed and monitored to ensure sustainable outcomes are achieved (including long-term project and mining industry involvement wherever possible).

2.5 Indigenous Business Development

The Taraborah project will offer an opportunity to expand on local Indigenous commercial enterprise capacity. Connecting Indigenous businesses back into the community will, potentially, deliver real Indigenous employment benefits.

The critical aspect of this opportunity will be to encourage employment outcomes designed to build Indigenous engagement across commercial enterprise, community support and regional economies.

The importance of the Indigenous business model is in providing practical avenues into full-time employment, based on a culturally acceptable workplace that caters for flexible working arrangements, personal development and education and training of local people in the required skill sets to achieve ongoing business growth.

Business ownership is a solid stepping stone for local Indigenous people to achieve sustainable employment, particularly as the Indigenous work environment reflects the expectations of the surrounding community members. This provides both personal and community commitment, as well as a level of ownership, which focuses on realising retention rates rarely possible in more traditional, non-Indigenous employment workplaces.

The focus of the Indigenous business model will be broader than specific project requirements. This will ensure security of tenure by expanding on industry skill sets and provide greater opportunities for engagement.

These activities will be external to the project and may include:

- Construction, mining and engineering services
- Land and conservation management, cultural tourism, local eco-tourism, development of living cultural centres, bushcraft tours, women's business and youth leadership programs
- Health services, including traditional healing practices, wellbeing, aged care and healthy-mother-healthy-baby program delivery.

2.5.1 Community Joint Ventures

Joint ventures with community groups can create local capacity to achieve direct procurement and employment, while indirectly supporting Indigenous training and business development. Shenhua will

Outline Indigenous Participation Plan



explore such models for the Taraborah project, particularly with regard to the Western Kangoulu community.

2.5.2 Industry Partnerships

On the Taraborah Coal Project, Shenhua will look to further develop relationships with key Indigenous participation stakeholders to achieve the objectives of this plan. These stakeholders will include:

DATSIMA

Shenhua has had initial discussions with DATSIMA's Rockhampton office with a view to working with the department to realise Taraborah-related training and employment opportunities for Indigenous communities in the Central Highlands. DATSIMA has indicated that it could coordinate recruitment and training of candidates, while Shenhua could commit to identifying and implementing long-term employment pathways at Taraborah.

DATSIMA has also indicated that it could support the project by identifying local Indigenous businesses that have the potential to participate in the project.

Shenhua will work with DATSIMA to investigate establishing a partnership along these lines.

Industry Capability Network

Shenhua will also work with the Industry Capability Network (Qld) to identify procurement opportunities for local businesses. In particular, Taraborah will draw on ICN's online Indigenous business directory, Black Business Finder, which launched in 2013 to help link Indigenous businesses with major projects.

2.5.3 Indigenous Business Support Program

Shenhua will consider introducing an Indigenous business development support program, to be facilitated in the first year by an external training provider, which will include:

- Classifying and assessing Indigenous community-based organisations with commercial business interests and the local Indigenous parties wishing to engage with the project
- Enhancing the capacity of Indigenous organisations to deliver, expand or develop service provisions, including risk assessments on delivery models
- Identifying Indigenous commercial expertise and pre-existing services or contract delivery, including development of an audit assessment tool for each regional location with group and organisational dynamics
- Providing support to develop Indigenous business opportunities, mentoring business set-up and contracting imperatives
- Identifying Indigenous community representation and support roles, such as mentoring, two-way business and cultural exchange plans and business feasibility support.

2.6 Procurement through Indigenous-Owned Businesses

Opportunities will arise on the Taraborah project to:

- Utilise existing Indigenous business capacity
- Develop new Indigenous business capacity
- Support alliances with Indigenous community organisations or individuals, through direct engagement or by utilising existing community services within the project area.

Outline Indigenous Participation Plan

The process of engaging with potential Indigenous service providers will, potentially, include the following activities to ensure greater awareness of commercial and community expectations with regard to opportunities related to the Taraborah project:

- Identifying areas of potential uptake for service provision within the project
- Risk-managing criteria for successful Indigenous engagement in the project, small business and works contracts to streamline the submission and application process prior to releasing tenders
- Developing standard competency framework criteria to deliver required services
- Identifying commercial imperatives, support mechanisms and alternative options for exploration to achieve expected outcomes
- Developing alliances with existing commercial interests and strategic partnering to deliver services
- Exploring opportunities to mentor and support business development directly within the project, so as to pass on commercial standards of quality and accountability to community organisations and developing Indigenous business interests.

A traditional area of concern has been the limited exposure of Indigenous service providers to submitting contracts, especially in providing evidence of health, safety and environmental planning and quality standards in the tendering process.

To initiate a service provision framework, Shenhua will undertake an internal audit of procurement opportunities to identify the range of criteria for local business operators to tender and deliver work to a required standard, while remaining competitive at market rates. All work will be subject to normal operating health, safety, environmental and quality controls, however, a starter-kit will be developed to assist businesses in meeting these standards.

Establishing achievable expectations is an essential first step in the process – local business providers must assess where in the supply chain they need to target their efforts.

2.7 Cultural Integration

2.7.1 Management Cultural Inductions

Mandatory cultural inductions will be held for all senior project staff with the aim of providing an overview of local Indigenous history, culture and customs. These inductions will be facilitated by an external Indigenous training provider.

2.7.2 Employee Cultural Inductions

Employee cultural inductions will be incorporated into the general site induction process. These externally facilitated inductions will focus on local Indigenous culture, customs and local community expectations, and will be mandatory for all new project employees and subcontractors.

2.8 Broader Social Investment Opportunities

In support of its Indigenous Participation Plan objectives, Shenhua will assess a number of potential tools for project-wide engagement with local Indigenous communities, including:

- Developing cultural exchanges with schools and community groups
- Working with communities to identify and implement appropriate social investment programs (i.e. health, education, cultural preservation).
- Sponsoring school awards for innovation and research.

3 External Funding and Resources

Shenhua will identify funding opportunities for business support and community capacity through auditing all State and Federal funding networks to compare against the needs of the Taraborah project Indigenous participation program.

4 Evaluation and Reporting

Performance against this plan will be regularly monitored. In addition to benchmarking against Indigenous Participation Plan targets, Shenhua will incorporate community-based evaluation methodology. This will directly involve Indigenous stakeholders in the assessment process and will assist in building capacity and enabling these communities to directly influence their future development. Evaluation methodology will potentially include:

- Satisfaction surveys
- Facilitating community wellbeing 'scorecard' measurements
- Overseeing investment programs.