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SOCIAL IMPACT ASSESSMENT

Lake Vermont Meadowbrook Project

Reference No. 30032487

Prepared for Bowen Basin Coal Pty Ltd

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Executive Summary

INTRODUCTION

Bowen Basin Coal Pty Ltd (the Proponent) is seeking environmental approvals for the Lake Vermont Meadowbrook Project (the Project). The Project is located within the Isaac Regional Council (IRC) Local Government Area (LGA), approximately 25 kilometres north-east of Dysart and 160 km south-west of Mackay. The Project is an extension of the existing Lake Vermont Mine. The key objective of the Project is to extend the life of the existing Lake Vermont Coal Mine by supplementing the future decline in production from the existing open-cut operations with output from an adjoining underground operation.

As a resource project that requires an Environmental Impact Statement (EIS), the *Strong and Sustainable Resource Communities Act 2017* applies to the Project, a key requirement of which is the preparation of a Social Impact Assessment (SIA). This SIA has been prepared by SMEC as one of the specialist technical assessments informing the EIS.

PURPOSE OF SIA AND METHODOLOGY

The purpose of the SIA is to identify and assess the social impacts which may occur in local and regional communities as a result of the Project, including how such impacts might be mitigated or enhanced and monitored.

The objectives of the SIA are to:

- Define the communities potentially affected by the Project.
- Provide stakeholders with the opportunity to provide inputs into the SIA, including the scope of assessment, the impacts which may be experienced in different localities and by different stakeholders, and how they might be avoided, mitigated or the benefits enhanced.
- Develop a robust baseline of the existing social environment against which the potential changes may be assessed.
- Provide a detailed assessment of the Project's positive and negative impacts on the social environment for each project stage.
- Derive mitigation and enhancement commitments which serve to avoid or reduce impacts and enhance benefits.
- Provide a monitoring and reporting strategy to support adaptive management of social impacts.

The objective and outcomes stipulated in the Project's EIS terms of reference relevance to social matters is for the construction and operation of the Project to ensure that:

- Adverse social impacts arising from the Project are avoided or mitigated.
- Benefits for local and regional communities are enhanced.

The methodology for the SIA has been specifically tailored to meet the requirements of the Project's EIS Terms of Reference, including the Coordinator-General's SIA Guideline (2018). Key steps in the SIA process include scoping, analysing the existing social environment, identifying and assessing potential social impacts (both positive and negative) and identifying measures to manage or mitigate the Project's potential impacts and enhance potential benefits.

This SIA also informs the preparation of the Social Impact Management Plan (SIMP), which documents the management measures identified through the SIA process and provides actions for their implementation and monitoring.

SIA STUDY AREAS

SIA study areas were determined based on those communities that have potential to experience changes to the social environment due to the location of the Project or project infrastructure, construction activities, or changes to the population profile. Outcomes of scoping activities facilitated the understanding and determination of the SIA study areas, in addition to consideration of fatigue management requirements; outcomes of assessment of nearby regional communities and their capacities to provide workers to the Project; and outcomes of engagement during the scoping phase.

Dysart is the only nearby regional community within a safe commute distance from the Project site. While Moranbah is located outside of safe commute distance from the Project's main access, the size of its population and its function as a key regional service centre determined that it is a secondary study area (with a moderate capacity to supply workers to the Project).

As such, the following study areas underpinned development of the SIA:

- Primary study area:
  - Dysart Urban Centre and Locality (UCL).
  - Isaac LGA.
- Secondary study area:
  - Moranbah UCL.
  - Mackay LGA.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

Stakeholder engagement was an integral part of the SIA approach and directly informed the development of the baseline analysis, identification of potential impacts and benefits and how they may be managed. The feedback received during stakeholder engagement also informed the SIMP development.

The primary means of stakeholder engagement was via semi-structured interviews and meetings with key stakeholders. A broad range of stakeholders were directly engaged as part of the SIA, including: local government; state government agencies; local and regional employment training providers; public and private housing providers; local commerce and community development groups; social and public service providers; emergency services; and health services. These engagements identified:

- The town of Dysart has endured a range of socio-economic challenges over the last ten years, following the closure of Norwich Park Mine (~2012) and the subsequent loss of population and economic activity.
- Stakeholders appreciated Jellinbah as an existing operator and a good corporate citizen and welcomed the Project and continuation of the Lake Vermont Mine operations.
- Numerous stakeholders, including Dysart Hospital and Dysart Medical Centre, indicated that inaccessibility to medical services is a significant challenge in Dysart, with the town only supported by one General Practitioner.
- Stakeholders indicated that a lack of any form of community transport or taxi service in Dysart is a challenge, particularly for vulnerable residents.
- Feedback from community groups and Queensland Police Service expressed that there is a lack of recreational opportunities for young people. This causes issues with young people congregating in groups and may result in anti-social behavioural issues.
- Numerous stakeholders, including the Lady Gowrie Dysart Childcare Centre, expressed that childcare services were struggling to meet demand and that there is a need for expansion of capacity.
- Schools in Dysart expressed a high degree of appreciation for the existing Jellinbah/Thiess support, including initiatives supporting Science Week and student career evenings. Schools emphasised a need and opportunity for continued educational support, particularly in regard to developing awareness on science, technology, engineering and mathematics..
- The housing market in Dysart remains heavily influenced by BMA, who own 528 dwellings in the town, of which 36.0 per cent were unoccupied at March 2019. t
- Stakeholders expressed that while there is available housing stock in Dysart, much of this is perceived to be of low quality which is a barrier for families to relocate to Dysart.. They also indicated there is a high degree of lower end housing stock which is affordable.

EXISTING SOCIAL ENVIRONMENT

The baseline analysis describes the existing social conditions and trends within the defined SIA study areas and provides a benchmark against which potential social impacts can be assessed. The baseline analysis has drawn on a range of primary and secondary information sources to obtain both qualitative and quantitative data to inform development of the SIA, including data from stakeholder engagement. The following sub-sections provide a summary of the existing social environment across the key SIA matters of workforce management, housing and accommodation, health and community wellbeing, and local business and industry procurement.

Workforce Management

The labour market in Dysart and the broader Isaac LGA region is typically characterised by the cyclical trends of the mining industry. Key characteristics of Dysart and the Isaac LGA region's labour market include:

- Very low rates of unemployment, with recent estimates at September quarter 2021 indicating an unemployment rate of 1.4 per cent in Dysart, compared to Queensland with an unemployment rate of 4.9 per cent. Low rates of unemployment may reflect the ability of skilled workers obtaining employment elsewhere, such as other nearby mining projects.
- Identified under-represented groups in Dysart's labour force include women, Aboriginal and/or Torres Strait Islander peoples and youth (aged 15 to 24 years), with the number of unemployed persons across these

groups increasing. Youth unemployment was identified by stakeholders as a key issue in Dysart, with 13.8 per cent of Dysart's youth unemployed and looking for work (as at the 2016 Census).

- Mining has been the dominant industry of employment in Dysart since the town's establishment in the 1970s. At the 2016 Census, almost half (48.5 per cent) of employed Dysart residents worked in the mining industry. Despite the high proportion of Dysart residents who are employed in the mining industry, these workers are typically skilled in surface mining. As such, there are limited skills in underground mining available within Dysart.
- There is an anticipated high cumulative demand for construction and operational mine workers over the next ten years, with seven major mining projects proposed within the Isaac LGA. These seven projects are expected to require up to 4,280 construction workers and 3,866 mining workers, far outstripping the available labour within the Isaac LGA.
- Outside of mining, other key industries of employment for Dysart residents include education and training (7.3 per cent) and accommodation and food services (6.8 per cent). Those employed in the accommodation and food services industries may be in roles that support the mining industries, such as in Worker Accommodation Villages (WAVs). At the 2016 Census, approximately 3.0 per cent of employed residents worked in the construction industry.
- The Lake Vermont Mine currently employs up to 880 people, of which 14.4 per cent identify as female and 4.9 per cent identify as Aboriginal and/or Torres Strait Islander. The principal mining contractor is Thiess Mining Services, who currently implement a range of measures supporting workforce diversity.

Overall, Dysart has limited capacity to provide new workers to the Project, particularly those skilled in underground mining. The limited availability of local skills is anticipated to be further compounded with the development of other new mining projects in the region.

Housing and Accommodation

The Project has the potential to change the supply and demand of housing and accommodation, due to potential increase in non-resident and resident workers. Dysart is the nearest community to the Project, located approximately 25 km south-west of the Lake Vermont Mine. Dysart is the only town within a safe commute distance from the site. The availability and affordability of housing and accommodation in Dysart and the broader Isaac LGA are typically influenced by the mining industry's cyclical trends. Key characteristics of housing and accommodation in Dysart include:

- There is a high proportion of unoccupied dwellings in Dysart, with 511 dwellings unoccupied at the 2016 Census, equating to 42.5 per cent of total dwellings. A significant proportion of unoccupied housing is owned by BMA, who owned 528 dwellings in Dysart as at March 2019, of which 36.0 per cent were unoccupied. Consultation with stakeholders indicated that many of these unoccupied dwellings are in poor condition and require maintenance and upgrade.
- Reflective of the relatively high residential population turnover, Dysart recorded higher rates of rented dwellings and lower rates of homeownership, with around 69.3 per cent of occupied dwellings being rented (as at the 2016 census). Of the rented dwellings, 40.4 per cent were rented from a real estate agent and 44.4 per cent were rented from an employer, such as a mining company or a Government agency. High rates of company-provided and/or subsidised housing reflect the relatively lower levels of median weekly rents in Dysart and the broader Isaac LGA region, at $120 and $90 per week respectively.
- Engagement with the Queensland Department of Housing and Public Works identified that the Department manages approximately 20 houses in Dysart, most of which were occupied. Consultation with other relevant stakeholders indicated that there is currently no demand for affordable housing in Dysart, with the town having sufficient availability of rental housing that is affordable for low income households. Despite this, stakeholders including IRC and IAHT has consistently highlighted that housing affordability is a region-wide concern.
- There are four WAVs in Dysart, providing a total of 3,275 beds, with a total approved capacity of 3,670 beds. The WAVs are BMA Dysart Village (closed to public), Lake Vermont Accommodation Village (closed to public), Civeo Dysart Village (open to public) and Stayover by Ausco (open to public). There are also two short-term accommodation providers in Dysart, catering for tourists and people visiting on short-term business. They include the Jolly Collier Hotel and the Country Roads Motor Inn.

Overall, there is ample capacity for Dysart to provide housing for families moving to town; however, the quality of some of the available housing may be a barrier preventing families from relocating to Dysart.

Health and Community Wellbeing

Dysart is a small town established in the 1970s to support nearby coal mine projects. As such, Dysart has a strong identity as a mining town. Residents also enjoy the rural lifestyle that Dysart affords. Key characteristics of health and community wellbeing in Dysart and the broader Isaac LGA region include:

- Prior to 2020, the population of Dysart had been steadily declining since it peaked in 2007 with 3,138 people. Over the ten-year period to June 2020, Dysart's population declined to 2,342 people (representing a loss of 649 people). Significant population losses were experienced between 2014 and 2015, which were attributed to the downturn in the mining industry (circa 2012-2017) including mine closures and downsizing of mining projects.
- In the year to June 2020, Dysart experienced minor population growth with an estimated population of 2,342 people, an increase of 12 people from June 2019. This population growth is potentially attributed to the recent increase in workforce size at Lake Vermont Mine, the COVID-19 pandemic and associated travel restrictions resulting in non-resident workers electing to remain in Dysart on a full-time basis and increase in economic activity stimulated by other nearby mining projects.
- At June 2020, the estimated full-time equivalent population of Dysart was 3,995 people, with 41.9 per cent being non-resident workers (QGSO, 2020). The proportion of non-resident workers in Dysart is higher than that recorded for the Isaac LGA as a whole, at 38.0 per cent (12,770 non-resident workers). The proportion of non-resident workers in Dysart is decreasing, with this group having shrunk by 9.0 per cent (165 non-resident workers) in the year to June 2020. The decrease in non-resident workers based in Dysart is likely influenced by the COVID-19 pandemic and associated travel restrictions.
- The population of Dysart is typically younger with a lower 'median age' relative to Queensland, with a higher proportion of people aged 14 years or younger and a significantly lower proportion of people aged 65 years or older. This age profile reflects the family-oriented nature of Dysart, and the lack of aged care infrastructure and services available in Dysart. Over the five years to the 2016 Census, some vulnerable groups in Dysart increased in size, despite the decline in population. The growing vulnerable groups in Dysart include people aged 65 years or older, people who need assistance, low income households earning less than $650 per week, and unemployed people.
- Mining towns are historically high-income towns. The average individual income in Dysart has exceeded the Queensland average since the 2001 Census. At the 2016 Census, median weekly incomes of the household and individual in Dysart were $2,128 and $1,103 respectively.
- Outcomes of recently conducted public surveys indicate that residents of the Isaac LGA, including Dysart and Moranbah, expressed that their towns are family-oriented and they feel a strong sense of belonging to their area. The surveys also identified that local schools, cultural facilities and sports and leisure facilities in the towns were rated positively. However, respondents indicated that shopping for some everyday household items can be difficult, and access to childcare services and some medical services is challenging in Moranbah and Dysart. This was further confirmed through stakeholder engagement for the SIA.
- Stakeholders engaged for the SIA identified a key challenge in Dysart as being constrained access to health services and childcare, exacerbated by challenges in attracting and retaining qualified workers. There is currently one General Practitioner resident in Dysart, serving the local population and surrounding area. Dysart also has only one childcare centre, the Lady Gowrie Childcare Centre, which has an existing capacity for 39 children. Stakeholders stated that there is demand to expand the existing capacity of the childcare centre and a key challenge is attracting diploma qualified childcare workers to Dysart.
- Emergency services in Dysart comprise of Queensland Ambulance Service, Queensland Police Service and Queensland Fire and Emergency Services. Dysart Ambulance Station is staffed by one full-time paramedic who is supported by volunteers.
- There are two schools based in Dysart, including the Dysart State School and the Dysart State High School, and one kindergarten, the Dysart Kindergarten (C&K). In addition, there is one childcare facility,the Lady Gowrie Day Care Centre. There are good community facilities available in Dysart, including parks, recreational facilities and churches.

  Dysart Community Support Group is a key community support service providing events and activities for local residents, and a specialist homelessness service.
- While stakeholders engaged for the SIA expressed positive sentiment towards Dysart's community facilities, including the community centre and the Dysart public swimming pool, some stakeholders noted that there needs to be more consideration of entertainment for school-aged children, in particular alcohol-free events.

While Dysart's population had been in slow decline since 2007, it is now experiencing minor population growth. Key issues raised by stakeholders include access to health services and childcare, as well as a lack of entertainment options for school-aged children.

Local Business and Industry Procurement

The mining industry is the key industry within the Isaac LGA. The total economic output generated by the Isaac economy is estimated at $22.5 billion, with mining accounting for around 86.6 per cent of Isaac LGA's output (REMPLAN, 2022). Other key characteristics of local business and industry in Dysart and the broader Isaac LGA include:

- Dysart has a number of small businesses, including a newsagency, IGA, bakery, hairdresser and food outlets. Stakeholders have expressed that businesses in Dysart suffered during the downturn of the mining industry

from 2012, with businesses closing, such as the ANZ bank, the butcher and clothing stores. This was noted to also be exacerbated by the presence of the WAVs, which typically provide an on-site general store.

- A major concern raised by all stakeholders was the state of the Dysart Shopping Centre. The Dysart Shopping Centre was once viewed as the heart of Dysart. However, high rents and a subsequent high turnover of tenants has resulted in much of the shopping centre now being empty. Dysart residents typically travel to Middlemount for their shopping, which is approximately a 45-minute drive from Dysart.
- As at June 2021, there were 1,861 registered businesses operating in the Isaac LGA, of which 61.8 per cent were non-employing businesses, such as sole traders (ABS, 2021). Of the registered businesses, 195 businesses were construction businesses and 27 businesses were mining businesses. As noted previously however, the construction industry employs only 3.0 per cent of people within Dysart.
- As at October 2019, the 'Black Business Finder' indicated there are eight businesses registered in Isaac LGA region that are owned by Aboriginal and/or Torres Strait Islander peoples. These businesses include a uniform shop, car repairers, and a mining consultancy.
- The Lake Vermont Mine has been operating since 2009 and as such, have already established supply arrangements with local and regional businesses. In the year to June 2019, the Lake Vermont Mine spent $6,856,820 on local suppliers within the Mackay, Clermont, Moranbah and Dysart areas. Annual spend increased in the year to June 2020, to $6,930,503, of which over $2 million (30 per cent) was spent within the Dysart postcode.

Due to the presence of businesses within Dysart and the broader Isaac LGA who can service the mining industry, and the existing established relationships the Lake Vermont Mine has with a range of local and regional suppliers, there is ongoing capacity for local and regional businesses to supply to the Project.

IMPACT ASSESSMENT

This impact assessment has analysed the potential impacts which may occur as a result of the Project and identified the associated mitigation and benefit enhancement measures.

The Project will have various social impacts and benefits, primarily accruing in Dysart, but with employment opportunities and benefits for businesses extending to many other areas, including the broader Isaac LGA and the Mackay LGA. As an existing mining operator, the Proponent has a proven record of maximising local employment and actively supports members of the workforce to live locally. Due to the minor variations in workforce size associated with the combined Lake Vermont Mine and the Project, the Project is not expected to have a significant impact on housing and accommodation, or on service provision.

Social impact	Stakeholders affected	Nature	Managed significance
Workforce Management			
Increase in labour force participation and reduction in number of unemployed people, particularly for identified underrepresented groups in the labour force, indirectly enhancing socio-economic wellbeing of individuals and communities in the Isaac LGA region	Unemployed people and jobseekers in Dysart and Isaac LGA region	Positive	Medium
	Isaac Regional Council	Positive	Medium
	Identified underrepresented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people (15 to 24 years)	Positive	High
Exacerbate shortage in construction and mining skills and labour in Isaac LGA region due to increase in competition for labour	Isaac Regional Council	Negative	Negligible
	Other nearby mining projects	Negative	Low
Retention of existing Dysart residents employed at Lake Vermont Mine	Lake Vermont resident workers	Positive	High
	Dysart community	Positive	Medium
Increase in opportunities for young people or those with no previous underground mining experience to gain skills relevant to the Project	Young people or people with no previous underground mining experience	Positive	Medium

Social impact	Stakeholders affected	Nature	Managed significance
Increase in risk to mental health, safety and wellbeing of workers, including work stress exacerbated by fatigue	Project workforce	Negative	Low
	Health and social services in Dysart	Negative	Low
	Emergency services in Dysart	Negative	Low
Increase in stress and/or anxiety for families of workers who are employed on a FIFO basis, indirectly contributing to family breakdown	Families of project workforce	Negative	Low
Housing and Accommodation			
Potential for temporary increases in rental prices due to perceived economic uplift in Dysart contributed to by the Project, which may place some pressure on low-income rental households	Low-income rental households in Dysart Project workforce	Negative	Low
Increased demand for quality houses sought after by families who relocate to Dysart to take up employment with the Project	Project workforce Dysart community	Negative	Low
Increase in financial returns for property owners in Dysart, with increase in demand for housing resulting unoccupied dwellings coming back on the market	Property owners and investors in Dysart	Positive	Medium
Reduced availability of dwellings for rent or purchase in Dysart may limit options for new resident operations workers	Project workforce	Negative	Low
Enhanced economic productivity for short-term accommodation providers due to increase in patronage, indirectly maintaining and/or increasing employment opportunities	Short-term accommodation providers in Dysart	Positive	Medium
Constrained access to short-term accommodation for tourists visiting Dysart, particularly self-drive tourists, indirectly reducing the number of tourists visiting Dysart	Tourists visiting Dysart	Negative	Negligible
	Isaac Regional Council	Negative	Negligible
Local Business and Industry Procurement			
Enhanced economic benefit and productivity for local and regional businesses, indirectly leading to potential generation of further employment opportunities and overall enhance productivity in regions	Mining and construction businesses in Isaac and Mackay LGAs	Positive	Medium
	Indigenous owned and/or managed businesses	Positive	Medium
	Local industry groups	Positive	Low
Barriers for local, small and/or new businesses in tendering for Project procurement opportunities due to potential monopolisation	Small or new businesses in Isaac LGA	Negative	Low
Shortage in labour and skills for non-mining local and regional employers due to workers taking up employment with the Project, indirectly decreasing employment and economic diversity in region	Non-mining business and industry in Dysart and Isaac LGA region	Negative	Low
	Isaac Regional Council	Negative	Low
Enhanced business viability in Dysart due to increase in patronage, indirectly maintaining or generating employment opportunities	Businesses in Dysart	Positive	Medium
Increase in entrepreneurism due to enhanced business environment, contributing to development of new	Community, new business, innovators	Positive	Medium

Social impact	Stakeholders affected	Nature	Managed significance
businesses in Dysart, or revitalisation for formerly closed businesses			
Health and Community Wellbeing			
Population retention or growth in Dysart, leading to increase in social capital, indirectly contributing to improved community cohesion and connectedness and enhance community vitality	Dysart community	Positive	High
	Isaac Regional Council	Positive	High
Decrease in community cohesion in Dysart due to increase in non-resident population, potentially in the order of 170 additional non-resident workers during operations, who will be accommodated at Lake Vermont Accommodation Village	Dysart community	Negative	Low
	Isaac Regional Council	Negative	Negligible
Increase in non-resident workers in Dysart may contribute to concerns about community safety or to amenity impacts through perception that non-resident workers are likely to engage in anti-social behaviour	Dysart community	Negative	Negligible
	Queensland Police Service	Negative	Negligible
Increase in demand for emergency services to respond to increased risk of traffic accidents and workplace accidents at Project site or Lake Vermont Accommodation Village	Emergency services in Dysart, including QAS, QPS and QFES	Negative	Low
Increase in demand for childcare places, indirectly placing pressure on providers and reducing access for other residents of Dysart	Childcare providers in Dysart	Negative	Low
	Dysart residents	Negative	Low
Increase in demand for hospital and health services by the Project workforce, resulting in increased burden for service providers and reduced level-of-service for existing residents	Hospital and health services in Dysart	Negative	Low
	Dysart community	Negative	Low
Increase in risk of road incidents along Saraji Road, Golden Mile Road, Fitzroy Developmental Road and Peak Downs Highway due to increased volume of heavy vehicles and driver fatigue (during construction phase)	Road users	Negative	Low
	Isaac Regional Council	Negative	Negligible
	Project workforce	Negative	Low
Temporary increase in noise and dust due to activities associated with expansion of Lake Vermont Accommodation Village, potentially affecting the learning environment at Dysart State High School	Dysart State High School	Negative	Low
Relinquishment of Native Title due to expansion of Lake Vermont Accommodation Village	Barada Barna Aboriginal Corporation	Negative	Medium
Increase in overall socio-economic wellbeing in Dysart and the broader region through provision of community investment initiatives	Dysart community	Positive	Medium
	Community groups and service providers in Dysart	Positive	Medium
	Aboriginal and/or Torres Strait Islander communities	Positive	Medium

With the Project being an extension to the existing Lake Vermont Mine (maintaining existing production and employment levels) it is acknowledged that social impacts are likely greater if the Project does not proceed, than if the Project is ultimately to be approved. This is not to suggest that social investment is not required from the Proponent, rather it is suggested that investment should be reasonable and commensurate with the social impacts anticipated.

SOCIAL IMPACT MANAGEMENT PLAN

This SIA has informed development of a stand-alone SIMP. The SIMP details the social impact mitigation and benefit enhancement measures developed in response to the social impacts, both positive and negative.

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Abbreviations and acronyms

Term	Description
ABS	Australian Bureau of Statistics
APCT	Abbot Point Coal Terminal
CHPP	Coal Handling and Preparation Plant
DATSIP	Department of Aboriginal and Torres Strait Islander Partnerships (Queensland)
DES	Department of Environment and Science (Queensland)
DESBT	Department of Employment, Small Business and Training (Queensland)
DIDO	Drive-in, drive-out
DNRME	Department of Natural Resources, Mines and Energy
EIS	Environmental Impact Statement
EP Act	*Environment Protection Act 1994* (Queensland)
FIFO	Fly-in, Fly-out
FTE	Full-time equivalent
GP	General Practitioner
HCC	Hinterland Community Care
HHS	Hospital and Health Service
IAHT	Isaac Affordable Housing Trust
IAP2	International Association for Public Participation
ICN	Industry Capability Network
IRC	Isaac Regional Council
Jellinbah	Jellinbah Group Pty Ltd
JV	Joint venture
km	Kilometre
LGA	Local Government Area
LRC	Large resource project
MDL	Mineral Development Lease
MIA	Mine Infrastructure Area
ML	Mining lease
Mtpa	Million tonnes per annum
NRAS	National Rental Affordability Scheme
NRC	Nearby regional community

Term	Description
OCG	Office of the Coordinator-General (Queensland)
PCI	Pulverised coal for injection
Principal Contractor	Thiess Pty Ltd
QGSO	Queensland Government Statistician's Office
ROM	Run of Mine
SA2	Statistical Area Level 2
SDPWO Act	*State Development and Public Works Organisation Act 1971* (Queensland)
SEIFA	Socio-Economic Indexes for Areas
SIA	Social Impact Assessment
SIA Guideline	Coordinator-General's Social Impact Assessment Guideline 2018
SIMP	Social impact management plan
SSRC Act	*Strong and Sustainable Resource Communities Act 2017*
STEM	Science, Technology, Engineering and Mathematics
The Project	Lake Vermont Meadowbrook Project
the Proponent	Bowen Basin Coal Pty Ltd
ToR	Terms of Reference
UCL	Urban centre and locality
WAV	Workforce Accommodation Village

1 Introduction

Bowen Basin Coal Pty Ltd (the Proponent) is seeking environmental approvals for the Lake Vermont Meadowbrook Project (the Project). The Project is located within the Isaac Regional Council (IRC) Local Government Area (LGA), approximately 25 kilometres (km) north-east of Dysart and 160 km south-west of Mackay (refer Figure 1). The Project is an extension of the existing Lake Vermont Mine. The key objective of the Project is to extend the life of the existing Lake Vermont Mine, by supplementing the future decline in production from the existing open-cut operations with output from an adjoining underground operation.

On 26 August 2019, the Department of Environment and Science (DES) approved an application for the proponent to voluntarily prepare an Environmental Impact Statement (EIS) for the Project, under the *Environmental Protection Act 1994* (EP Act).

As a resource project that requires an EIS, the *Strong and Sustainable Resource Communities Act 2017* (SSRC Act) also applies to the Project. A key requirement of the SSRC Act is the preparation of a Social Impact Assessment (SIA). This SIA has been prepared by 'SMEC' as one of the specialist technical assessments informing the EIS.

1.1 Project description

The Lake Vermont Meadowbrook Project represents an extension of mining activities at the existing Lake Vermont Mine and involves underground longwall mining and open cut mining activities and supporting infrastructure (Figure 1-1).

The key components of the Project include:

- Underground longwall mining of the Leichardt Lower Seam and Vermont Lower Seam; the depth and thickness of the coal seams in the Project area means the coal resource can be extracted using underground mining methods;
- An open cut pit to mine the Vermont Seam and Vermont Lower Seam;
- Development of a new infrastructure corridor linking the new mining area to existing infrastructure at the Lake Vermont Mine;
- Development of a Mine Infrastructure Area (MIA);
- Construction of a drift and shafts to provide access to underground operations; and
- Development of other supporting infrastructure and associated activities.

The Project involves the extraction of up to 7 Mtpa of ROM coal, equivalent to approximately 5.5 Mtpa of metallurgical product coal (for the export market). The Project addresses the forecast decline in coal output from the Lake Vermont Mine, by maintaining existing (approved [up to 12 Mtpa ROM]) production levels across an extended life of the mine. The anticipated extension to the life of the Lake Vermont Mine is approximately 25 years.

The Project maximises the use of Bowen Basin Coal owned land and infrastructure at the Lake Vermont Mine to minimise the environmental impacts from additional infrastructure and provide Project efficiencies (Figure 1-2). The Lake Vermont Accommodation Village in Dysart is proposed to be expanded to support the Project's construction and operational stages.

Figure 1-1 Regional location of the Project

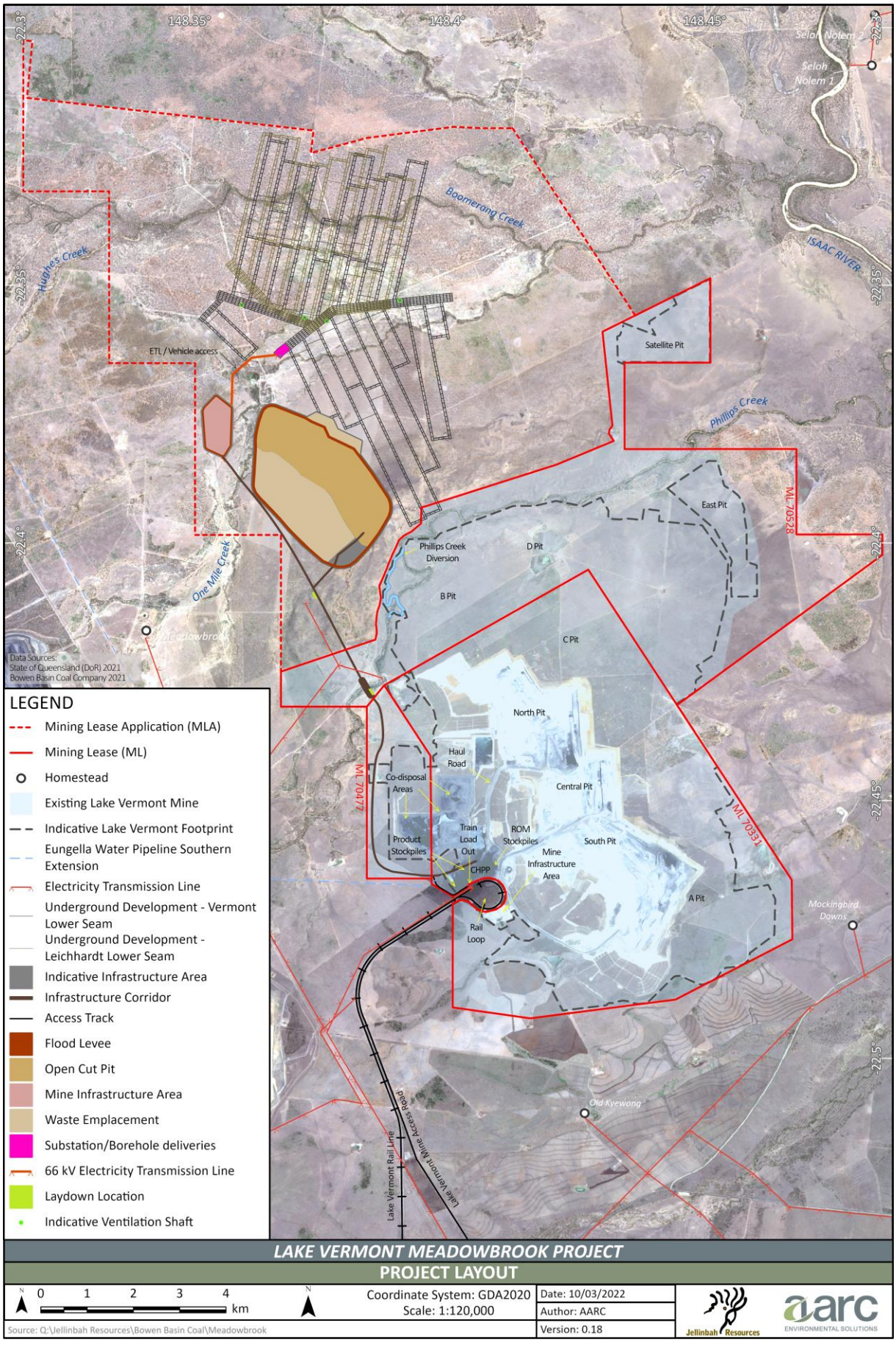

Figure 1-2 Project layout and proposed infrastructure

Dysart is an established regional township servicing both mining and pastoral industries. The Project is located within the IRC LGA and spans across Mineral Development Lease (MDL) 429 and MDL 303, as well as the existing Lake Vermont Mine on Mining Leases (ML) 70331, 70477 and 70528 (Figure 1-3). The Project is located over one freehold land parcel, being Lot 102 SP310393 (formerly Lot 10 on Plan CNS93) being the 'Meadowbrook' property, owned by Bowen Basin Coal.

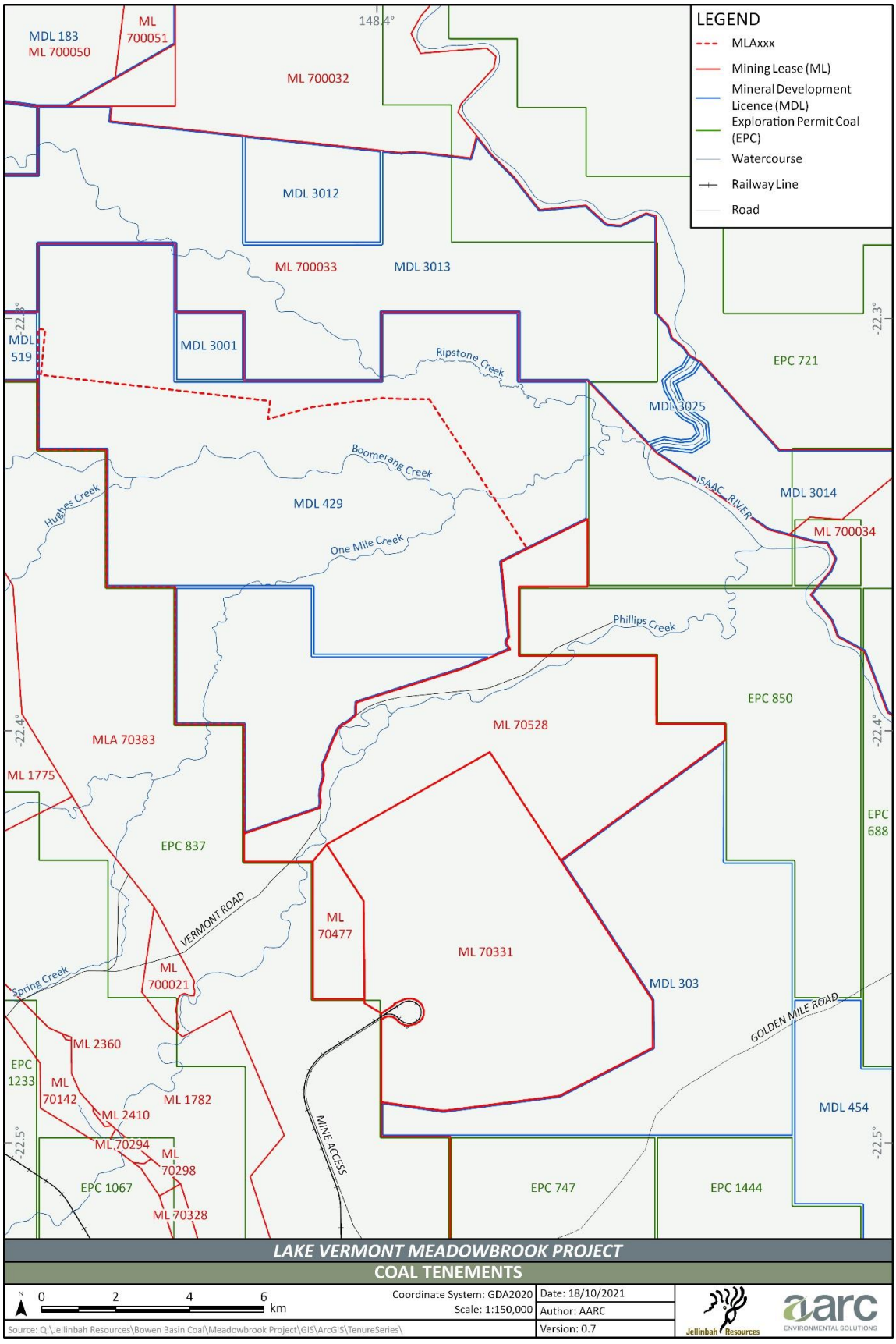

Figure 1-3 Project boundary and mining tenure

1.1.1 Lake Vermont Meadowbrook Complex

Approximately 880 people are currently employed at the Lake Vermont Mine. The current workforce is estimated to decrease to 450 people post 2028, with the forecast reduction in open cut coal production, should the Project not proceed (Table 1-1).

At Project full development, the operational workforce for the Lake Vermont Mine Complex (i.e. operation of the existing Lake Vermont Mine together with the Project) is estimated to be 860 workers (450 workers associated with open cut operations and 410 workers associated with underground operations). Were the Project not to proceed, some 410 direct workforce positions will be lost, plus there will also be the flow-on indirect economic impacts primarily to Dysart as well as nearby towns.

Table 1-1 Overview of the Lake Vermont Meadowbrook Complex

Project	Type	Owner (Proponent)	Manager	Operator (Principal Contractor)	Operational Workforce	
					FY20/21	From FY27/28
Lake Vermont Mine	Open cut mine	Bowen Basin Coal Pty Ltd	Lake Vermont Resources	Thiess Pty Ltd	880	450
Lake Vermont Meadowbrook Project (the Project)	Underground mine, with one small-scale open cut satellite pit			Contractor and Owner personnel	0	410
Lake Vermont Meadowbrook Complex					880	860

The Project will provide training opportunities, where appropriate, for many of the current workforce to transition from the planned reduction in open cut operations, to the underground Project. This will enable workforce retention and job security for those existing employees who wish to take advantage of this opportunity.

Occupations required by the Project during operations are anticipated to include:

- Underground heavy equipment operators;
- Drillers;
- Skilled tradespeople including boiler makers, electricians, special mechanics and diesel fitters;
- Engineers, surveyors, geologists;
- Health, safety, environment, human resources, and mine management professionals; and
- Administrative staff.

Local industry service providers and job seekers will be provided with timely notification regarding potential Project employment opportunities. Employment opportunities will be promoted widely, which may include community and stakeholder engagements, major contractors' websites, employment agency listings and local/regional papers.

The Barada Barna People and Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships–Central Region (Rockhampton office) will be consulted in relation to employment and training opportunities for Indigenous people.

The Project will provide equal opportunities for employment and will recruit based on candidates' skills, skill requirements and job suitability without regard to gender, age, race or disability status.

As a component of its recruitment strategy, the Project's equal employment opportunity and local employment focus will be promoted to surrounding communities, including under-represented groups, to encourage local participation in the Project.

Training opportunities will be provided at the Project to attract unskilled and semi-skilled, local employees and may include traineeships, apprenticeships and/or general on-the-job training.

1.1.1.1 Workforce management

Project workforce management practices will include:

- Prioritising recruitment of suitable workers from local and regional communities and workers who have a preference to live in regional communities;
- Supporting the health and wellbeing of the Project workforce.

The following recruitment hierarchy will be implemented for the Project:

- Existing Thiess workforce who wish to transition from an open cut role to an underground role;
- Local Dysart residents who will commute daily from their homes;
- People from other regions who will move to Dysart and commute daily from their homes;
- People from nearby regional communities; and
- People from other regions.

1.1.1.2 Rostering

Project construction activities will be undertaken progressively in parallel with ongoing mining operations at the Lake Vermont Mine. Construction activities will generally be undertaken during the day, seven days a week. Construction rosters are expected to be 12 hour shifts with 21 days on and seven days off.

The operational hours of the Project will be 24 hours a day, seven days a week. Operational employees will work industry standard 12-hour shift, working seven days on and seven days off. Senior management will most typically work on a five-day on (Monday to Friday), two-day off roster.

1.1.1.3 Workforce travel arrangements

Given the specialised nature of the work to be completed during the construction phase and its temporary nature, it has been assumed that Mackay, Rockhampton and Gladstone will provide approximately 95% of the construction workforce. The remaining 5 per cent will be sourced from Moranbah and other towns within the study area.

The Proponent's principal contractor, Thiess, has been successfully operating the Lake Vermont Mine and the Lake Vermont Accommodation Village since the commencement of operations in 2008. Whilst preference is given to employment of local personnel and monetary incentives provided to attract employees to reside in Dysart, the majority of the workforce choose not to reside in Dysart.

Based on historical and current workforce statistics, for operations, it is expected that:

- Approximately 8 per cent of the workforce will choose to reside in Dysart and will drive in and out from the mine on a daily basis. An additional 2 per cent will reside in surrounding local communities such as Moranbah, Middlemount and Clermont however will stay in the Lake Vermont Accommodation Village whilst rostered on as the daily commute distances from the surrounding local communities to Dysart is excessive from an Occupational Health and Safety perspective.
- Approximately 90 per cent of the workforce will drive-in drive-out (DIDO) primarily from the Mackay and Rockhampton regions and reside in the Accommodation Village.

1.1.1.4 Workforce accommodation

The Lake Vermont Accommodation Village in Dysart provides accommodation for the existing Lake Vermont Mine workforce who do not live locally, or live locally, but choose to stay in the village during their roster. The accommodation village currently has 637 single accommodation units, and recreation and dining facilities on-site for guests.

The construction workforce for the Project will be accommodated in either the commercial Civeo accommodation village or Stayover (Ausco) accommodation village in Dysart.

Consultation with the Isaac Regional Council has indicated the accommodation village in Dysart is the preferred location to continue to accommodate the operational workforce for the Lake Vermont Mine Complex (i.e. the workforce from Year 1 on), who do not choose to live locally. Jellinbah Group (a related entity of Bowen Basin Coal) has acquired land adjacent to the Lake Vermont Accommodation Village to enable extension of the village by up to an additional 100 rooms and also provide additional car parking space. This extension will ease congestion at the current village and will facilitate a progressive refurbishment of the existing facilities. A development application will be lodged with the Isaac Regional Council for the development. The accommodation village will be extended prior to operations commencing.

1.2 Purpose of the SIA

The purpose of the SIA is to identify and assess the social impacts which may occur in local and regional communities as a result of the Project, including how such impacts might be mitigated or enhanced and monitored.

SIA involves analysing, managing and monitoring the social consequences of a development. This includes changes to, or impacts on, communities that are likely to occur from the Project's lifecycle. The International Principles for Social Impact Assessment define SIA as being the process "of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions and any social change processes invoked by those interventions" (Vanclay, 2003: pg. 5).

The objectives of the SIA are to:

- Define the communities potentially affected by the Project.
- Provide stakeholders with the opportunity to provide inputs into the SIA, including the scope of assessment, the impacts which may experienced in different localities and by different stakeholders, and how they might be avoided, mitigated or the benefits enhanced.
- Develop a robust baseline of the existing social environment against which the potential changes may be assessed.
- Provide a detailed assessment of the Project's positive and negative impacts on the social environment for each Project stage.
- Derive mitigation and enhancement commitments which serve to avoid or reduce impacts and enhance benefits.
- Provide a monitoring and reporting strategy to support adaptive management of social impacts.

In addition to adopting the above objectives, this SIA has been prepared to meet the Project's EIS terms of reference. The final terms of reference for the Project's EIS was issued to the proponent on 30 April 2020. The final terms of reference have identified 'social' as a critical matter as it raises obligations under other legislation, which is the SSRC Act.

The objective and outcomes stipulated in the Project's EIS terms of reference relevant to social matters is for the construction and operation of the Project to ensure that:

- Adverse social impacts arising from the Project are avoided or mitigated.
- Benefits for local and regional communities are enhanced.

Table 1-2 outlines the matters stipulated in the Project's EIS terms of references that must be met through preparation of this SIA. The table also outlines where the terms of reference matter is met in this SIA.

Table 1-2 Project EIS terms of reference items

9.12 Social (Critical Matter)	Where addressed in SIA
Prepare a SIA for the proposed project that is consistent with the requirements of the SSRC Act and the Coordinator-General's SIA Guideline (March 2018).	This SIA
Develop the SIA in consultation with the Office of the Coordinator-General, Department of State Development, Manufacturing, Infrastructure and Planning.	Section 4
The SIA is to describe the potential social impacts (both positive and negative) for the proposed project, and must identify relevant and effective impact mitigation and benefit enhancement measures.	This SIA
The SIA is required to include detailed assessment of the following key matters in accordance with the SIA Guideline:	As below
• Community and stakeholder engagement	Section 4
• Workforce management	Section 6.1
• Housing and accommodation	Section 6.2
• Local business and industry procurement	6.4

9.12 Social (Critical Matter)	Where addressed in SIA
• Health and community well-being	Section 6.3
The SIA is to include an analysis of the capacity of relevant towns within 125 km radius of the proposed main access to provide workers for the construction and operational phases of the proposed project and the impacts of a resident workforce on housing and social infrastructure.	Appendix A: Capacity Assessment of nearby regional communities
Identify and assess the potential impacts of the project on existing health services in the construction and operational phases and describe how the health services are likely to be affected and the impact of these services on neighbouring communities and towns.	Section 6.3.2
The SIA is to be informed by an inclusive and collaborative community and stakeholder engagement process, consistent with the SIA Guideline. Community and stakeholder engagement is to be iterative throughout preparation of the SIA and engagement with local government must commence at an early stage.	Section 4
The SIA is to demonstrate evidence of engagement outcomes from local government, state agencies, local and regional employment and training providers, public and private housing providers, local and regional commerce and community development groups, social and public service providers, emergency services and public health providers and any other relevant stakeholders. The SIA must be informed by the results from community and stakeholder engagement.	Section 4 Section 6
The SIA must clearly identify measures for prioritising the recruitment of workers from local and regional communities. This includes describing how the recruitment hierarchy for workers in section 9(3A) of the SSRC Act will be implemented.	Section 6.1 Refer to Social Impact Management Plan
Where a FIFO workforce is proposed, the SIA must identify measures for managing this workforce in accordance with the SIA guideline, as well as sections 6 and 8 of the SSRC Act and the relevant provisions in the Anti-Discrimination Act 1991.	Section 6.1 Refer to Social Impact Management Plan
The SIA will need to include a target for obtaining a local workforce and set the maximum proportion of FIFO workers for the proposed project. This is to be supported by a rationale to ensure local benefit.	Section 3.6 Section 6.1 Refer to Social Impact Management Plan
The SIA must include a social impact management plan (SIMP) with management measure to mitigate the impacts and enhance the potential benefits identified in the assessment of the five key matters listed above in accordance with the SIA guideline. In particular the SIMP must:	Refer to Social Impact Management Plan
• Address barriers that may impact choice for workers to live local and provide support for people in local and regional communities to engage in project employment opportunities.	Refer to Social Impact Management Plan
• Provide management measures to ensure availability and affordability of local and regional housing and accommodation is not adversely impacted.	Refer to Social Impact Management Plan
The SIMP must describe a practical basis for the implementation of management measures identified through the SIA process. The SIMP is to include timeframes for implementation, roles and responsibilities, stakeholders and potential partnerships. Potential partnerships include opportunities for linkages with other projects planned or operating in the area and possible alignment with existing strategies that would benefit the management of cumulative social impacts.	Refer to Social Impact Management Plan
The SIMP must include a process of review throughout the proposed project lifecycle to ensure management measures continue to be effective, and where not achieving the stated outcomes, are amended to appropriately mitigate impacts. A	Refer to Social Impact Management Plan

9.12 Social (Critical Matter)	Where addressed in SIA
monitoring program must be included in the SIMP to consider the ongoing effectiveness of the management measures. The SIA Guideline sets out the monitoring, review and compliance requirements.	

2 Methodology

This section describes the methodology that has been used to undertake the SIA. The methodology for the SIA has been specifically tailored to meet the requirements of the Project's EIS terms of reference, in particular the SIA Guideline (2018).

Key steps in the SIA process include scoping, analysing the existing social environment, identifying and assessing potential social impacts (both positive and negative) and identifying measures to manage or mitigate the Project's potential impacts and enhance potential benefits. This SIA also informs the preparation of the Social Impact Management Plan (SIMP), which documents the management measures identified through the SIA process and provides actions for their implementation and monitoring.

Figure 2-1 below illustrates the steps of the SIA and SIMP processes which have been adopted based on the applicable requirements and standards.

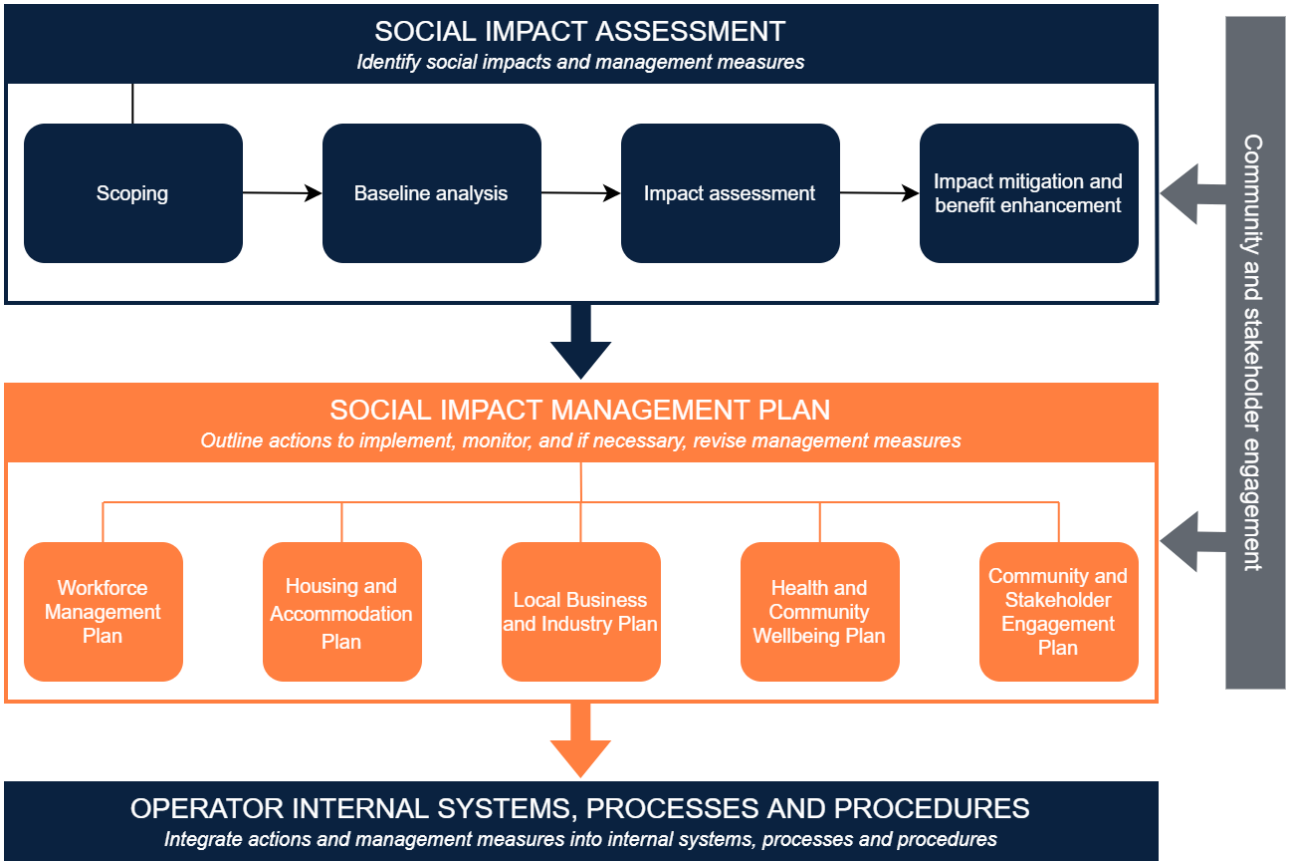

Figure 2-1 SIA and SIMP process

The key steps in the SIA process, including engagement and the SIA principles, are described in the following sections.

2.1 SIA principles

Underpinning the development of the SIA was the principles outlined in Section 2.2 of the SIA Guideline (2018). Table 2-1 describes how this SIA applied the principles.

Table 2-1 SIA principles

SIA Principle	Application to this SIA
Lifecycle-focused	The SIA considered the full lifecycle of the Project, including construction, operations and decommissioning. The cyclical nature of the resource sector and the associated boom and bust effects on communities within the Bowen Basin has been recognised throughout the SIA. Section 3.2 provides a description of the proposed activities for each phase of the Project lifecycle. Section 6 considers the social impacts of each Project phase.

SIA Principle	Application to this SIA
Reasonable	Scoping activities undertaken for this SIA ensured the SIA is commensurate with the nature and scale of the Project and the sensitivity of the potentially affected social environment. As part of scoping, key social changes likely to occur as a result of project development were identified along with the stakeholders likely to be affected. These insights were used to define the SIA study areas (Section 3.5) and relevant baseline parameters (Section 5).
Participatory	The community and stakeholder engagement program undertaken for the SIA was inclusive, respectful, meaningful and tailored to the needs of potentially impacted individuals and groups. The community and stakeholder engagement program was underpinned with the IAP2 Principles, and was designed with consideration to consultation fatigue in the Bowen Basin. A broad range of stakeholders were engaged via face to face meetings, interviews and interactions as detailed in Section 4.
Rigorous	Rigorous social research methods have underpinned all elements of the SIA. Primary and secondary data has been recorded and interpreted by experienced social scientists who have no conflict of interest or bias. A particular focus was given to ensuring a clear line of sight between the existing baseline condition, the social impact and the significance evaluation of that impact, and the management measure proposed to minimise the impact or to enhance the benefit.
Effective management	The SIA includes effective social management measures that enhance potential benefits and mitigate potential negative impacts. These were developed in collaboration with a range of stakeholders including Isaac Regional Council, housing providers and social infrastructure providers (see Social Impact Management Plan). Stakeholders were provided an opportunity to review and provide comment on draft management measures to ensure adequacy of management measures.
Adaptive	The SIA was developed in recognition that the social context of the Bowen Basin is fluid and can radically change due to the cyclical nature of the mining industry. Subsequently, each management measure was assigned a monitoring and reporting framework to ensure ongoing effectiveness of management measures, and ineffective management measures are adjusted (see Social Impact Management Plan).

2.2 Scoping

The first step in the SIA process is scoping. As defined in Section 2.3.1 of the SIA Guideline (2018), scoping allows the early identification of the likely SIA issues and ensures that the SIA is appropriately scaled and consistent with regulatory requirements.

The objective of the scoping for this SIA was to ensure that proportionate depth and scope is given to the potentially significant impacts of the Project. A number of scoping activities were undertaken to achieve this objective, including:

- Describing and understanding the activities involved in each Project phase.
- Determining the regulatory context relevant to this SIA.
- Profiling of potentially affected stakeholders.
- Engagement with IRC and the Office of the Coordinator-General.
- Conducting a preliminary review of potential key social changes likely to be invoked by the Project.
- Undertaking an assessment of nearby regional communities and their capacities to provide workers to the Project.

The outcomes of scoping activities informed the definition of the study areas for this SIA, the information to be gathered for the social baseline and the assessment of potential impacts. Outcomes of scoping activities is presented in Section 3. The assessment of nearby regional communities and their capacities to provide workers to the Project is in Appendix A.

2.3 Baseline analysis

The second step in the SIA process is the baseline analysis. A social baseline describes the existing social conditions and trends within the defined SIA study areas and provides a benchmark against which potential social impacts can be assessed.

The objective of the baseline analysis for this SIA was to concisely document the current state of relevant social, economic and land use characteristics within the defined SIA study areas, providing a benchmark against which direct and indirect impacts can be identified, assessed and monitored. The scope and content of the social baseline study was tailored to the specific context and only included indicators and information which was deemed useful and meaningful to the prediction and assessment of impacts. Relevant indicators were identified during the scoping process (Section 3.3) to ensure development of a relevant and concise social baseline analysis.

Triangulation of data was employed in the baseline to facilitate rigorous analysis. Using multiple sources, including qualitative and quantitative, enhanced the validity of the baseline analysis. The social baseline has drawn on a range of primary and secondary information sources to obtain both qualitative and quantitative data to inform this SIA.

Quantitative data sources include:

- Australian Bureau of Statistics (ABS), including for Census and population data.
- Queensland Government Statistician's Office (QGSO), including data on population projections and non-resident population.
- Australian Government's Labour Market Information Portal, including data on unemployment and labour force participation trends, and skills and occupation shortages and projections.
- Australian Institute of Health and Welfare, including for data on health and wellbeing indicators.
- Realestate.com.au, for data on availability of dwellings and housing market trends.

Qualitative data sources include:

- On-site observation, for data on access and connectivity, and location and type of social infrastructure.
- Outcomes of stakeholder and community engagement, for qualitative data on community values, capacities and challenges associated with social infrastructure and community facilities, and to verify quantitative data.
- Review of literature, including from:
  - Peer-reviewed academic journal articles.
  - Industry-commissioned surveys and research reports.
  - Government policy and other publications.
  - Public submissions to Government inquiries related to fly-in, fly-out (FIFO) and long-distance driving work practices and the mining industry.
- Desktop review of mapping tools, for data on location of social infrastructure and other areas of social interest.

The social baseline is reported in Section 5 of this SIA.

2.4 Impact assessment

The International Principles for Social Impact Assessment considers that social impacts include all the issues associated with a planned intervention that affect or concern people, whether directly or indirectly (Vanclay, 2003). The definition of social impact adopted in the SIA is based on the SIA Guideline (2018), which defines social impacts as "the issues that affect people and the potentially impacted communities in which they live as a result of a project".

A four-pronged approach was employed to facilitate the assessment of social impacts, including:

- Impact identification, to predict the nature and scale of potential social impacts associated with the Project.
- Impact significance evaluation, to evaluate the significance of the identified impact by considering their sensitivity to the impact and the magnitude of the effect.
- Mitigation and enhancement, to identify appropriate and justified measures to mitigate negative impacts and enhance the benefits.
- Residual impact significance evaluation, to evaluate the significance of the impact assuming effective implementation of impact mitigation and benefit enhancement measures.

The following describes the respective steps of the impact assessment process in more detail.

2.4.1 Impact identification

Identification of impacts is an exercise requiring subjective judgement to determine what is likely to happen to the social environment as a consequence of the Project and its associated activities. Impacts were identified and described using data triangulation of multiple sources of information, including both primary and secondary data. Primary data included the outcomes of community and stakeholder engagement activities as described in Section 5. Secondary data informing impact identification comprised:

- Project description information.
- Demographic, employment, housing and other data available from the ABS, government agencies and local government.
- Government-authored strategic policies, plan and documents.
- EIS assessment of air quality, noise, economic impacts, and transport.
- Desktop research of websites, databases and grey literature as referenced.

As this SIA adopted a significance-based assessment which applies the criteria of sensitivity of stakeholder group, social impacts were identified from the lens of the relevant impacted stakeholder group/s or receptor as they experience them. Therefore, this SIA recognises that the experience of social impact is subjective; that is, different people experience and perceive changes to the social environment and their impacts on them differently.

Once the impacts were identified, they were categorised based on the nature of each impact:

- Positive impact (benefit): where the impacted stakeholders would be 'better off' or would benefit due to the proposed Project, and/or the quality of life of affected stakeholders is improved.
- Negative impact: where the impacted stakeholders would be 'worse off' due to the proposed Project and/or the quality of life of affected stakeholders is diminished.

The identified impacts were predicted based on the social conditions in the SIA study areas at the time when the SIA was undertaken. It is recognised that the predicted social impact and their assessment may change with any alterations to the socio-economic or political context or as stakeholder perceptions change over time as more information about the Project becomes available.

2.4.2 Impact significance evaluation

As stipulated in Section 2.3.4 of the SIA Guideline (2018), a significance-based approach was used for impact evaluation. The significance-based approach typically assesses the significance of a social impact by considering the sensitivity of the stakeholder group to the impact and the magnitude of the effect before the application of management measures. More broadly, the objective of assessing the significance of an impact is to ask if it is acceptable in the social context of the Project (Boyle and Barnes, 2016).

The objective of the impact significance evaluation was to undertake an evaluation to determine the extent to which potentially affected stakeholder groups may be impacted by the Project, whether positively or negatively. This approach assumes the impact will occur and that the worst case is identified and assessed. The significance-based approach is also suitable for assessing the significance of project benefits, as it enables analysis of a stakeholder group's capacity to benefit from the change to their social environment.

The magnitude of effect typically focuses on the physical dimensions of an impact. These dimensions included:

- The type of impact: a description indicating the relationship of the impact to the Project (in terms of cause and effect) such as direct, indirect, induced.
- The extent of impact: the spatial extent of the impact (for example, confined to a small area around the project footprint, or projected for several kilometres such as local and regional areas).
- Likelihood: ranging from almost certain, likely, possible, unlikely, and rare.
- Reversibility: ranging from permanent requiring significant intervention to return to 'baseline' to 'no change'.
- The duration of impact: the time period over which a stakeholder group is affected such as temporary, short-term, long-term, or permanent.

An assessment of overall magnitude of the effect (both negative and positive) was provided by taking into account all the dimensions described above and were categorised as major, moderate, minor or minimal, which are defined in Table 2-2.

Table 2-2 Criteria for magnitude of the effect

Classification		Negative impact	Positive impact
1	Major	Long-term consequences for the stakeholder group covering a broad area are likely to occur. Measurable effects may persist beyond the life of the Project.	Long-term benefits for the stakeholder group covering a broader area are likely to occu, and may persist beyond the life of the Project.
2	Moderate	Long-term consequences for the stakeholder group covering a small area, or short-term consequences for the stakeholder group covering a larger area, are likely to occur. Probability of persistence is variable.	Long-term benefits for the stakeholder group in a small area, or short-term benefits for the stakeholder group over a larger area, are likely to occur. Probability of persistence is variable.
3	Minor	Limited short-term consequences for the stakeholder group may occur. Size of affected area may vary, but effects are unlikely to persist long-term.	Limited short-term benefits for the stakeholder group may occur. Size of affected area may vary, but effects are unlikely to persist long-term.
4	Minimal	Noticeable consequences for the stakeholder group is unlikely to occur. Any perceptible effects that did occur are likely to be temporary, limited to a small area, and are unlikely to persist.	Noticeable benefits for the stakeholder group is unlikely to occur. Any perceptible effects that did occur are likely to be temporary, limited to a small area, and are unlikely to persist.

The significance of an impact of a given magnitude then depended on the assessment of sensitivity of a stakeholder group which typically involve context-specific value dimensions and subjective judgement. Sensitivity focuses on the stakeholder group's specific vulnerabilities and resilience to social change and their capacity to benefit.

The sensitivity evaluation considered a stakeholder group's likely response to the change in their environment and their ability to adapt to, and manage, the effects of the change. Changes to the social environment invoked by a project activity can have varying effects on different people or groups within a community (Slootweg et al., 2001). Some receptors (ie. local retail businesses) may be able to adapt quickly and exploit the opportunities of a new situation. Others (ie. low income households) may be less able to adapt and will bear most of the negative consequences of change.

Evaluating sensitivity of a stakeholder group was a subjective exercise and required rigorous and in-depth qualitative analysis. A robust understanding of the existing social values and the analysis of primary data assisted with the evaluation of sensitivity of stakeholder groups.

Criteria for determining sensitivity of stakeholder group include low, medium, and high and are defined in Table 2-3.

Table 2-3 Sensitivity of stakeholder group criteria

Classification		Negative impact (vulnerability to impact)	Positive impact (capacity to benefit)
A	High	Stakeholder group is highly sensitive to the consequences of this potential negative impact, more so than most other stakeholder groups within the area of influence. This may be because of heightening vulnerability to negative effects.	Stakeholder group is highly sensitive to the benefit of this potential positive impact, more so than most other stakeholder groups within the area of influence. This may be because of enhanced capacity to benefit from positive effects.
B	Medium	Stakeholder group does not have any particular sensitivity to the consequences of this negative impact. Vulnerability to negative effects is broadly comparable to other stakeholder groups within the area of influence.	Stakeholder group does not have any particular sensitivity to the beneficial effects of this positive impact. Vulnerability to positive effects is broadly comparable to other stakeholder groups within the area of influence.
C	Low	Stakeholder group has little sensitivity to the consequences of this potential negative impact when compared to others within the	Stakeholder group has little sensitivity to the benefits of this positive impact when compared to others within the area of

Classification		Negative impact (vulnerability to impact)	Positive impact (capacity to benefit)
		area of influence. This may be because of low vulnerability to negative effects.	influence. This may be because of low capacity to benefit from positive effects.

Overall impact significance was assessed by taking into account the interaction between magnitude and sensitivity as presented within the impact significance matrix in Table 2-4.

Table 2-4 Impact significance matrix

		MAGNITUDE OF EFFECT									
		NEGATIVE				POSITIVE					
		MAJOR (1)	MODERATE (2)	MINOR (3)	MINIMAL (4)	MINIMAL (4)	MINOR (3)	MODERATE (2)	MAJOR (1)		
SENSITIVITY TO RECEPTOR (vulnerability to impact)	HIGH (A)	A1	A2	A3	A4	A4	A3	A2	A1	HIGH (A)	SENSITIVITY TO RECEPTOR (capacity to benefit)
	MEDIUM (B)	B1	B2	B3	B4	B4	B3	B2	B1	MEDIUM (B)	
	LOW (C)	C1	C2	C3	C4	C4	C3	C2	C1	LOW (C)	

NEGATIVE IMPACT	NEGLIGIBLE	LOW	MEDIUM	HIGH
POSITIVE IMPACT	NEGLIGIBLE	LOW	MEDIUM	HIGH

The significance of impacts was then categorised as negligible, low, medium or high (Table 2-5).

Table 2-5 impact significance definition

Overall significance	
High	This potential impact is expected to have a major or substantial effect on the wellbeing of the affected stakeholder group.
Medium	This potential impact is expected to have noticeable effect on the wellbeing of the affected stakeholder group.
Low	This potential impact is expected to have a small but perceptible effect on the wellbeing of the affected stakeholder group.
Negligible	This potential impact is expected to have a minimal or imperceptible effect on the wellbeing of the affected stakeholder group.

2.4.3 Impact mitigation and benefit enhancement

The social impact management measures outlined in this SIA seek to both enhance the benefits for the stakeholders and communities as well as mitigate negative impacts of the Project. The SIA also draws upon the various EIS technical studies for mitigation/management of specific impacts, such as air quality, noise, economic impacts, and transport as specified in Section 6. The recommended management measures were developed using adaptive management principles, recognising that impacts may change over time, and that ongoing monitoring of impacts would provide the flexibility to accommodate such changes.

Impacts with a significance rating of medium and high require mitigation or management actions. Where feasible, the following hierarchy of mitigation measures will be applied to ensure that all residual impacts levels can be reduced to low or negligible:

- Changes in technology choice.
- Avoidance and reduction of impacts through design (embedded mitigation).
- Abate impacts at source or at receptor.

- Repair, restore or reinstate to address temporary effects.
- Compensation and offsetting for loss or damage.

Consideration has also been given to the identification of enhancement measures. These measures are actions and processes that:

- Create new positive impacts or benefits.
- Increase the reach or amount of positive impacts or benefits.
- Distribute positive impacts or benefits more equitably.

The proposed mitigation/enhancement measures are integrated into the relevant impact assessment and a residual impact level defined. All the proposed mitigation/enhancement, management, and monitoring measures to reduce impacts to acceptable levels will be consolidated and integrated into the SIMP.

2.4.4 Residual impact significance evaluation

Residual impacts are those that remain after the application of mitigation and management measures. Once mitigation and enhancement measures are declared, the next step of the impact assessment process is to assign residual impact significance. This is essentially a repeat of the impact assessment steps discussed above, considering the assumed effective implementation of the proposed mitigation and enhancement measures.

2.4.5 Cumulative impact evaluation

A community may experience cumulative impacts when multiple projects occur in a similar timeframe. Simultaneous advancement of multiple projects exacerbates social and economic impacts and benefits. The potential cumulative impacts of proposed mining projects which have completed or are undergoing an EIS were identified and considered. Project identified as being relevant to cumulative impacts were those which would likely contribute to changed social conditions, being Dysart and Moranbah. These are communities which have historically been affected by boom and bust mining cycles and are therefore the focus of the assessment of cumulative impacts. Projects which are located further afield (such as in the Mackay LGA) have not been considered as they would have a negligible effect upon social conditions experienced in the communities which comprise the local study areas.

Projects were identified on the basis that there would be a likely scheduled overlap with the construction phase (predominantly 2021) or first three years of the operations phase (2022- 2024) of the Project. This includes the following projects:

- Saraji East (BMA).
- Red Hill (BMA).
- Olive Downs (Pembroke).
- Winchester South (Whitehaven).
- Eagle Downs (South 32/ Aquila Resources).
- Moranbah South (Anglo Coal/ Exxaro).
- Isaac Downs (Stanmore Coal).

Analysis was undertaken of proposed workforces associated with respective projects and the capacity of 'nearby regional communities' to provide for cumulative demand. This provides insights into the potential effects on the local housing market along with other cumulative impacts.

2.5 Social impact management plan

The SIMP is to be directly informed by outcomes of the SIA, which identified the social impacts of the Project and the management measures to minimise the negative impacts or to enhance the positive impacts. Social impacts and management measures were identified in consultation with communities and stakeholders, including with Thiess as the principal contractor of Lake Vermont Mine to understand existing social initiatives in Dysart and partnerships with stakeholders.

As the SIMP is to be an adaptive tool, the SIMP has been prepared as a standalone document to be appended to this SIA. As outlined in the Coordinator-General's *Social Impact Assessment Guideline* (2018), it is a requirement that a SIMP be prepared and submitted to the Office of the Coordinator-General (OCG) which comprises the following sub-plans:

- Community and Stakeholder Engagement.
- Workforce Management.
- Housing and Accommodation.
- Local Business and Industry Content.

- Health and Community Wellbeing.

The SIMP will be presented according to each sub-plan, which includes objectives, a summary baseline and impacts, management measures, Project and proponent initiatives, policies and programs that will implement the management measures, and the monitoring and reporting framework. In addition to the five sub-plans, the SIMP presents an implementation plan and a section on monitoring, review and update of SIMP, to ensure ineffective management measures are amended.

2.6 Community and stakeholder engagement

Community and stakeholder input play an important role in understanding the social context, assessing the potential social impacts and developing management measures. In addition, the SIA Guideline (2018) place emphasis on community and stakeholder engagement to inform both SIA scoping and the subsequently SIA and SIMP. Therefore, the SIA engagement process was undertaken to ensure the SIA was informed by inputs from affected and interested stakeholders.

A principle underpinning the SIA is 'participatory', defined as ensuring engagement for the SIA is inclusive, respectful, meaningful and tailored to the needs of potentially impacted individuals and groups (Section 2.2 SIA Guideline 2018). In addition to applying the 'participatory' principle, the other following principles were applied to guide the community and stakeholder engagement program for the SIA:

- Inclusive: equal opportunity was provided for all interested stakeholders to participate in the SIA community and stakeholder engagement program, including traditionally under-represented stakeholders.
- Respectively: engagement was a two-way process and considered all views and perspectives raised by stakeholders.
- Meaningful: ensuring stakeholders understand the Project details, timing and workforce arrangements so that discussions about impacts and management measures are meaningful.
- Tailored: engagement approach was customised / different approaches applied to meet the needs of different stakeholders, taking into consideration the existing levels of consultation fatigue in the Isaac LGA.

The engagement approach was structured to meet the requirements of the ToR and SIA Guideline (2018) and provided stakeholders with the opportunity to provide meaningful inputs into the identification of social impacts and how they may be managed through the SIMP and respective sub-plans. The engagement process commenced with the identification and profiling of stakeholders and their interests during the scoping phase (Section 3.4). IAP2's Public Participation Spectrum was applied to select an appropriate level of engagement for respective stakeholders.

The primary means of SIA engagement was via semi-structured interviews and meetings with targeted key stakeholders. This was determined to be the most effective way in which to meaningfully engage and gain genuine input into social impact definition and management.

The SIA interviews with structured so as to:

- Enable stakeholders to define local values and the characteristics of potentially affected communities.
- Provide stakeholders with an understanding of the Project including timing and workforce arrangements.
- Collect stakeholder input specifically regarding potential social impacts and benefits.
- Collect stakeholder input specifically regarding applicable mitigation and enhancement strategies.

SIA engagement activities were conducted in accordance with good ethical practice, including the IAP2 Code of Ethics and Australia's National Statement on Ethical Conduct in Human Research (2007). Informed consent from participants was gained to ensure they understood that participation was voluntary and confidential.

An overview of engagement outcomes is summarised in Section 4. The results of stakeholder engagement have been incorporated throughout the SIA as referenced.

3 Scope of SIA

Scoping was undertaken to inform the nature and scale of the SIA, and to meet the requirements outlined in Section 2.3.1 of the SIA Guideline (2018). To understand the nature and scale of the Project, various activities were undertaken during scoping, including:

- Outlining the statutory framework and regulatory context relevant to the SIA (Section 3.1).
- Understanding and describing the anticipated activities throughout the Project's lifecycle (Section 3.2).
- Preliminary identification and analysis of key social changes likely to be invoked by Project activities, including the relevant baseline indicators required to be collated and the geographic extent of potential social change (Section 3.3).
- Identification of relevant stakeholders and the level of engagement (Section 3.4).
- Determination of the SIA study areas (Section **Error! Reference source not found.**).
- Outlining Project labour and housing requirements and assumptions (Section 3.6).

Outcomes of these activities then informed the determination of the study areas for the SIA (Section 3.5). The following sub-sections detail the outcomes of the scoping activities.

3.1 Statutory framework and regulatory context

Informing the scope of the SIA is the statutory and policy framework.

3.1.1 Strong and Sustainable Resource Communities Act 2017

The SSRC Act applies to the Project. The SSRC Act commenced on 30 March 2018. The SSRC Act sets out consistent mandatory requirements for SIA under the EP Act and the *State Development and Public Works Organisation Act 1971* (SDPWO Act), to be regulated by Queensland's independent Coordinator-General.

The SSRC Act's object is to ensure that residents of communities in the vicinity of large resource projects benefit from the construction and operation of those projects. This is supported by three key elements which are:

- Prohibition of 100 per cent FIFO workforce arrangements on operational large resource projects.
- Prevention of discrimination against locals in the future recruitment of workers.
- The requirement for an SIA during the assessment process in accordance with the SIA Guideline (2018) as published on the Coordinator-General's website.

The SSRC Act applies to a large resource project that has a 'nearby regional community'. A 'large resource project' is defined as one for which an EIS is required or that holds a site-specific environmental authority under the EP Act and has a workforce of 100 or more workers. A 'nearby regional community' is defined as a town that (i) is located within a 125km radius of the main access to the Project or a greater or lesser radius decided by the Coordinator-General; and (ii) has a population of more than 200 people or a smaller population decided by the Coordinator-General.

The existing Lake Vermont Mine was retrospectively published on the list of large resource projects on 29 March 2018, as the project holds an environmental authority (EPML00659513), completed an EIS in 2010 and has a workforce of 100 or more workers. The declared nearby regional communities for the existing Lake Vermont Mine include Capella, Clermont, Dysart, Emerald, Middlemount, Moranbah, Nebo and Tieri.

While an extension of the existing Lake Vermont Coal Mine, the Project requires approval of a new environmental authority and an EIS is required to be prepared before an environmental authority can be issued. As such, the Project meets the criteria (Schedule 1 of SSRC Act) of a large resource project under the SSRC Act as the Project:

- Requires an EIS under the EP Act.
- Is projected to have an operational workforce of 100 or more workers, with an anticipated peak operational workforce of 410 workers.

Desktop mapping and consultation with the Office of the Coordinator-General confirmed that eight nearby regional communities apply to the Project, and they are outlined in Table 3-1 with their approximate distances from the Project's main access.

Table 3-1 Applicable Nearby Regional Communities

Local Government Area	Nearby regional community	Approximate straight-line distance	Approximate driving time and travel distance
Isaac Regional Council	Dysart	25 km	21 minutes, 30 km
	Moranbah	49 km	1 hour 15 minutes, 115 km
	Middlemount	61 km	1 hour 4 minutes, 100 km
	Nebo	81 km	1 hour 46 minutes, 172 km
	Glenden	114 km	2 hours 35 minutes, 232 km
	Clermont	89 km	1 hour 20 minutes, 118 km
Central Highlands Regional Council	Tieri	73 km	1 hour 12 minutes, 108 km
	Capella	85 km	1 hour 17 minutes, 107 km

These communities meet the criteria under the SSRC Act as they are defined as a locality or urban centre by the ABS, are located within a 125 km radius of the main access to the Project and have a population of more than 200 people (Figure 3-1).

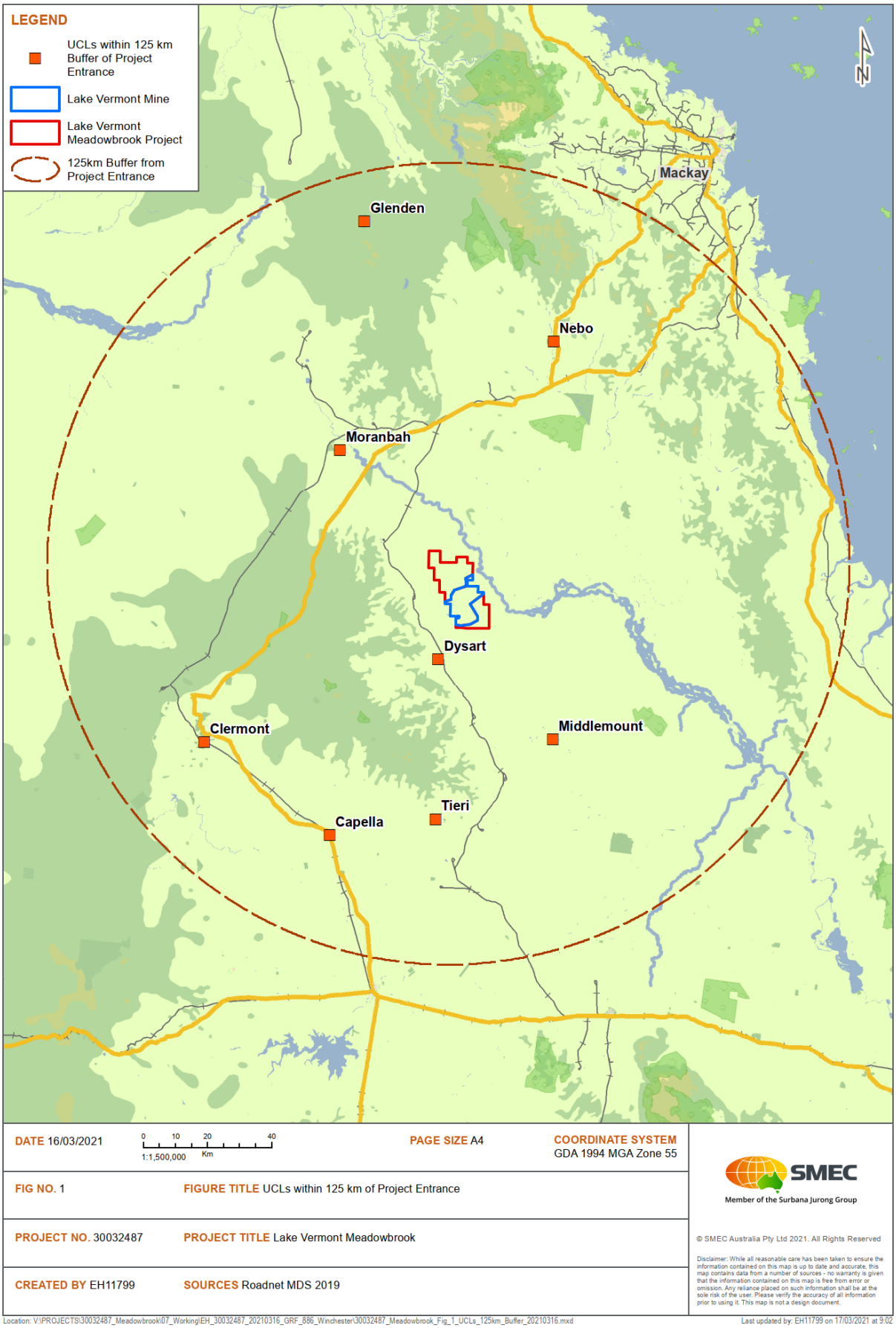

Figure 3-1 Project site and SSRC Act's nearby regional communities - 125 km radius

3.1.2 Social Impact Assessment Guideline (March 2018)

The SSRC Act requires that large resource projects prepare an SIA in accordance with the SIA Guideline (2018) as published on the Coordinator-General's website. The SIA Guideline (2018) was published on the website on 30 March 2018 and states the details that must be included in an SIA.

The SIA Guideline outlines key matters to be addressed by the SIA according to the following themes:

- Community and stakeholder engagement.
- Workforce management.
- Housing and accommodation.
- Local business and industry procurement.
- Health and community well-being.

The SIA Guideline (2018) further requires the development of a SIMP which comprises sub-plans attributed to each of the key matter themes outlined above. The SIMP outlines management strategies and includes processes to ensure the effectiveness of management measures is monitored.

3.2 Project activities

The SIA is to consider the full lifecycle of the Project. To inform the scope and scale of the SIA, an understanding of each of the Project phases and their activities is required. Table 3-2 provides a description of the anticipated activities associated with each project phase.

Table 3-2 Project activities

Project phase	Anticipated timeframe	Anticipated activities relevant to social environment
Pre-construction	Pre-2022	• Acquisition of Meadowbrook land from BHP • Studies for approvals processes (EIS and EA), including stakeholder engagement and fieldwork • Acquisition of land for expansion of existing Lake Vermont WAV in Dysart •
Construction	2024-2026	• Construction of underground mine and supporting infrastructure • Expansion of existing Lake Vermont WAV in Dysart in increase bed capacity • Engagement of up to 250 construction employees, with workers to be accommodated at the Civeo or Stayover Accommodation Villages in Dysart. • Construction workers to be transported to and from site via Project shuttle bus
Operations	2026-2060	• Operation of Project • Engagement of up to 410 operational employees skilled in underground and open-cut mining, representing an overall incremental increase of 70 new employment positions for the Lake Vermont Meadowbrook Complex as existing Lake Vermont Mine workers transition to the Project • Workforce to be accommodated at Lake Vermont Accommodation Village in Dysart, along with self-accommodation (i.e. home ownership) and rental accommodation for employees who choose to live locally • Workers will be transported to and from site/Dysart via Project shuttle buses • Progressive rehabilitation of disturbed lands as available
Decommissioning	2049-Post 2060	• Sealing of underground access portals • Removal of buildings and infrastructure • Progressive rehabilitation of disturbed lands as available

3.3 Preliminary identification of key social changes

A key objective of the SIA scoping process was to undertake a preliminary review of potential social impacts as a result of the Project. Social impacts are predicted through identifying social change processes invoked by activities associated with the Project. Social change processes invoked by a Project activity then lead to social impacts that are experienced or felt in physical or perceptual terms (Vanclay, 2002). The preliminary identification of potential social changes informed the scope of relevant social indicators required to inform the baseline analysis and the likely geographic extent of the social change. Outcomes of this scoping activity also informed the identification of stakeholders and subsequently the community and stakeholder engagement strategy for this SIA.

A change to the baseline value in the social environment may occur as a result of an activity associated with the Project, subsequently leading to a social impact. Therefore, scoping focused on the identification of the potential social changes that are likely to be invoked by the Project. Section 6 then undertakes an assessment of the identified impacts from the anticipated social changes. Table 3-3 outlines the key social changes potentially to be invoked by the Project.

Table 3-3 Preliminary identification of key social changes and indicators

Key matter	Preliminary identification of potential key social change	Geographic extent of social change	Baseline social indicator
Community and Stakeholder Engagement	Changes in perceptions towards mining activity due to the Project intensifying mining activity in the region, including increase in non-resident workers.	Regional	• Community values and perceptions • Socio-economic status • Demographic profile
	Changes to levels of anxiety due to Project activities generating uncertainty for stakeholders and communities.	Local	
Workforce Management	Changes in supply and demand for labour due to generation of employment opportunities by the Project.	Regional	• Labour force characteristics • Unemployment • Labour availability • Industry and occupation of employment • Skills shortage • Non-resident population • Community values
	Changes in availability of skills and capacity building training programs due to Project generating training initiatives.	Regional	
	Changes to wellbeing of existing and new Project workers through the adoption of block shift rosters and FIFO arrangements.	Regional	
Housing and Accommodation	Changes in supply and demand of housing and accommodation due to accommodation requirements for Project's resident and non-resident workforce.	Local	• Dwelling occupancy and tenure • Housing availability • Housing affordability • Affordable housing
Health and Community Well-being	Changes to community cohesion and social capital levels due to influx of new resident workers and non-resident workers during the Project's construction and operations.	Local	• Population change and trends • Capacity of: - Health centres - Schools - Childcare services - Emergency services • Community values • Amenity and environmental values • Community attitudes
	Changes in demand for social infrastructure and community facilities as a result of influx of new resident workers and non-resident workers during Project's construction and operation.	Local	
	Changes to access and connectivity on local and regional road networks due to increase in heavy vehicle traffic associated with the	Regional	

Key matter	Preliminary identification of potential key social change	Geographic extent of social change	Baseline social indicator
	Project's construction and increase in private vehicle traffic due to population influx.		• Vulnerable groups • Health stuff
	Changes in amenity values due to Project's construction activities may alter liveability values for residents located near to Project site.	Local	
Local Business and Industry Procurement	Increase in opportunities for local and regional businesses to supply goods and services during the Project's construction and operation.	Regional	• Existing supply arrangements • Type and size of businesses • Number of registered businesses • Industry type of business • Number of Aboriginal and/or Torres Strait Islander owned businesses
	Changes in demand for local goods and services due to influx of new resident workers and non-resident workers during the Project's construction and operation.	Local	
	Contribute to increased entrepreneurism through Project workforce expenditure on food and services.	Local	
	Change to other local business and industry due to increase in labour competition.	Local	

3.4 Stakeholder profile and analysis

A stakeholder profile and analysis was undertaken as part of SIA scoping to identify relevant stakeholders and community groups, explore what issues are of interest to them, and analyse the potential extent of impact on these groups and their level of influence to determine the level of engagement as defined by IAP2's Public Participation Spectrum.

A stakeholder profile and analysis was necessary because not all stakeholders will necessarily share the same concerns or have unified opinions or priorities. In addition, and as described in Section 2.4, impacts are to be identified and assessed from the perspective of the affected stakeholder group, therefore necessitating understanding of differences across stakeholder groups and their likely extent of impact and influences on the Project. To determine the level of engagement for each stakeholder group, a two-pronged approach was applied:

- The likely extent of impact on the stakeholder group.
- The likely ability of the stakeholder group to influence the outcome of the Project.

Table 3-4 provides an overview of the stakeholder analysis based on the determined level of engagement, in addition to outlining the objectives of each engagement level. The detailed stakeholder analysis is provided in Appendix B.

Table 3-4 Overview of stakeholder profile

Level of engagement	Stakeholder	IAP2 objective	SIA objective
Collaborate	• Office of the Coordinator-General • Isaac Regional Council • Barada Barna Aboriginal Corporation	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	Collaborate and partner with communities and stakeholders to ensure their input informs preparation of SIA.

Level of engagement	Stakeholder	IAP2 objective	SIA objective
Involve	• Queensland Ambulance Service • Queensland Police Service • Queensland Fire and Emergency Services • Dysart Medical Centre • Dysart State High School • Dysart State School • Lady Gowrie Daycare Centre • C&K Kindergarten, Dysart • Hinterland Community Care • Dysart Community Support Group • Moranbah Traders Association • Local retail businesses • Isaac Affordable Housing Trust • Operator of Lake Vermont Accommodation Village • Real Estate agency	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	Involve stakeholders in the identification of social trends and issues, and of social impacts and management measures.
Consult	• Department of Aboriginal and Torres Strait Islander Partnerships • Department of Housing and Public Works • Department of Communities, Disability Services and Seniors • Department of Employment, Small Business and Training • Department of State Development, Manufacturing, Infrastructure and Planning	To obtain public feedback on analysis, alternatives and/or decisions.	Consult with stakeholders to obtain baseline social data and input to validate identified impacts and management measures.
Inform	• Department of Natural Resources, Mines and Energy • Mackay Regional Council • Regional Businesses • Unions • Employment and training providers • Tourists	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	Inform stakeholders of project information, including aspects of project design and the SIA process.

Outcomes of the SIA community and engagement program is presented in Section 4.

3.5 SIA study area determination

This section details the study area determination for the SIA. The study areas are based on those communities that have potential to experience changes to the social environment due to the location of the Project or project infrastructure, construction activities, or changes to the population profile. Outcomes of other scoping activities facilitated the understanding and determination of the SIA study areas. In addition, the following factors were explored:

- Fatigue management requirements.
- Outcomes of assessment of nearby regional communities and their capacities to provide workers to the Project.
- Outcomes of engagement during the scoping phase.

The Proponent has adopted the Department of Natural Resources, Mines and Energy's Guidance Note for Fatigue Risk Management (DNRME, 2013). The Guidance Note stipulates that a commute time of more than one hour with a 12-hour shift length can overtly influence the opportunity for sleep and other essential daily activities. Accordingly, a maximum of one-hour drive time from the main access of the Project was adopted to identify towns where residents would be able to live and commute to work on a daily basis. A broader range of social impacts and benefits may be experienced in towns where residents are able to commute on a daily basis to the Project, compared to more distant towns where Project-related effects are primarily limited to employment opportunities.

As discussed in Section 3.1, the SSRC Act applies to the Project. Based on the criteria in the SSRC Act, there are eight nearby regional communities for the Project. These nearby regional communities have varying levels of relevance to the SIA. An assessment was undertaken to understand and determine the capacities of the nearby regional communities to supply workers to the Project, by considering their commute distance from the Project's main access, current availability of labour, skillsets and occupations, population size and proximity to other large resource projects (see Appendix A). Outcomes of the assessment of nearby regional communities assisted the determination of the SIA study area.

Of the eight nearby regional communities, Dysart is the only community within a safe commute distance from the Project's main access. While Moranbah is located outside of safe commute distance from the Project's main access, the size of its population and its function as a key regional service centre determined that the nearby regional community has a moderate capacity to supply workers to the Project. The remaining six nearby regional communities were determined to have low capacities to supply workers to the Project due to distance from the Project's main access, small populations and proximity to other large resource projects.

Based on the above, the following primary and secondary study areas have been determined for the SIA (Table 3-5).

Table 3-5 Study areas for SIA

ABS statistical boundary		Explanation	SIA Guideline key matter				
			CSE	WM	HA	HCW	LBIP
Primary study area	Dysart UCL (UCL315029)	Dysart is the nearest town to the Project, predicted to take a 21 minute drive. The existing WAV housing non-resident workers is located in Dysart, which is to also accommodate new workers. The potential for workers to relocate to Dysart may increase demand on social infrastructure and community services.	✓	✓	✓	✓	✓
	Isaac LGA (LGA33980)	The LGA hosts the Isaac Regional Council, a key stakeholder and collaborator for this SIA.	✓	✓	✓	✓	✓
Secondary study area	Moranbah UCL (UCL314017)	Moranbah is a key service centre in the northern Bowen Basin and is the service centre for IRC.	✓			✓	✓
	Mackay LGA (LGA34770)	Mackay LGA is likely to be a source of DIDO workers, in particular for the construction workforce. Businesses in Mackay may also supply to the project during construction.		✓			✓

Note: CSE – Community and Stakeholder Engagement; WM – Workforce Management; HA – Housing and Accommodation; HCW – Health and Community Well-being; LBIP – Local Business and Industry Procurement.

Figure 3-2 depicts the Project's SIA study area.

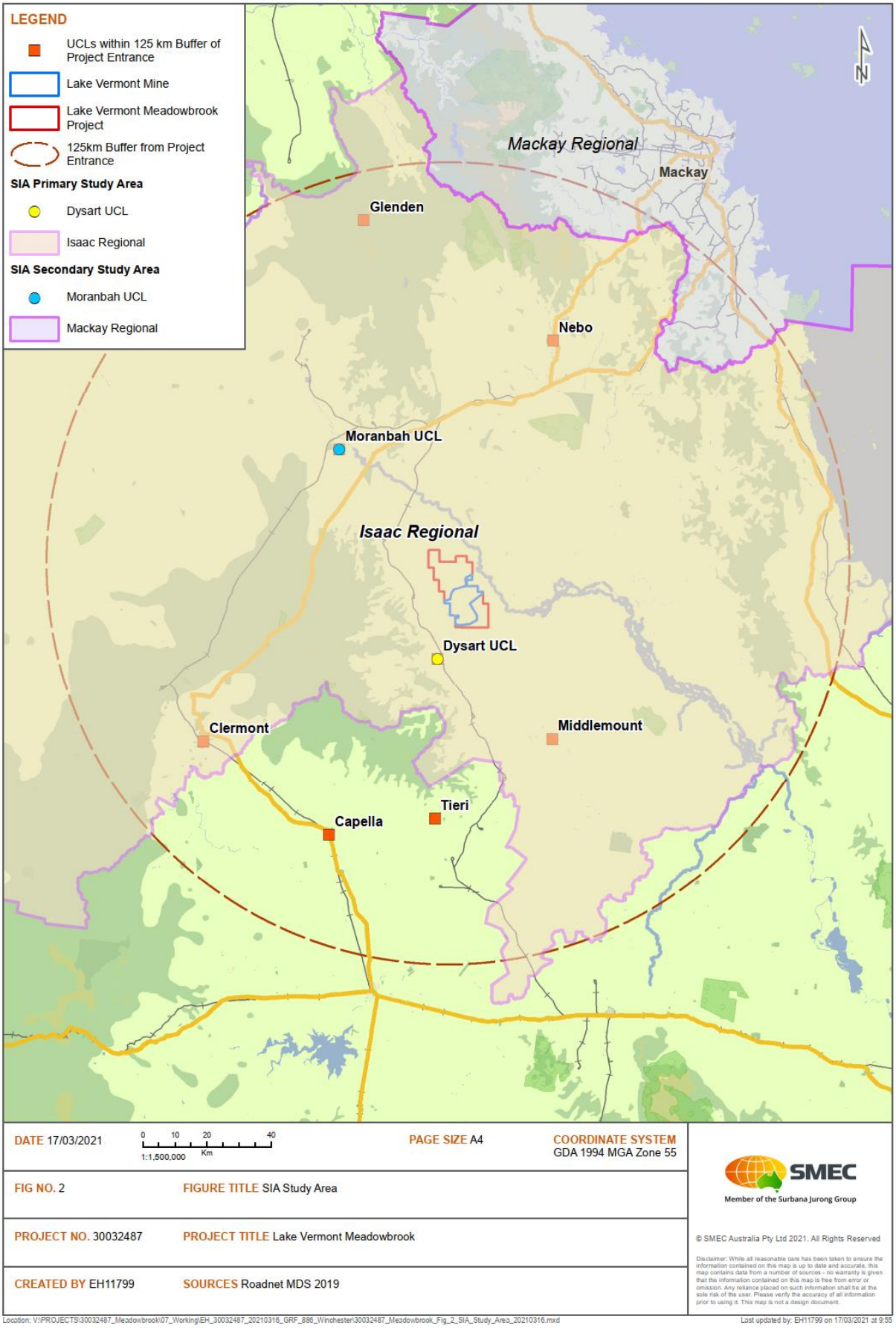

Figure 3-2 Project's SIA study area

3.6 Project labour and housing requirements and assumptions

To inform the scope of the SIA and to guide the identification and assessment of impacts, labour and accommodation requirements and assumptions, including likely source of worker, are outlined.

3.6.1 Labour requirements

The Project will employ up to 250 contractor construction workers, while the operational workforce is anticipated to comprise a mix of owner-operator and contractor employees of up to 410 workers. Table 3-6 outlines the labour requirement for the Project and the likely worker skillsets and occupations required.

Table 3-6 Worker requirement for Project

Project phase	Number of workers required	Likely worker skillset/occupations required
Construction (indicatively 2022-2024)	250	• Earthmoving plant operators. • Structural steel and welding trades workers. • Professionals including geologist, managers, safety officers, engineers and environment scientists. • Painting, plumbing and electrical trades workers. • Concreters. • Construction and mining labourers.
Operations (indicatively from FY 2027)	410	• Underground miners. • Machinery operators. • Truck drivers. • Tradespeople including diesel fitters, boiler makers, electricians, plumbers, gasfitters and painters. • Engineers, surveyors and geologists. • Health, safety, human resources and mine management professionals. • Administrative staff.

At January 2021, the existing Lake Vermont Mine employed 880 workers who support the open-cut operations. As the Project moves into full operational phase by 2028, there will be a corresponding reduction in the size of the Lake Vermont Mine operations. It is the Proponent's intention to provide opportunities, where appropriate, for many of these roles to transition from the slowing open-cut operations, to the ramping up of the Project, thereby promoting workforce retention and job security for employees and contractors.

Overall, the operating workforce of the combined Lake Vermont Meadowbrook Complex is expected to remain broadly consistent with the current 880 workers, with an anticipated total of 860 employees (refer Table 1-1). If the Project does not proceed, the existing Lake Vermont Mine's open-cut operations would see a loss of 410 workers by 2028.

3.6.2 Housing requirements

To understand workforce housing requirements, assumptions are made on the likely source of Project workers. These assumptions are based on available evidence at time of SIA preparation. It is important to note that it is not possible to accurately predict the residential location of future workers, particularly when taking into consideration people's right to choice of employment and place of residence, as stipulated in Sections 18 and 19, Division 2, Part 2 of the *Queensland Human Rights Act 2019*. In addition, and as described in Section 5.1, the socio-economic context of the Bowen Basin is fluid and heavily influenced by the cyclical trends of the mining industry. Therefore, the availability of labour and housing in the region can change rapidly. However, reasonable assumptions on worker accommodation and residence are required to inform the scope, prediction, assessment and management of social impacts. Emphasis was placed on ensuring assumptions are reasonable; that is, sensible and cognisant of the socio-economic context and the expectations of stakeholders and community.

The development of assumptions on residential location of workers was directly informed by the composition of the existing workforce at Lake Vermont Mine, which is outlined in Table 3-7.

Table 3-7 Residential location of worker, Lake Vermont Mine, January 2021

Region	Number of workers	Per cent of total workforce
Isaac Regional	85	9.8
Dysart	*71*	*8.3*
Carmila	*3*	*0.3*
Nebo	*2*	*0.2*
Clermont	*6*	*0.7*
Moranbah	*3*	*0.3*
Central Highlands Regional	52	5.9
Mackay Regional	240	27.9
Whitsunday Regional	52	5.9
Rockhampton Regional	71	8.3
Brisbane City	60	7.1
Other Queensland regions	277	32.4
Interstate	23	2.7
Total	**860**	**100.0**

Almost 10 per cent of the Lake Vermont Mine workforce permanently reside within the Isaac LGA, of which 83.5 per cent reside in Dysart. Other towns within Isaac LGA where workers are resident include Carmila, Nebo, Clermont and Moranbah. As Dysart is the only town within a safe commute distance to and from the Lake Vermont Mine, all workers who reside outside of Dysart (789 workers) are accommodated at the Lake Vermont Accommodation Village located within Dysart (owned and operated by Thiess). The Lake Vermont Accommodation Village will be expanded to support the incremental increase in workforce numbers for the Lake Vermont Mine and the Project.

At January 2021, there were 71 Lake Vermont Mine workers who were resident in Dysart. These workers sourced their own housing, either through renting or purchasing of a dwelling- noting that an incentive payment of $130/ per week is paid to any employee who chooses to live locally. The Proponent is committed to retaining as many Lake Vermont Mine employees as possible that are Dysart residents. Where a position is to be made redundant and the worker is an existing Dysart resident, the worker will be given priority to transition to a new role with the Project, including priority to retrain in underground mine operations. However, some resident Dysart workers may choose to seek employment elsewhere, such as with another Thiess managed mine or to a role that does not require retraining. Reflecting this, it is assumed that:

- With the reduction in operations, from 2028, 25 Lake Vermont Mine employees that are residents of Dysart would not have a position going forward and would either transition to a similar role or be re-trained for a role on the Meadowbrook Project or seek alternative employment.
- 10 workers would transition to the Project in a new role.
- The remaining 15 workers would seek employment elsewhere and would most likely migrate out of Dysart as a result.

The Proponent is also committed to encouraging new Project workers to relocate to Dysart through provision of live local incentives. Assuming that the same proportion of the Meadowbrook Project workforce choose to live locally as that of the Lake Vermont Project, the total number workers that would reside in Dysart would be 34. As outlined above, 10 of these would be existing Lake Vermont employees which transition over to Meadowbrook. Therefore, the number of additional Meadowbrook operations workers that would choose to relocate and reside in Dysart would be 24 and the total number of Lake Vermont Meadowbrook Complex workers residing in Dysart would be 80 (Table 3-8).

Table 3-8 Estimated change in workers who reside in Dysart

Project	2021	2028
Lake Vermont Mine worker	71	46
Meadowbrook Project	0	34
Total (Lake Vermont Meadowbrook Complex)	71	80

As outlined above, it is anticipated that up to 15 current Lake Vermont employees would seek employment elsewhere and migrate out of Dysart thereby releasing these dwellings to the local market. The net increase in demand for permanent housing in Dysart is therefore 9 dwellings (Table 3-9).

Table 3-9 Anticipated housing requirements

Project	Permanent dwellings in Dysart		WAV accommodation	
	2021 (actual)	2028 (predicted)	2021 (actual)	2028 (predicted)
Lake Vermont Mine	71	46	789	414
Meadowbrook Project	0	34	0	376
Total (Lake Vermont Meadowbrook Complex)	71	80	789	790

Project workers who choose not to reside in Dysart will be accommodated in the Lake Vermont Accommodation Village.

4 Community and stakeholder engagement

In accordance with the engagement requirements outlined in the Project's Terms of Reference, this SIA has been structured so that it is informed by an inclusive and collaborative stakeholder engagement process. Information gained through the direct engagement with Project stakeholders has been used to inform key elements of the SIA including baseline conditions and social trends occurring in different communities, identification and assessment of potential impacts and benefits and how these may most effectively be mitigated and managed.

4.1 Principles and objectives of engagement

Community and stakeholder input play an important role in understanding the social context, assessing potential social impacts and developing management measures. Engaging communities and stakeholders is necessary to understand how they might experience and perceive social impacts. Their input can also contribute to the design of the Project so that it enhances benefits, mitigate negative impacts, and effectively manages unavoidable residual social impacts.

As stipulated in the Coordinator-General's Social Impact Assessment Guideline (March 2018), community and stakeholder engagement undertaken for the SIA is to be participatory, transparent and inclusive. The objectives of SIA engagement were to:

- Provide local stakeholders with the opportunity to define local values and the characteristics of potentially affected communities.
- Ensure stakeholders understood the Project details, timing, and workforce arrangements so that discussions about impacts and benefits were meaningful.
- Provide stakeholders with the opportunity to identify and assess potential social impacts and applicable management measures.
- Ensure the SIA considers the interests and perspectives of stakeholder who may be affected by Project-related impacts.
- Integrate the broader EIS and Project engagement activities so as to provide a range of opportunities for community members and key stakeholders to provide feedback.

The design of the SIA engagement program also took into consideration the principles of IAP2.

4.2 Overview of SIA engagement program

Engagement to inform the SIA for the Project was targeted. The SIA engagement program was designed with consideration of:

- Engagement fatigue in the Bowen Basin, with recent SIA and EIS engagement conducted for the Olive Downs Project, Winchester South Project (by SMEC), Isaac Downs Project (by SMEC), Eagle Downs Project and the Saraji East Project.
- Scale and nature of the Project, including proximity to Dysart and Moranbah.
- Quality of recent data obtained by SMEC from engagement activities recently undertaken for the Winchester South and Isaac Downs projects.
- Stakeholder groups identified under the categories in the stakeholder analysis at the collaborate and involve levels (see Appendix B).

The approach to SIA engagement was presented to and endorsed by both the Office of the Coordinator General (SIA Unit) and Isaac Regional Council prior to commencement of engagement activities.

As per the Terms of Reference for the SIA, engagement was directly undertaken with the following stakeholder groups:

- local government
- state agencies
- local and regional employment and training providers
- public and private housing providers
- local and regional commerce and community development groups
- social and public service providers
- emergency services and public health providers

4.3 Key findings

A summary of some of the key findings from the direct engagement with stakeholders as part of the SIA includes the following:

- The town of Dysart has endured a range of socio-economic challenges over the last ten years attributed to the downturn in the mining industry including mine closures and downsizing of mining projects.
- Stakeholders appreciated Jellinbah as an existing operator and a good corporate citizen and welcomed the Meadowbrook Project and continuation of Lake Vermont operations.
- Numerous stakeholders, including Dysart Hospital and Dysart Medical Centre, indicated that inaccessibility to medical services is a significant challenge in Dysart, with the town only supported by one General Practitioner.
- Stakeholders indicated that a lack of any form of community transport or taxi service in Dysart is a challenge, particularly for vulnerable residents.
- Feedback from community groups and Queensland Police Service expressed there is a lack of recreational opportunities for young people. This causes issues with young people congregating in groups and may result in anti-social behavioural issues.
- Numerous stakeholders, including the Lady Gowrie Dysart Childcare Centre, expressed that childcare services were struggling to meet demand and that there is a need for expansion of capacity.
- Schools in Dysart expressed a high degree of appreciation for existing Jellinbah/Thiess support, including initiatives supporting Science Weeks and student career evenings. They emphasised a need and opportunity for continued educational support, particularly in regard to developing awareness on STEM.
- The housing market in Dysart remains heavily influenced by BMA who own 528 houses in the town.
- Stakeholders expressed that while there is available housing stock in Dysart, much of this is perceived to be of low quality. They also indicated there is a high degree of lower end housing stock which is affordable.

4.4 Issues raised in engagement

An overview of the stakeholders engaged, and the key matters raised and discussed is provided in Table 4-1 below.

Table 4-1 Summary of stakeholder engagement and the key matters raised and discussed

Category	Entity	Means of engagement	Key matters discussed/ issues raised
Local Government	Isaac Regional Council- elected representatives and key Council staff	Face to face meetings; Standing Committee meeting and subsequent discussion	• The IRC appreciated the opportunity to learn about the Project and look forward to an ongoing relationship with Jellinbah. • Council recognised that Jellinbah are an existing operator and the Project is essentially an underground extension of the existing Lake Vermont operation. • Council appreciated that without the underground extension, operations at Lake Vermont would scale back significantly and result in the workforce being reduced by 50% which would have a negative social impact upon Dysart. • Council provides a broad range of services and facilities in Dysart. It was recognised that a diminishing rate base makes service delivery increasingly difficult. • Council recognise the ongoing dialogue regarding the planning approvals for the expansion of the Lake Vermont Workers Accommodation Village. It was recognised that camps can generate economic activity and benefit for local businesses. • Council are committed to advocating wherever possible for opportunities to be provided to local businesses. • A preference of Council is to support existing infrastructure and services rather than coming up with new initiatives. It is preferable for projects to invest in supporting the sustainability of existing facilities, services and networks. • Council acknowledged the Project will create impacts to local housing and accommodation, if not in isolation, through the cumulative impact of multiple Projects planned within the region. Strategies should therefore be proposed to support the management of these challenges. • Mental health is a major issue with the workforce. Council's position is that local living greatly reduces mental health issues, as workers get to enjoy the social connections and facilities which are provided locally. • Council seeks further dialogue regarding potential extra usage and maintenance contributions regarding the Golden Mile Road.
State Agency	Office of the Coordinator-General- Coordinated Project Delivery Division (CPDD)	Face to face meetings	• OCG recognised and welcomed the involvement of Jellinbah in the SSRC Act review. • It was recognised that a key focus of the SSRC Act is to enable local communities to benefit from major resource projects. Jellinbah highlighted that this was an outcome which was wholly supported as reflected by the contributions which are already made to community outcomes in Dysart. • OCG appreciated being provided a briefing on the Meadowbrook Project and the SIA to be completed as part of the EIS. • OCG recognised the existing Lake Vermont operation. It was further recognised that Lake Vermont and the Meadowbrook Project are very closely linked in terms of

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			maintaining existing levels of employment and contributions to the Dysart community. • It was acknowledged that Dysart was the central community of relevance to the Project. • SMEC confirmed that the local study area adopted for the SIA was the town of Dysart and Isaac LGA. • OCG recommended continued engagement with Isaac Regional Council in the completion of the SIA and SIMP. • OCG highlighted the importance of creating ongoing employment opportunities for residents of Dysart and the broader region. Also recognised the challenge of attracting people to move to Dysart and encouraged innovative incentives being provided to encourage this outcome. • OCG recognised the housing situation in Dysart whereby a substantial proportion of housing stock is held by BMA.
State Agency	Department of Aboriginal and Torres Strait Islander Partnerships	Virtual meeting	• DATSIP explained that their role is to enhance and protect Aboriginal and Torres Strait Island culture and improve social and economic outcomes for Indigenous people. • It was highlighted that there is a need to break inter-generational disadvantage experienced by Aboriginal people and that the provision of employment and training programs make a very positive contribution to achieving this outcome. • DATSIP offers support in terms of creation and sustaining Indigenous employment. It is recommended that targets for Indigenous employment are set by major projects as has proven to be one way in which to further promote commitment to Indigenous employment and training outcomes. • DATSIP strongly encourage mining proponents to have structured programs in place to maximise Indigenous employment. • It was recognised that employment and training targets need to be realistic and that it can be very difficult to achieve such targets as a mining environment may not be amenable to Indigenous people. It is only with the proper support networks that this situation can be improved. • DATSIP maintain a register of Indigenous businesses. If Jellinbah or primary contractor would like to undertake an EOI process with Indigenous businesses, DATSIP can assist with distribution through business networks. • DATSIP highlighted that the continuity of programs and awareness regarding opportunities in the mining sector is a key factor influencing success.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
State Agency	Department of Housing and Public Works	Virtual meeting	• The Department of Housing currently has approximately 20 houses in Dysart. Most of these are currently occupied. • As part of a region-wide effort to reduce the quantity of housing stock held by the Department, there are properties in Dysart which they are seeking to sell. There have been three properties in Dysart recently sold by the Department. • Some of the housing stock is Dysart is aged and in need of renovation and repair. • There is limited demand for Departmental housing from within the Dysart community itself. Demand for social housing predominantly comes from other areas in the region (such as Moranbah) and from outside of the region. • Departmental housing is generally reserved for people in crisis situations or have very limited economic resources. • The Department recommends that mining companies should try to invest in housing as this serves to reduce the volatility of local housing markets.
State Agency	Department of Employment, Small Business and Training	Virtual meeting	• The Department seeks to work in partnership with proponents to provide training and apprenticeship programs They seek to work project proponents to connect buyers and major contractors with local businesses seeking to expand their supply chains and position them to win project work. • The Department administers the Major Project supply chain development program which supports job creation and development of regional supply chains. This is achieved through assisting proponents to engage directly with local businesses involved in all stages of the supply chain. • There are various government funded programs which can be tapped into- under 'Skilling Queenslanders for Work' there are four programs which can be linked with. Recommend that when the Project is at an appropriate stage of development that Jellinbah make contact and work through what can be supported. • There are skill shortages in key industries relevant to the project, particularly in construction due to recent government led initiation of construction programs to stimulate the economy post-COVID. • Mining skills seem to be in relatively short supply; though this can be difficult to gauge due to it not being clear when projects will be decommissioned. • Would like to see the proponents of major projects access available Departmental programs to a greater extent- there are a range of programs on offer, however uptake by industry is sometimes limited. • It was noted that the nature of employment in the mining industry (particularly 7 days on/7 days off shift scheduling) has had an effect on whether people choose to live in local communities.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• The Department would be interested in linking with/ supporting Jellinbah in any training initiatives (particularly 18-25-year-old cohort). This doesn't need to be a locked in performance initiative- just working through to what can potentially be done to maximise employment opportunities for young people.
Local and regional employment and training providers	Thiess Mining Services	Face to face meeting	• Thiess is the principal mining contractor for the existing Lake Vermont mine. • Thiess have demonstrated a high level of commitment to the provision of apprenticeship opportunities for young people with over 63 apprentices being supported since 2013. • A challenge has been that the mining industry has not promoted itself as well as it could have to young people. This has resulted in low numbers of school leavers and university graduates specialising in mining engineering coming through. To address this deficiency, Thiess have had to train up persons with civil engineering qualifications for mining roles. • There has been an effort to open up more roles which are not 7 days on/ 7 days off 12 hrs a day roster. This allows more women with children to participate in the workforce. • Jellinbah and Thiess have supported a wide range of community initiatives in Dysart. They have established a very close relationship with the schools through supporting the annual awards night in both the high school and primary school along with a variety of programs including STEM week where on staff mining professionals go to schools and run sessions with children around specific mine engineering and operation topics. • Thiess support the 'Hear and Say' program for persons with hearing disability and also support book week in the schools. This includes the publication of two books including one which presents local Aboriginal poems with Thiess funding all printing and publication costs. • Thiess are highly supportive of Indigenous culture and the creation of opportunities for Indigenous people. They provide funding to the 'Sisters in Mining Program' which seeks to open up opportunities for Indigenous women to gain employment in the mining sector. They also provide sponsorship to the celebration of NAIDOC week in Dysart. • Workforce well-being is a focus. Jellinbah and Thiess provide a comprehensive Employee Assistance Program for employees. This includes access to mental health support (through Gryphon Psychology) for both employees and their families. • Also actively supported is the 'Lives Lived Well' program which promotes general health and well being.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• Thiess raised that permanent housing options in Dysart remains a challenge due to the control which BMA retain over supply of residential housing. There is a shortage of quality housing for families.
Local and regional employment and training providers	Resource Centre of Excellence/ Regional Industry Network	Virtual meeting	• The Resource Centre of Excellence provides facilities and support across all facets of resource development. A key objective of the Centre is to bring people together to work together to solve industry problems. • The Centre is based in Mackay and provides support and guidance for mining and other resources businesses across the Mackay Isaac Whitsunday region. • The Centre includes an underground mine simulated training and testing facility and showcases emerging technology and capabilities. Also provides training and conference facilities. • Recently held a successful open day for local businesses to view the Centres facilities and meet and collaborate with other resource sector professionals.
Public and private housing providers	Emergency and Long-term Accommodation Moranbah (ELAM)	Face to face meeting	• ELAM provides emergency accommodation for persons in times of crisis. • ELAM offer a 12-week support program which includes food, accommodation and transport. • Of the people which ELAM assists, most progress through the Department of Housing system to attain long term accommodation. • There are high levels of demand for crisis accommodation with all available accommodation fully booked. • Highly recommend providing the workforce with a genuine opportunity to live in local communities. Living locally not only benefits the town but also the employee in terms of being part of the family and the community and the company as there is less turn-over of staff. • Dysart is a great community which have proven to be highly resilient. It has gone through some difficult times recently but remains a very good place to live with strong local community connections. • Dysart has been affected by the decision of the Department of Housing to provide social housing to people from other areas (Charters Towers, Mackay etc.). They have moved to Dysart without fully appreciating the relative isolation and lack of services. They are generally not able to find employment and fail to integrate into the community. • Domestic violence is a primary reason for people seeking crisis accommodation and this has further worsened as a result of COVID.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• Housing stock in Dysart is becoming really run down. Due to the collapse of the housing market following closure of Norwich Park, there is no investor confidence and banks demand very high deposits for home loans. • Of those seeking crisis and affordable accommodation in Moranbah, some end up going to Dysart as there is greater availability of accommodation and rental prices are substantially cheaper than in Moranbah. • ELAM and MDSS would welcome working with the Jellinbah to establish mental health support to the workforce. There is a need for early intervention services to break the cycle of drug and alcohol dependence, domestic violence and suicide.
Public and private housing providers	Ausco 'Stayover' Workers Village- Dysart	Face to face meeting	• There is a total of 410 rooms at the village. • The 15sqm rooms all include a double bed and ensuite along with a desk, bar fridge and flat screen TV with Foxtel. • There are 10 'Eco-cabins' which are an executive option. They are considerably larger (30sqm) and well appointed. • The complex also includes an entertainment centre, BBQ areas, gym, running track, café' and corner store. • With the exception of 10 rooms, all rooms at the village are fully contracted to BMA. • The village is used as a spill over facility for the adjacent BMA camp. Whilst BMA has contracted almost all of the rooms, there are not always used. The village is often only 50% occupied.
Public and private housing providers	Real estate agencies	Face to face meetings	• Housing in Dysart remains dominated by the influence of BMA who retain ownership of a substantial proportion of housing stock. • Housing values dramatically reduced following the closure of Norwich Park mine along with the general mining activity downturn which occurred throughout the region in 2013/ 14. • There has been very little new housing stock coming on line. Many of the houses in Dysart are not of a high quality as they were built for the purpose of servicing the life of mine rather than a long-term township. • There has been a recent uplift in the housing market in Dysart. • There is a deficiency of supply of higher quality large (4 bedroom) homes for which there is a relatively high level of demand. • Rental accommodation is also relatively constrained for higher quality houses. • There are some positive signs that the housing market will further stabilise. Projects such as Meadowbrook and Saraji are very important to both direct demand and stimulation speculative interest and investment in Dysart.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
Local and regional commerce and community development groups	Moranbah Traders Association	Face to face meeting	• Moranbah Traders Association seeks to create linkages between mining proponents and local businesses for mutual benefit. • Moranbah Traders Association is a voluntary, community owned entity which has been operating for 25 years. There are about 120 members with a core group of 25 who regularly meet. • It is recognised that Jellinibah is an existing operator in Dysart and has a reputation for being respectful and committed to the town. It is generally the case that if proponents do the right thing for the community, then they will support continued and expanded operations. • The culture and attitude set by proponents is important in terms of overall community and business acceptance and support for projects. • Throughout the region there has been strong levels of activity and growth over the last few years- even the onset of COVID has done nothing to affect the level of regional activity. • In places like Moranbah the level of activity is already having a notable effect on housing prices and the availability of housing. Dysart is not yet experiencing such pronounced effects, however history has shown that things can change quickly as it would only need a major project like Saraji East to rapidly stimulate commercial and housing demand. • It is the construction phase which creates 'boom time' conditions. Once projects move into operational phases there is generally far less pressure on housing and local services. • Highly recommend encouraging workers to be reside locally as a strong town works best for all parties. Businesses thrive in a buoyant local economy which also benefits proponents in terms of viable local procurement alternatives. • A focus of the Moranbah Traders Association is to achieve cheaper flights in and out of the region. Provision of safer road conditions is also a priority. • There are regional opportunities associated with technology such as increasing automation along with building capability in fleet maintenance. • Council is attempting to establish an Isaac Chamber of Commerce; which would replace the primary role of the Moranbah Traders Association. • The Dysart Business Group is a loose association of businesses and is not an incorporated body.
Local and regional commerce and	Local businesses	Face to face meetings	• The poor state of the commercial centre of Dysart is a major factor making things tough for local businesses. The condition of the centre is very poor. The owner

Category	Entity	Means of engagement	Key matters discussed/ issues raised
community development groups			resides on the Gold Coast and has refused to make any of the necessary investments to maintain the amenity of the centre. • Businesses in the centre are committed to the town and do everything possible to create a good experience for customers, however the condition of the shopping centre makes things difficult. • The shopping centre used to be a real community hub. It was a place where everyone enjoyed coming as there were water features and playgrounds. Residents commonly got married at the centre. • Unfortunately, the wrong investor bought the premises and it has fallen into dis-repair to such an extent that it has become a feature which represents the demise of Dysart as a thriving community. • In spite of the poor state of the shopping centre, businesses have recently enjoyed relatively buoyant levels of trade. There have been some positive signs that the local economy is recovering. • One factor which effects all businesses are the persistent power outages. It is not known whether this is due to poor connections to the shopping centre or a broader problem. • Overall the business community has needed to become resilient to the boom and bust cycles which continue to characterise the town.
Local and regional commerce and community development groups	Barada Barna Aboriginal Corporation		• There have been ongoing negotiations between Jellinbah and the Barada Barna regarding the resolution of the Native Title which existed over the parcel of land adjacent to the Lake Vermont Workers Accommodation Village. • The Barada Barna are looking to build long term relationships with proponents such as Jellinbah. They are looking to build an understanding of their culture – connection to land, with mining companies. • The Barada Barna are looking to maximise employment opportunities and particularly for opening up training and skills development opportunities for Barada Barna people. This is not just about technical training but also all the other levels of support which deliver sustained employment outcomes. • The Barada Barna would like to see proponents prioritise sustainable employment pathways for traditional owners and not just employ Aboriginal people from anywhere in order to meet targets/ quotas. • Mentoring is the key to generating successful employment outcomes for young people. This is what the Barada Barna is focussing on. • Recording history and language is very important to the Barada Barna as much of their history has been lost.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• Suicide prevention is also a focus, as rates are too high for Indigenous people. • Any support the Proponent could make to trainees and employment pathways would be greatly appreciated. Also, any contributions to social programs which the Barada Barna are hoping to provide the traditional owners would be greatly appreciated. • Barada Barna acknowledged they are in the process of developing their own rehabilitation capabilities to support mine rehabilitation, through their associated consulting entity. • An interest was expressed by the Proponent to update the existing Cultural Heritage Management Plan relevant to the Lake Vermont Complex. This proposal was supported by Barada Barna.
Social and public service providers	Dysart High School	Face to face meeting	• The school currently has a total of 275 students. This is below full capacity, which is around 350 students. • Overall numbers at the school have been declining over the last ten years. There is a direct correlation with the number of people associated with the resource industry living in town. • There is a notable differentiation in terms of the types of kids at the school. There is a substantial cohort who are from relatively well-off families and are well cared for. There is also a stream of kids from low socio-economic families predominantly living in social housing. There are some high need kinds in this cohort. • One of the key challenges for the school is to retain the academically minded and committed kids through to Year 12. Retaining these kids brings up all students and creates an environment for them to thrive. • There is a real focus on tailoring the curriculum as much as possible to the interests and career pathways which are available. • The school is always looking to increase career pathway options such as through school based traineeships and apprenticeships. • As the mining sector is so dominant in the region, it makes sense to focus education and training to open up career pathways into this sector. The school highly welcomes ongoing [partnerships with Jellinbah and other proponents to achieve this outcome. • STEM is also a focus and the school appreciates the contributions which Jellinbah/ Thiess have made in terms of professionals coming to the school and showing kids the sorts of opportunities there are in the mining sector. • Any opportunities to further build an active and sustained partnership between the school and Jellinbah's Lake Vermont/ Meadowbrook Project is highly welcomed.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• The expansion of the existing workers camp was briefly discussed. The expanded camp is somewhat buffered from school buildings by the oval; however the construction of appropriate fencing would be appreciated.
Social and public service providers	Lady Gowrie Dysart Childcare Centre	Face to face meeting	• The centre is operating very close to full capacity. There only spaces available are a couple in the junior kindy age rage (3-5 years). • There are waiting lists for spaces younger age groups, from babies through to 3 years, are in high demand. • There has been a recent upsurge in demand- presumably due to an upswing in mining activity. • There are two things which inhibit the ability to offer greater availability- lack of staff and available space. • It is very difficult to attract staff to Dysart. This has been exacerbated by the requirement for Certificate III and degree qualified staff. There is a general shortage of these employees and so attracting to Dysart is a real issue. It is understood that by the end of 2021 the centre will need to have all staff either fully qualified or in the process of studying to attain the required qualifications. • Housing can be an issue in Dysart as there is a lack of quality stock which further detracts people from coming to Dysart. Most of the centre's staff have partners who have subsidised housing. • The centre does not have the resources to expand the available space. There is an adjacent community space which could be fitted out as an area for the 3-5 year cohort. This would free up additional space in the existing rooms for younger ages. • Any contributions or support to expand the space available for children or to attract staff would be most appreciated as the provision of childcare to meet community demand is rapidly becoming a real challenge. • A further issue in Dysart is the lack of any after-hours care for school children. There used to be a number of services, however these have recently closed due to tighter operational requirements, which has left a gap.
Social and public service providers	Dysart Primary School	Face to face meeting	• The school currently has 330 students. The maximum capacity of the school is 500 students. • There is a notable loss of students between primary school and high school as reflected in there being around 100 more children enrolled in the primary school than the high school. • There is a constant turnover of teachers. Many young and graduate teachers come to Dysart to 'do their time' in a regional area. There will be 5 new teaching staff come

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			on next year- three of which are university graduates. Generally they commit to a three year stint in Dysart. • The school does actively recruit new teachers. They make sure new teachers have a good understanding of the environment they are entering including some of the limitations in terms of services and facilities. This prepares them and avoids any feelings of disappointment. Overall there is a positive attitude and a commitment to do a good job whilst in the community. • The school is fortunate to some exceptional long-term teachers who create a great environment for the students and the young teachers coming through. • Further support is provided by the Centre for Learning and Wellbeing in Emerald which focusses on attraction and preparation of teachers in rural areas. • All teaching staff are provided housing and the school manages a portfolio of houses which does create an administrative burden which needs to be managed. • The school greatly appreciates the support provided by mining companies- including Jellinbah/ Thiess which most recently provided the 'buddy bench'. BMA also provided support through their 'Bright Minds' program. • There is a general lack of opportunities for kids outside of school. This is particularly so for girls- the dance school in the shopping centre is a really important service; however its ongoing viability may be affected by the shopping centre owner demanding excessive rents. • There is a lack of mental health support for young people. Children's mental health is generally closely related to the mental health of the parents. Social media has created an additional layer of complexity and exposure for young people. • Prevention is the best intervention regarding mental health. There are some great programs such as Headspace and Bush Kids; however, they are only outreach services in Dysart. • Parenting courses are also very important. There are some high need families in Dysart. This includes some very low socio-economic families. But also others where the parents are largely absent due to both parents working for resource projects. • There has been a recent increase in the number of mothers taking up job opportunities and subsequent drop off in kids academic performance as they are not getting the same support and encouragement at home. • There are also lots of amazing families in town who work really hard to support the school and the children. • Dysart is quite a complex community in that it wouldn't exist if wasn't for the mines but also seeks to maintain a degree of it's own autonomy and self-identity.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
Social and public service providers	Dysart Community Support Group	Face to face meeting	• Dysart is quite a transient community. This has an effect on accommodation availability and affordability. • When rents are down there is commonly an influx of people on low incomes moving into town. They underestimate the high cost of living and the lack of support services and end up requiring assistance. • An ever-increasing cohort is single mothers looking to escape abusive relationships who are attracted by the relatively low rental prices • A lot of what the Community Support Service does is problem solving for people who are in times of need • Housing and accommodation is an ongoing challenge. Whilst there are a large number of unoccupied dwellings, they are privately owned and not available for rent. There is high competition for the stock which is available • Investors who bought houses at high rates are waiting for the next boom to sell and are not prepared to spend any money on maintenance in the interim. Houses are subsequently in poor condition • There are four units of affordable housing in Dysart which are owned by the Isaac Affordable Housing Trust. They are all occupied and demand for these is strong • Low income and vulnerable people who move to Dysart do not realise how difficult it is to access services. There is no public transport and it is beyond the means of some people to access services in Moranbah and Mackay • There were a cohort of long term homeless and very low-income people who were provided Department of Housing accommodation in Dysart. They have not integrated into the community and are high need. Fortunately, some of these are now moving on to locations that are able to better provide the social support services required by these individuals.
Emergency services and public health providers	Dysart Police Station	Face to face meeting	• The Dysart Police Station has two permanent officers- housing is also provided. • Overall rates of crime have dropped off recently- could be related to on-set of COVID. • Most call outs are domestic violence and mental health related. There has been greater reporting of domestic violence and it now accounts for up to 40% of all call outs. • There is some drug related crime in Dysart- primarily cannabis and ice. • There are some high need families who moved into Dysart families as they were provided Department of Housing social housing. These are the cause of a few problems in the community.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• There are very few call outs to the worker accommodation villages- almost all call outs are to houses. The camps are well-run and mining proponents do a good job at ensuring workers are well-behaved. • The only issue with the Jellinbah/ Thiess camp is the lack of CCTV cameras. The only call outs have been related to the theft of property off the back of utes. If there was a entry gate and CCTV cameras in the parking areas, this would be a deterrence and also enable perpetrators to be identified. • Speeding is an ongoing issue on the Highway with workers coming on or going home from shifts. Fortunately, there have not been any recent fatalities. • There is an issue with kids roaming around in groups at night. Increased employment opportunities for women (BMA 50% target for female employment) has resulted in kids being unsupervised at home as both parents are at work. • Kids sometimes break into empty houses and get up to some mischief. Currently it is all fairly innocent and there haven't been many serious issues, however this could deteriorate the longer this situation persists. • Overall Dysart is a good town to live in. It is a safe town which has a strong sense of community. • The Police work closely with social service providers regarding mental health and domestic violence issues.
Emergency services and public health providers	Dysart Hospital	Face to face meeting	• There are a total of 18 – 20 nursing staff at the hospital along with a number of administrative staff. • The only doctor is Dr Sunday, who also has a practice at the medical centre. There is definitely a need for another doctor in Dysart- at least a locum to provide support and cover for Dr Sunday. • The hospital provides a women's health service and an allied health team visits 1 day/ week. • There are no dedicated mental health services. This is a major gap in health services, particularly as the incidence of mental health related issues has been growing substantially in recent years. • Causes of mental health problems seems to both be drugs (amphetamines) and anxiety and depression due to loneliness and dislocation from family. • The move of workforces to 7 days on/ 7 days off shift work has seemed to have had a negative effect on mental health and overall levels of satisfaction with life. There is limited opportunity to interact with community and family in a normal way. This seems to take a toll on people and result in depression and drug and alcohol dependence.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• Most of the mental health issues which arise in workers camps are medi-vac straight to Mackay. • Dysart used to be a thriving community. There should be incentives for mine workers to reside in towns as this seems to be good for both the towns and the workers as they are able to have a more meaningful relationship with their families and the community. • A major problem in Dysart is the lack of any public transport or taxi service. This has a big impact on people's ability to get to the hospital or the medical centre- particularly for elderly and vulnerable members of the community. If something could be done to provide a bus or subsidised transport service for these people, it would make a real difference.
Emergency services and public health providers	Dysart Medical Centre	Face to face meeting	• The only doctor in Dysart is Dr Sunday, who has been servicing the town for over 20 years. • The Medical Centre is usually very busy and there is often a waiting list to book an appointment. • There have been additional doctors provide services and support; however it has proven difficult to maintain commitment to the town due to high levels of demand throughout regional areas. • The Medical Centre building is owned by the hospital. Dr Sunday runs the practice out of the building and also provides medical services for the hospital. • If the doctor is required at the hospital, patients at the medical centre either have to wait or re-schedule their appointment.
Emergency services and public health providers	Moranbah and District Support Services	Face to face meeting	• Finding qualified and experienced staff is very difficult- across all elements of society. A pre-occupation with local employment quotas isn't completely realistic as there are limited numbers of people available for employment. • Youth engagement is a major issue in Dysart. There are a lack of options to keep kids busy and engaged. This is exacerbated by parents who are absent due to 12hr/ day shift work. There are too many kids in Dysart who are roaming around unsupervised but have a substantial amount of cash or a credit card on them as this is what parents have provided in lieu of being present. • The police are generally very good- in spite of being significantly under-resourced as they need to deal with a large non-resident workforce, which for some reason do not get recognised in terms of resource allocations. This really does make any sense and Council have continually tried to make this point recognised by the bureaucrats in Brisbane.

Category	Entity	Means of engagement	Key matters discussed/ issues raised
			• Dysart struggles to get the support services it needs as it does not meet the threshold population required. There is just one doctor who has serviced the town for many years and a lack of mental health services. • There is a lack of depth of social networks and support services in mining communities. This is an issue as there are also elevated rates of social and psychological conditions in these communities. This is caused by shift work, transience and a heavily alcohol orientated social condition. • Ideally there would be a good balance between mining wages being reasonably structured recognising the work which these people do and the hours they need to work, whilst also sympathetic shift scheduling for local residents so that there are opportunities for family interaction and participation. A contracting based employment arrangement doesn't allow this to happen. • The people who are earning lower wages are the first to suffer when housing prices start rising. They get forced out and struggle to find alternative accommodation. • There are mental health issues occurring in camps. Suicide and substance abuse is prevalent and results in negative social outcomes. • Domestic violence is a support service which is spread thin.
Emergency services and public health providers	Ambulance Service	Virtual meeting	• Fatigue seems to be a major cause of accidents- people are working very long shifts and alternating between day shift and night shifts. It is not surprising that there are resultant accidents Queensland Ambulance Service appreciates major projects keeping them informed of developments which impact upon their ability to service areas. • Ambulance do get call outs to workers camps. Whilst the larger camps have medical first aid capability the Ambulance is called for more serious matters. This includes mental health issues which can be challenging for paramedic staff.

5 Existing social environment

This section details the existing social baseline conditions across the study areas. The baseline focuses on socio-economic characteristics relevant to the potential social changes caused by Project activities as identified in Section 3.3.

5.1 Socio-economic context of Bowen Basin

The Project is located on the traditional country of the Barada Barna People in the Bowen Basin, Queensland. Towards the end of the 19th century, the Barada Barna People were displaced and dispossessed of their traditional lands as pastoralism took hold. Many of the Barada Barna People worked on the pastoral lands, enabling them to maintain connection to their country (Dowsett, 2016). An application for native title determination made on behalf of the Barada Barna People was granted in 2016, covering approximately 2,699 km^2 within the Isaac LGA (Dowsett, 2016).

The Bowen Basin is an area of coal reserves and mining related communities that extends over approximately 60,000 km^2 of Central Queensland from the town of Collinsville in the north to Theodore in the south (Franks et al., 2010). Prior to mining, the region was sparsely populated and economic activity primarily consisted of sheep and cattle grazing. In the 1960s, mining companies started to invest in the construction of company towns to provide company-built accommodation for their employees.

Dysart, Moranbah and Middlemount were three towns in Queensland built for the purpose of housing mine employees. Moranbah was established in 1969 to support the Goonyella and Peak Downs mines, while Middlemount was established in the early 1980s to house workers of the German Creek and Foxleigh mines. Dysart was established in 1973 soon after the construction of the Saraji Mine. A few years later in 1979, Norwich Park Coal Mine opened approximately 25 km south-east of Dysart, further contributing to Dysart's population growth.

Over time, these towns developed permanent populations and became 'normalised' while still maintaining strong identities as mining towns. The mining industry maintained its dominance as the key industry of employment for the residents, and subsequently Dysart, Moranbah and Middlemount were vulnerable to the boom and bust cycle associated with the mining industry over the past 50 years (Petkova et al., 2009). Cyclical industry trends establish pressure on these towns. During mining boom times, there would be challenges associated with housing shortage and affordability, labour draw, and competition for local services including health and emergency services. On the other hand, industry declines put pressure on employment levels, business activities, and community connectedness through population loss. A significant effect of cyclical trends is population change and turnover. With the exception of Middlemount, the mining towns in the Bowen Basin experienced considerable population change, resulting in significant indirect effects to the town economy and community (see Figure 5-1).

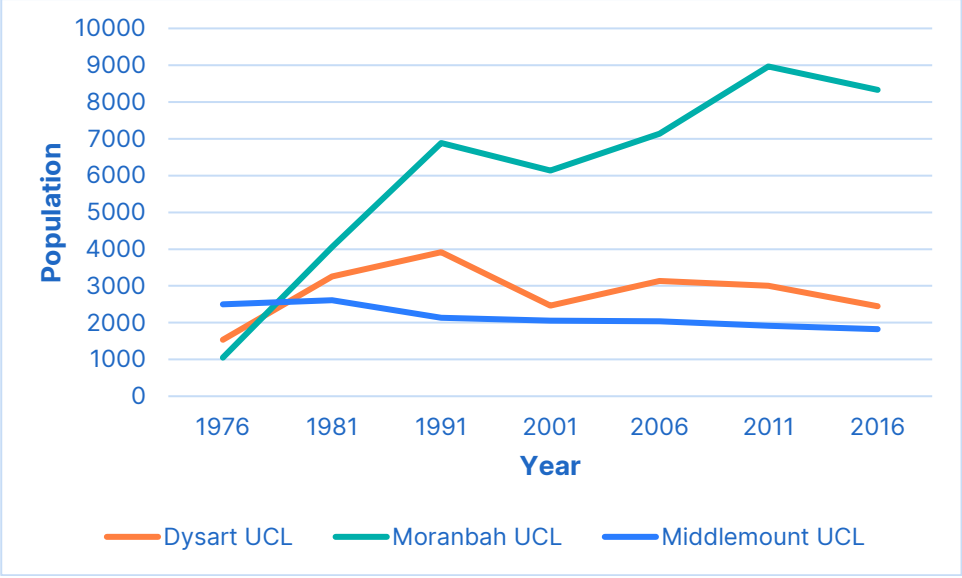

Figure 5-1 Population change in mining towns, 1976 to 2016
Source: Centre for the Government of Queensland, 2018.

The mining boom commencing 2006 spurred the development of WAVs and the normalisation of mining projects operating a continuous production cycle of 12-hour shifts, seven days a week. This has subsequently led to the growth of non-resident workers who FIFO or DIDO to the towns. By 2012, there was almost one non-resident worker for every Dysart resident (UQ CCSG, 2018). However, a decline of the mining industry occurred from 2012, with noticeable effects on Dysart. In 2012, Norwich Park Coal Mine closed for economic reasons, reportedly losses from lower coal prices, higher costs and weaker output due to flood (UQ CCSG, 2018). As a result, Dysart's population declined with resident miners relocating to other mines within the Bowen Basin (Dysart Action Group Submission, 2015).

The widespread normalisation of block rosters of 12-hour shifts to support continuous production processes has led to the preference for FIFO/DIDO workforces and the accommodation of these workers in camps, with adverse effects for local towns (Carrington et al., 2011). This has contributed to the passage of the SSRC Act in Queensland Parliament in March 2018, to ensure nearby regional communities of large resource projects benefit from these projects. In particular, the SSRC Act requires large resource projects to employ people from nearby regional communities through prohibition of 100 per cent FIFO workforces.

5.2 Population and demography

This section presents data on trends in population, socio-cultural characteristics, incomes and levels of educations and qualifications. Data is primarily sourced from Government sources, including the ABS and QGSO.

5.2.1 Population trends

Prior to 2020, the population of Dysart had been steadily declining since it peaked in 2007 with 3,138 people (Figure 5-2).

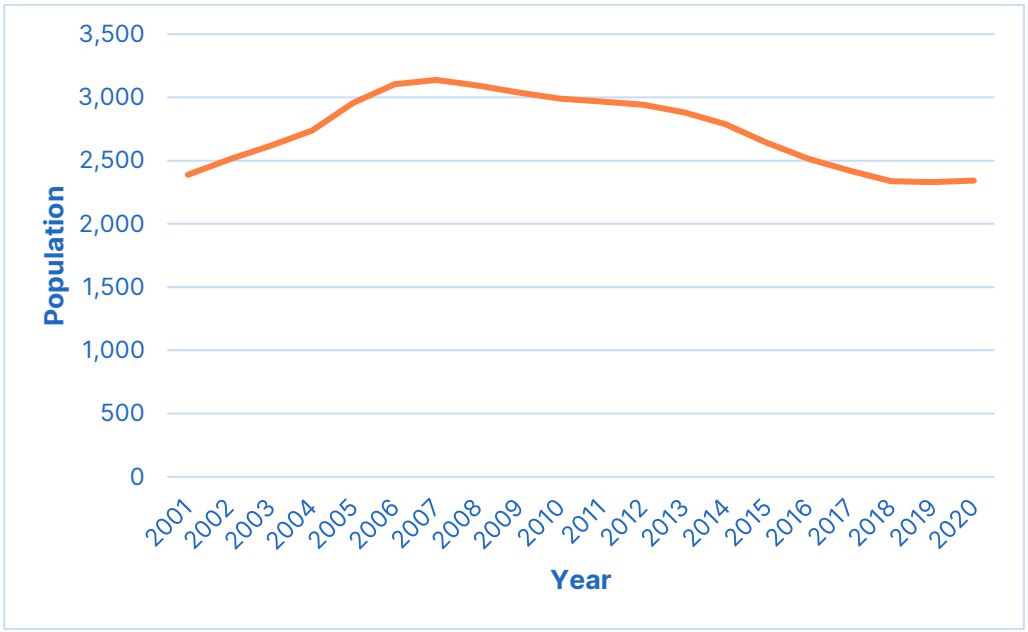

Figure 5-2 Population trend in Dysart, 2001 to 2020
Source: Regional Population Growth, Australia, Cat. No. 3218.0, Australian Bureau of Statistics, 2020.

Over the ten-year period to June 2020, Dysart's population declined by 21.8 per cent, with a loss of 649 residents (Table 5-1). Significant population losses were experienced between 2014 and 2015.

Table 5-1 Estimated residential population, 2010 to 2020

Locality	2010	2012	2014	2016	2018	2020
Dysart UCL	2,991	2,942	2,788	2,514	2,338	2,342
Isaac LGA	22,658	23,344	22,786	21,543	20,930	20,987
Queensland	4,404,744	4,568,687	4,719,653	4,845,152	5,009,424	5,176,186

Source: Regional Population Growth, Australia, Cat. No. 3218.0, Australian Bureau of Statistics, 2020.

The population decline is likely attributed to the downturn in the mining industry (circa 2012-2017) including mine closures and downsizing of mining projects, such as the closure of nearby Norwich Park Coal Mine and the loss of around 340 workers and contractors, most of whom resided in Dysart with their families (UQ CCSG, 2018).

Some workers of Norwich Park Coal Mine were redeployed to other BHP Billiton operations elsewhere in the Bowen Basin and may have migrated out of Dysart with their families as a result (QGSO, 2012).

However, in the year to June 2020, Dysart experienced minor population growth with an estimated population of 2,342 people, an increase of 12 people from June 2019 (Figure 5-3). This population growth is potentially attributed to the recent increase in workforce size at Lake Vermont Mine, the COVID-19 pandemic and associated travel restrictions resulting in non-resident workers electing to remain in Dysart on a full-time basis and increase in economic activity stimulated by other nearby mining projects.

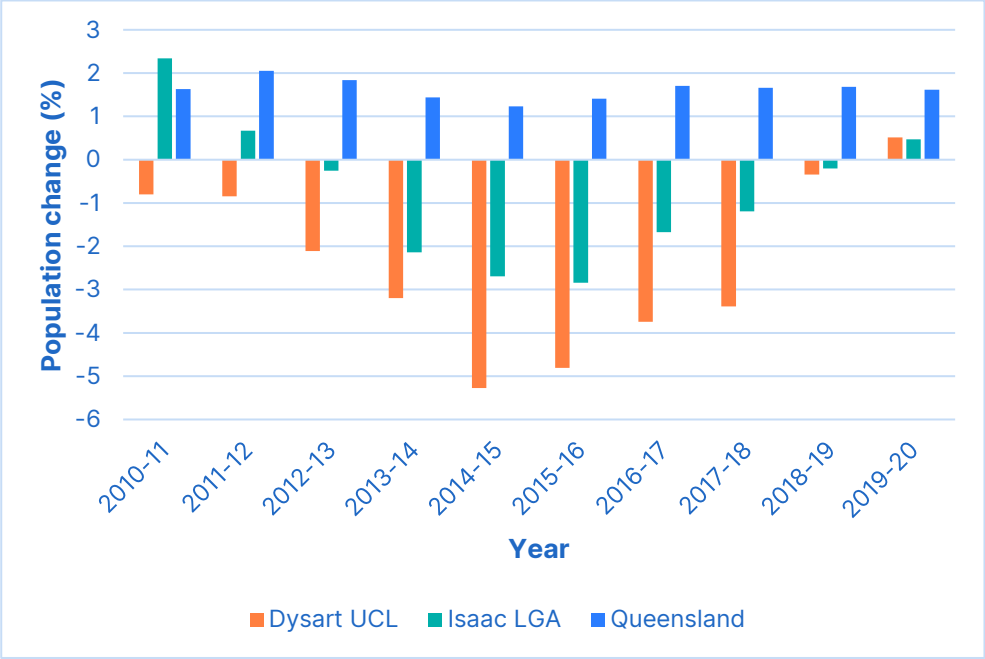

Figure 5-3 Population change rates, 2010 to 2020
Source: Regional Population Growth, Australia, Cat. No. 3218.0, Australian Bureau of Statistics, 2020.

Population projection data is available for Broadsound-Nebo SA2, which includes Dysart. By 2041, the projected population of Broadsound-Nebo SA2 is 7,529 people, with an average annual growth rate of -0.6 per cent between 2016 and 2041 (Figure 5-4).

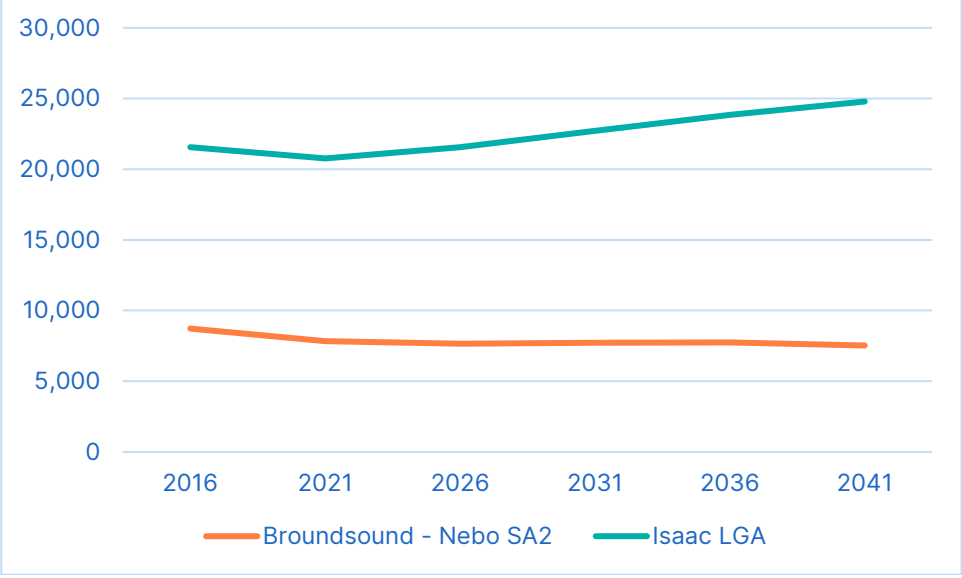

Figure 5-4 Projected population, 2016 to 2041
Source: Queensland Government Population Projections, 2018 edition (Medium series).

On the other hand, Isaac LGA is projected to host 24,786 residents by 2041, with an average annual growth rate of 0.6 per cent between 2016 and 2041. While Isaac LGA is projected to experience population growth, this growth is less than that recorded for Queensland as a whole, with an anticipated average annual growth rate of 1.6 per cent between 2016 and 2041.

QGSO publishes estimates on the full-time equivalent (FTE) population. Recent estimates for Dysart's FTE population at June 2020 was 3,995 people, of which 58.1 per cent were residents and 41.9 per cent were non-residents (Table 5-2). Non-residents are people who FIFO (including DIDO) to work and live in the are temporarily while rostered on shift, and who have their usual place of residence elsewhere (QGSO, 2020). Dysart's proportion of non-resident workers is almost double than the proportion estimated for Moranbah.

Table 5-2 Population estimates, June 2020

Locality	Resident population		Non-resident population		FTE population
	No.	%	No.	%	
Dysart UCL	2,320	58.1	1,675	41.9	3,995
Moranbah UCL	8,700	77.6	2,510	22.4	11,210
Isaac LGA	20,810	62.0	12,770	38.0	33,575

Source: Bowen Basin Population Profile, Queensland Government Statistician's Office (2020).

Isaac LGA recorded a non-resident population of 12,770 people at June 2020, up from 12,130 non-residents in June 2019 (QGSO, 2020). This this growth is likely attributed to the combination of project construction and ongoing coal industry activity, which more than made up for mine closures.

QGSO also publishes a series of projections on the non-resident population in the Isaac LGA and in the Bowen Basin more broadly. The projections take into account the FIFO construction, production and maintenance workforces of all existing resource operations and future resource projects, as well as assumptions about project timing (QGSO, 2020). The projection series are derived according to the status of projects in the development pipeline. Series D includes the Series A, B and C projections, plus projected growth in the non-resident population arising from projects that are in the early stages of planning. Under this scenario, the non-resident population of Isaac LGA is projected to peak at 14,510 persons in 2024 before falling to 14,430 by 2026 (Figure 5-5).

Figure 5-5 Projected non-resident population, Series D, Isaac LGA
Source: Bowen Basin non-resident population projections, Queensland Government Statistician's Office (2020).

There is typically a high degree of transience in mining towns. Population mobility refers to the geographic movement of people where there has been a change in the place of usual residence (ABS, 2009). Small towns with low rates of population mobility is an indicator of community strength, as a stable and long-term permanent community contributes to social capital building and subsequently enhances community well-being and resilience. Dysart generally recorded high levels of population mobility compared to Queensland, with lower proportions of people who lived at the same address either 12 months or five years prior to the 2016 Census (Figure 5-6).

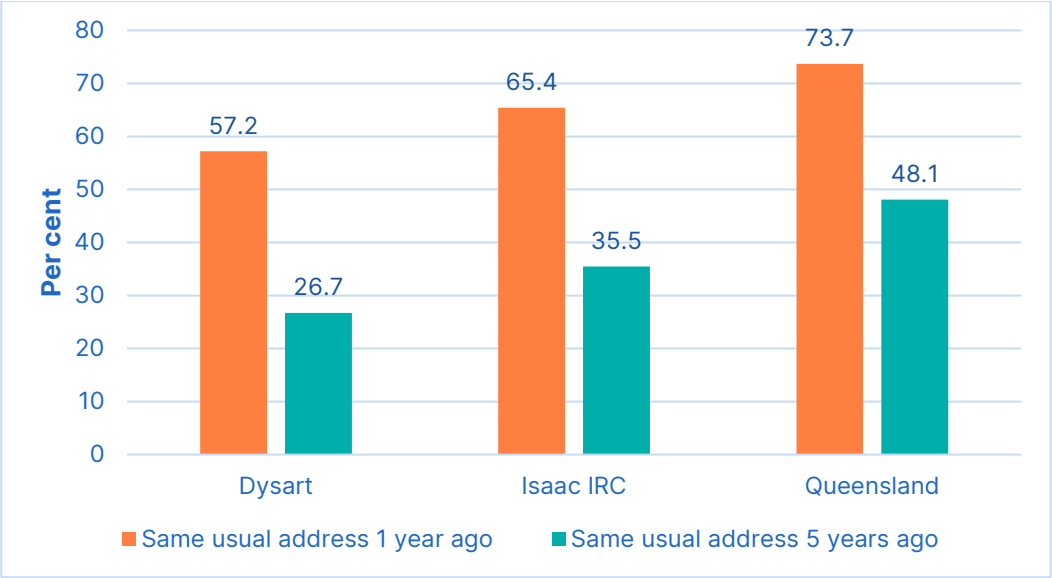

Figure 5-6 Population mobility, 2016
Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

Around 26.7 per cent of Dysart's resident population resided in Dysart for the five years prior to the 2016 Census. If a town's population records high rates of population turnover, it can have important impacts on local regional development through the gain or loss of skilled people, community leaders and others with particular attributes facilitating development. Population mobility in Dysart is likely to be influenced by the cyclical trends of the mining industry.

5.2.2 Socio-cultural characteristics

Overall, the population of Dysart is typically younger with a lower median age relative to Queensland, has more males than females, and has a higher proportion of residents who identify as Aboriginal and/or Torres Strait Islander relative to Queensland (Table 5-3).

Table 5-3 Age, sex, cultural and family profile, 2016

Indicator	Dysart UCL	Isaac LGA	Queensland
Male (%)	56.5	54.5	49.4
Median age	30	32	37
People aged 14 years or under (%)	26.6	25.3	19.4
People aged between 15 and 64 years (%)	70.5	69.3	65.3
People aged 65 years or older (%)	3.0	5.4	15.3
Aboriginal and/or Torres Strait Islander (%)	4.5	3.6	4.0
Number of families	491	4,610	1,221,148
Couple family with no children (%)	*33.2*	*35.2*	*39.4*
Couple family with children (%)	*52.1*	*53.5*	*42.5*
One parent family (%)	*13.0*	*10.7*	*16.5*
Number of households	683	6,189	1,656,831
One family households (%)	71.2	73.2	70.0
Multiple family households (%)	-	0.6	1.8
Group households (%)	3.2	3.0	4.7

Indicator	Dysart UCL	Isaac LGA	Queensland
Lone person households (%)	26.2	23.2	23.5
Completed Year 12 or equivalent (%)	37.2	42.7	52.2

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

At the 2016 Census, the age profile of Dysart's population differed from the age profile recorded for Queensland. Dysart's population is typically younger, with a higher proportion of people aged 14 years or under and a significantly lower proportion of older people aged 65 years or older. This age profile reflects the family-oriented nature of Dysart, and the lack of aged care infrastructure and services available in Dysart. Further, residents who retire are typically more likely to migrate out of Dysart and retire elsewhere.

Dysart also recorded a high proportion of people who identified as Aboriginal and/or Torres Strait Islander as the 2016 Census compared to Isaac LGA and Queensland. Around 4.5 per cent, or 109 people, of Dysart's population identified as Aboriginal and/or Torres Strait Islander, compared to 3.6 per cent and 4.0 per cent for Isaac LGA and Queensland respectively.

There were 491 families residing in Dysart at the 2016 Census, of which more than half were couple families with children. Both Dysart and Isaac LGA recorded higher levels of couple families with children than Queensland, indicating the town and broader region has a strong family presence.

5.2.3 Incomes

Mining towns are historically high-income towns. The average individual income in Dysart has exceeded the Queensland average since the 2001 Census. At the 2016 Census, median incomes of the household and individual in Dysart and Isaac LGA were higher than that recorded for Queensland as a whole (Table 5-4).

Table 5-4 Average incomes, 2011 and 2016

Incomes	Dysart UCL			Isaac LGA			Queensland		
	2011	2016	Change	2011	2016	Change	2011	2016	Change
Median total weekly personal income ($)	1,277	1,103	-17.4	1,052	1,030	-22	587	660	73
Median total weekly household income ($)	2,726	2,128	-598	2,579	2,138	-441	1,235	1,402	167
Less than $600 (at 2011 Census) and $650 (at 2016 Census) gross household weekly income (%)	3.6	11.1	8	10.1	11.6	2	22.8	19.5	-3.3
More than $3,000 gross household weekly income (%)	31.9	23.3	-9	27.5	27.4	0	10.2	14.4	4.2

Source: 2016 and 2011 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

However, over the five years to 2016, median personal and household incomes in Dysart and the Isaac LGA declined, while they increased for Queensland as whole. For example, the median total weekly household income of households in Dysart declined from $2,726 per week in 2011 to $2,128 per week in 2016, while the median recorded for Queensland as a whole increased during the same time period. While median personal and household incomes declined in Dysart and Isaac LGA, they remain higher than the median incomes recorded for Queensland as a whole.

The proportion of households earning less than $600 per week in 2011 and $650 per week in 2016 has increased significantly in Dysart. In 2011, 3.6 per cent of households in Dysart reported a gross weekly income of less than $600 per week, which increased to 11.1 per cent (representing 33 households) at the 2016 Census. This is likely driven by the outmigration of high-income households between 2011 and 2016, as the number of households earning a gross income of more than $3,000 per week declined from 238 households to 147 households (loss of 91 high-income households).

5.2.4 Level of education and qualifications

Dysart's population recorded lower rates of completion of Year 12 or equivalent. Around 37.2 per cent of residents aged 15 years or over in Dysart completed Year 12 or equivalent, while Isaac LGA recorded 42.7 per cent and Queensland 52.2 per cent (Table 5-5). Lower rates of Year 12 completion or equivalent in Dysart may have implications for recruitment of locally skilled labour.

Table 5-5 Highest year of school completed, 2016

Indicator	Dysart UCL		Isaac LGA		Queensland	
	No.	%	No.	%	No.	%
Year 12 or equivalent	643	37.2	6,456	42.7	1,900,263	52.2
Year 11 or equivalent	151	8.7	1,098	7.3	246,546	6.8
Year 10 or equivalent	394	22.8	3,686	24.4	811,671	22.3
Year 9 or equivalent	79	4.6	614	4.1	153,232	4.2
Year 8 or below	43	2.5	513	3.4	178,122	4.9
Did not go to school	8	0.5	33	0.2	18,366	0.5
Not stated	406	23.5	2,718	18.0	335,634	9.2
Total 15 years and over	1,727	-	15,118	-	3,643,834	-

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

Of people aged 15 years and over in Dysart, 14.3 per cent reported having completed Year 12 as their highest level of educational attainment, which is comparable to rates recorded for Isaac LGA and Queensland as a whole (Table 5-6).

Table 5-6 Level of highest educational attainment, 2016

Educational attainment	Dysart UCL	Isaac LGA	Queensland
Bachelor degree or above	7.1	10.3	18.3
Advanced diploma and diploma level	4.6	5.1	8.7
Certificate level IV	3.1	3.1	3.2
Certificate level III	20.4	20.2	15.2
Year 12	14.3	14.7	16.5
Year 11	4.9	4.3	4.3
Year 10	13.4	14.5	12.9
Certificate level II	0.2	0.1	0.1
Certificate level I	0.0	0.0	0.0
Year 9 or below	5.7	6.3	7.3
No educational attainment	0.2	0.1	0.4

Educational attainment	Dysart UCL	Isaac LGA	Queensland
Not stated	24.8	19.4	10.8

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

However, Dysart's population recorded relatively lower rates of people with a Bachelor degree or above compared to Isaac LGA and Queensland. This is likely reflective of the lack of tertiary institutions in Dysart and surrounds.

5.3 Housing and Accommodation

The housing and accommodation profile of Dysart is heavily influenced by the mining industry's cyclical trends. The housing and accommodation profile focus on Dysart and the broader Isaac LGA.

5.3.1 Dwelling occupancy and tenure

At the 2016 Census, Dysart recorded 1,201 private dwellings, of which 56.9 per cent were occupied (Table 5-7). This was lower than private dwelling occupancy rates recorded for Isaac LGA and Queensland, at 65.5 per cent and 89.4 per cent respectively. Private dwellings may be unoccupied because it is awaiting maintenance, is on the market for purchase or rental, or is off the market due to low demand (ABS, 2016). Some unoccupied dwellings in Dysart and Isaac LGA are likely to be owned by mining companies and are vacant or reserved for future resident employees or are awaiting sale. For example, BMA owns around 528 dwellings in Dysart, of which 36 per cent were unoccupied as at March 2019 (BMA, 2019).

Table 5-7 Occupancy of private dwellings, 2011 and 2016

Locality	Occupied private dwellings (%)		Unoccupied private dwellings (%)		Total private dwellings (no.)		Change in total private dwellings, 2011 to 2016 (%)
	2011	2016	2011	2016	2011	2016	
Dysart	69.2	56.9	30.8	42.5	1,219	1,201	-1.5
Isaac LGA	76.0	65.5	24.0	34.5	8,751	9,440	7.9
Queensland	89.7	89.4	10.3	10.6	1,725,214	1,852,407	7.4

Source: 2016 and 2011 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

In Dysart, the proportion of unoccupied dwellings grew by about 36.3 per cent between 2011 and 2016, from 375 unoccupied dwellings in 2011 to 511 unoccupied dwellings in 2016, despite the number of total private dwellings only declining by 1.5 per cent. The increase in the proportion of unoccupied private dwellings is likely reflective of the town's declining population, with more people migrating out of town than people migrating in. The high number of unoccupied private dwellings indicates that Dysart has housing available to support absorption of new residents through in-migration. However, engagement undertaken for the SIA suggests that many of the unoccupied dwellings are in poor condition and require substantial maintenance and upgrade in order to be attractive dwellings for families.

Reflective of the high rate of population turnover, Dysart recorded higher rates of rented dwellings and lower rates of homeownership. Around 69.3 per cent of occupied private dwellings in Dysart were rented in 2016, compared to 63.5 per cent and 34.2 per cent for Isaac LGA and Queensland respectively (Table 5-8). Rates of homeownership in Dysart declined between 2011 and 2016 by 25.5 per cent, while rates of renting declined by 13.4 per cent.

Table 5-8 Dwelling tenure, 2011 and 2016

Locality	Owned outright or with a mortgage (%)		Change in rates of home ownership 2011-2016 (%)	Rented (%)		Change in rates of rented dwellings 2011-2016 (%)
	2011	2016		2011	2016	
Dysart	30.7	28.3	-25.5	64.6	69.3	-13.4

Locality	Owned outright or with a mortgage (%)		Change in rates of home ownership 2011-2016 (%)	Rented (%)		Change in rates of rented dwellings 2011-2016 (%)
	2011	2016		2011	2016	
Isaac LGA	35.5	32.4	-15.0	60.7	63.5	-2.8
Queensland	63.5	62.2	4.8	33.2	34.2	10.3

Source: 2016 and 2011 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

Dysart and Isaac LGA also feature high proportions of 'other landlord type' for rented dwellings, which in mining towns typically equate to dwellings owned by mining companies with some dwellings owned by Government to provide housing for employees. Around 44.4 per cent of rented dwellings in Dysart and 54.8 per cent in Isaac LGA were rented from 'other landlord type' (Table 5-9). High rates of company-provided and/or subsidised housing reflect the relatively lower levels of median weekly rents in Dysart and Isaac LGA, at $120 and $90 per week respectively. Around 40.4 per cent of rented dwellings in Dysart were managed by real estate agencies.

Table 5-9 Rental landlord of occupied private dwellings, 2016

Locality	Real estate agent (%)	Social housing[1] (%)	Other (including employer)[2] (%)	Median rent ($ per week)
Dysart	40.4	3.8	44.4	120
Isaac LGA	30.3	3.5	54.8	90
Queensland	62.2	10.9	5.0	330

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

Dysart and the Isaac LGA recorded lower proportions of social housing, with around 3.8 per cent and 3.5 per cent of rented dwellings constituting as social housing respectively.

5.3.2 Housing availability and affordability

The influx of non-resident workers has historically reduced housing availability and affordability in Dysart. This effect was seen to be exacerbated by mining companies subsidising rent for workers. At the peak of the mining boom to 2012, median rent reportedly reached $1,200 per week in Dysart, compared to $500 per week in 2010 (UQ CCSG, 2018). High rents also led to investors buying houses, further increasing house prices and rents. The companies also bought and sold houses, causing peaks and troughs in the number of sales and house prices (UQ CCSG, 2018). While housing costs in Dysart and the Isaac LGA have normalised over the past five years, the high percentage of dwellings owned by companies prevents a normalisation of ownership, and leaves communities vulnerable to industry trends and policy changes.

At February 2022, there were 51 dwellings available for purchase in Dysart and 28 dwellings available for rent (Table 5-10). On the other hand, there were 177 dwellings available for purchase in Moranbah and 81 dwellings available for rent. The number of houses available for purchase in Dysart at February 2022 has more than doubled since the year prior, indicating Dysart has the capacity to absorb new residents.

Table 5-10 Houses available for purchase and rent

Postcode	Available for purchase			Available for rent		
	Feb 2020	Jan 2021	Feb 2022	Feb 2020	Jan 2021	Feb 2022
Dysart	22	22	51	36	32	28
Moranbah	121	135	177	33	93	81

Source: www.realestate.com.au

[1] Social housing includes state or territory housing authority, and housing co-operative/community/church group.
[2] Other includes Government and other employer, such as mining companies.

According to IRC, property prices across all housing stock in Dysart were gradually falling since April 2012 and has just started to rise since October 2018 (IRC, 2019a). Residential dwellings sales data is only available for Moranbah and the Isaac LGA. The median dwelling sale price in Moranbah in the year 2021 was $282,200, which increased by 20.2 per cent from 2020 (Table 5-11).

Table 5-11 Sales market for dwellings, 2021

Locality	Sales (no.)	Median sale ($)	Annual median sale (1yr ago) ($)	1 yr change (%)	Annual median sale (5 yrs ago) ($)	5yr change (%)
Moranbah	120	282,500	235,000	20.2	200,000	41.3
Isaac LGA	204	250,000	200,000	25.0	185,000	35.1

Source: Queensland Market Monitor, March 2021 Issue 49, Real Estate Institute of Queensland.

The average rental price for a dwelling in Dysart was $250 per week at December 2020, which was lower than the average rental price for a dwelling in Isaac LGA at $320 per week (Table 5-12).

Table 5-12 Rental market indicators for three-bedroom dwellings

Locality	December 2015		December 2019		December 2020	
	$ per week	New bonds	$ per week	New bonds	$ per week	New bonds
Dysart UCL	150	25	220	35	250	39
Isaac LGA	225	125	300	158	320	115

Source: Queensland Market Monitor, March 2021 Issue 49, Real Estate Institute of Queensland.

The vacancy rate of rental housing in Dysart has fallen from 6.5 per cent in June 2018 to 4.9 per cent in December 2018. Vacancy rates were at their highest in five years at 20 per cent in July 2013 (IRC, 2019a).

5.3.3 Affordable housing and homelessness

Affordable housing typically describes a range of subsidised housing products that are affordable to those on low to moderate incomes. More specifically, affordable housing can be defined as a dwelling available through a housing assistance program that provides a specific level of below market rent prices, such as public housing provided by the Queensland Department of Housing and Public Works (AHURI, 2019).

Typically, housing that is affordable for low to moderate income households are when housing costs are low enough to enable the household to meet other basic, long-term living costs. A measure of households experiencing housing stress is associated with housing costs that are 30 per cent or less of a household income. At the 2016 Census, around 4.6 per cent of rental households in Dysart were experiencing housing stress, greater than the proportion recorded across Isaac LGA region as a whole (Table 5-13).

Table 5-13 Housing stress, 2016

Indicator	Dysart UCL		Isaac LGA		Queensland	
	2011	2016	2011	2016	2011	2016
Households where rent payments are greater than or equal to 30% of household income (%)	5.1	4.6	5.4	3.7	11.9	12.8
Households with mortgage repayments greater than or equal to 30% of household income (%)	1.0	0.5	2.2	1.9	9.7	6.4

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

Across Australia, affordable housing is typically facilitated through the National Rental Affordability Scheme (NRAS), which is an Australian Government initiative to address the shortage of affordable rental housing by offering financial incentives for investors to build and rent dwellings to low- and moderate-income households at below-market rates. IRC had constructed a number of dwellings under the NRAS. However, due to the high average incomes of the region, NRAS was unable to achieve the required affordability outcomes principally due to the influence of the mining industry. Alternative mechanisms to providing affordable housing was then required. IAHT was established in response to this. IAHT currently offer affordable housing options in Clermont,

Dysart and Moranbah under the Isaac Rental Affordability Scheme. The eligibility criteria to access IAHT dwellings include meeting established income thresholds and to be an Australian citizen or permanent resident residing in Isaac LGA.

Engagement with the Queensland Department of Housing and Public Works for the SIA identified that the Department manages approximately 20 houses in Dysart, most of which were occupied at time of engagement. The Department of Housing and Public Works also expressed they are seeking to sell housing stock in the region, with three properties in Dysart recently sold by the Department.

At the 2016 Census, Isaac LGA recorded 48 homeless persons, a decrease from 131 homeless persons at the 2011 Census. Recent research into homelessness conducted by Warren (2017) in Dysart, Moranbah and Mackay identified that a lack of affordable housing and access to housing was identified as a major structural issue that impacted all three communities during the mining boom to 2012. Prior to the mining boom, participants described Mackay, Moranbah and Dysart as being largely rural and regional communities with reasonable levels and supply of affordable housing. Warren's (2017) research concluded that people who are experiencing, or had experienced, homelessness in Mackay, Moranbah and Dysart identified three pathways to homelessness, including:

- Relationship and family breakdown and domestic and family violence.
- Unemployment and housing affordability.
- High vulnerability and lack of access to housing and support services.

However, engagement undertaken for the SIA identified that lack of access to affordable housing is currently not a significant issue in Dysart, with the town providing sufficient available low-rental dwellings. Despite this, stakeholders including IRC and IAHT has consistently highlighted that housing affordability is a region-wide concern.

5.3.4 Workforce accommodation villages

WAVs are the predominant type of accommodation utilised by non-resident workers while on-shift in the Isaac LGA, housing around 10,800 persons at June 2019 (QGSO, 2019). Other types of accommodation housing non-resident workers, including hotels/motels, caravan parks and private rentals, accounted for 1,330 persons in the same year. The demand for accommodation for non-resident workers is expected to increase due to the projected growth in the region's non-resident population.

WAV bed occupation reached its peak in 2012 with 16,105 of a total 19,515 beds being occupied. However, the total number of operational WAV beds peaked the following year in 2013 at 21,745 beds with only 14,285 being occupied. Occupation of WAV beds was at its lowest in 2016 with 8,960 WAV beds being used across the region out of a total 19,140 beds (IRC, 2019a). IRC keeps a register of all known WAVs across the region including the total number of beds built and those approved but not yet built. At June 2018, there was a total of 19,052 existing WAV beds in the Isaac LGA, with a total approved capacity of 31,698 beds (including existing beds).

As a mining town, Dysart host a number of WAVs to accommodate non-resident workers employed at the nearby mines. There are four WAVs in Dysart, including:

- BMA Dysart Village (closed to public).
- Lake Vermont Accommodation Village (closed to public).
- Civeo Dysart Village (open to public).
- Stayover by Ausco (open to public).

Data provided by IRC indicate that at June 2018, there was a total of 3,275 existing beds in Dysart, with a total approved capacity of 3,670 beds (Table 5-14).

Table 5-14 Worker Accommodation Villages in Dysart, 2019

WAV	Capacity		Location	Description
	Existing beds	Approved beds		
BMA Dysart Village (BHP)	430	691	30-minute walk to centre of Dysart town	Closed camp for BMA employees, likely servicing the Saraji Mine. Due to the facilities provided on-site, and its proximity to the town centre, residents are not likely to interact with Dysart town and community.

WAV	Capacity		Location	Description
	Existing beds	Approved beds		
Lake Vermont Accommodation Village (Theiss)	637	637	15-minute walk to centre of Dysart town	Closed camp for existing Lake Vermont employees, servicing the Lake Vermont Mine.
Civeo Dysart Village	1,798	1,932	10-minute walk to centre of Dysart town	Public camp with over 1,700 rooms available and provides catered dinning facilities and fitness and recreation services. WAV residents are able, and encouraged, to interact with Dysart town and community, particularly as the WAV is located a 10-minute walk to the town centre.
Stayover by Ausco	410	410	25-minute walk to centre of Dysart town	Public camp with over 410 rooms available. Provides fitness and BBQ facilities, a retail shop and café, entertainment area, catered dining and a running track. Due to the facilities provided on-site, and its proximity to the town centre, residents are not likely to interact with Dysart town and community.
TOTAL	**3,275**	**3,670**		

Source: Isaac Regional Council provided data, 2019.

5.3.5 Short-term accommodation

There are two short-term accommodation providers in Dysart. They are:

- The Jolly Collier Hotel.
- Country Roads Motor Inn.

The Jolly Collier Hotel was upgraded in 2010 and 2015. The hotel has 51 motel rooms, two bars, free wifi, a gaming room, a bistro and a drive-through bottle shop (CQ Hotels Group, 2019). The facility hosts regular events, including live entertainment, karaoke, and pool competitions, which play a key role in building social capital in Dysart. The Country Roads Motor Inn was built in 2007 and was purposely designed to meet the needs of the rapidly expanding mining industry. It provides conferencing and meeting rooms, and a restaurant.

Guests of these short-term accommodation providers are likely to be people travelling on business. According to Tourism Research Australia's Local Government Area Profile, the Isaac LGA welcomed 468,000 domestic overnight visitors in 2016 (Austrade, 2016). Business travel dominates Isaac's purpose of visit with approximately 56 per cent of the market share. Tourist holds around 23 per cent of the share and visiting friends and relative comprised 17 per cent of the share.

Qualitative information gathered from QGSO's Survey of Accommodation Providers, conducted in June 2020, provides an insight into the impact of the COVID-19 pandemic on the accommodation sector in the Bowen Basin (QGSO, 2020). WAVs reported minimal negative impact from COVID-19, with measures such as changes to rosters and infection control protocols were not reported to have had a significant effect on occupancy levels. Hotels/motels and caravan parks reported being more adversely affected by COVID-19 than was reported by WAVs, through reported lower numbers of customers due to bans on non-essential travel (QGSO, 2020).

5.4 Community values

This section describes the values held as important to residents in Dysart and the broader Isaac region for quality of life and well-being. They include tangible elements such as access to infrastructure and community groups, and intangible qualities such as sense of place and community cohesion. Identification of values were informed by consultation undertaken for the SIA and through qualitative analysis of literature.

5.4.1 Local and regional social capital and community connectedness

Social capital and community connectedness are important parts of rural living and trust plays a crucial role in everyday life for rural people (Altson, 2002). Social capital describes the benefits obtained from the links that bind and connect people within and between groups (OECD, 2001). Typically, rural and remote Australians report increased community connectedness and social cohesion, as well as higher levels of community participation, volunteering and informal support from their communities (Ziersch et al., 2009). A number of surveys and research projects has been undertaken in the Isaac LGA region to elicit insight and understanding of community values and levels of social capital, including from LGA plans and strategies, and from academic-led research projects.

In 2015, Isaac Regional Council developed the 2035 Community Strategic Plan – Isaac's 20-year vision (Isaac 2035 Plan), which was informed by extensive community inputs. The Isaac 2035 Plan provides insights into the shared community values of towns in the Isaac LGA, which include:

- Residents value the community lifestyle as well as town atmosphere.
- A strong and diverse community that support all to live, work and raise families.
- A place that provides a range of services to cater for the diverse needs of the community.
- A commitment to delivering a secure and sustainable future for children, the elderly and vulnerable people.
- People are passionate about conserving and protecting environmental qualities.

The Isaac 2035 Plan also identifies strengths and weaknesses of the region. Strengths include that Isaac LGA is a good place to bring up a young family with some great, family-friendly facilities and the communities are safe with low crime. Weaknesses include the significant economic, political and social challenges related to FIFO workers and limited regional funding priorities directed to the region.

Between March and July 2019, 200 community members from Moranbah, Dysart and surrounds participated in CSIRO's Local Voices Anchor Survey, commissioned by BHP (CSIRO, 2019). Overall, residents expressed that their towns are family oriented, confirming that the towns are a great place to raise a family. Coupled with this, most residents completing the survey felt a strong sense of belonging to their area.

The Survey also identified that local schools, cultural facilities and sports and leisure facilities in the towns were rated positively. However, respondents indicated that shopping for some everyday household items can be difficult, and access to child-care services and some medical services challenging in Moranbah and Dysart.

An indicator of community strength and cohesion is the level of participation in volunteering reflects people's willingness to be involved in their local community and is commonly used as a measure to an area's social capital. Dysart and Isaac LGA generally demonstrated a volunteering rate commensurate to the Queensland average, with approximately one in five residents indicating that they had volunteered for a community group or organisation in the previous 12 months to the 2016 Census (ABS, 2016).

In terms of community identity and amenity, Dysart has a strong identity as a mining town. Although Dysart is predominantly a mining town, residents enjoy a rural lifestyle. Dysart town is strongly bonded by shared employment in mining.

5.4.2 Community perceptions towards mining

There is considerable literature unpacking community perceptions towards mining, particularly in the Bowen Basin. This literature includes peer-reviewed academic research articles which draw on survey and interview findings, and community submissions to the '*FIFO and other long-distance commuting work practices in regional Queensland*' inquiry led by the Infrastructure, Planning and Natural Resources Committee in 2015.

Recently, O'Mullan et al. (2018) conducted a survey of, and interviews with, health and community service providers in Dysart, Moranbah and surrounds. Key findings from Dysart-based research participants included:

- Income inequality has fostered resentment among those not employed in the mining industry, as "*it's hard to live comfortably out here if you're not working for an employer that pays well*" (Dysart participant).
- Shift work and the FIFO roster has decreased community connectedness, such as "*when they changed to 12-hour shifts, our sporting club diminished because parents couldn't be there to coach, train or even take their kids there*" (Dysart participant).
- The transient nature of the mining workforce has disruptive effects on individuals, families and the local communities.

A key theme emanating from interviews with Dysart participants is the breakdown of community connectedness from weakened traditional community values such as "*looking out for your mates*". A number of Dysart research participants referred to the change of shift patterns, particularly to the 12-hour shift pattern, which subsequently impacted workers' ability to participate in community.

While residents in mining communities often express that mining has contributed significantly to the economic development of their town (see for example, Brereton et al. 2008), research exploring perceptions about how mining sites reliant on a non-resident workforce are impacting mining communities revealed the majority of respondents felt mining projects with non-resident workforces had an overall adverse impact on their communities. In 2011, Carrington and Pereira conducted a study into the social impact of mining in Bowen Basin communities, including Dysart, which elicited 559 respondents. Overall, 75 per cent of respondents felt mining developments with non-resident workforces housed in their communities had an adverse impact (Carrington and Pereira, 2011). Specifically, participants in the survey believed this impacted negatively on housing availability and affordability, local infrastructure and services, local employment opportunities, local business and economy, crime and community safety, as well as wellbeing and lifestyle.

Submissions to Queensland's FIFO inquiry also provide insight into community perceptions towards mining in Dysart and surrounds. A submission from the Dysart Community Action Association (2015) highlighted the 'fly-over' effects of mining projects, where it was perceived that Dysart did not receive the economic or social benefits associated with mining as they typically 'fly-out' with the worker. The submission provided the example that as WAVs provided their own stores, there is no need for non-resident workers to spend money at the local supermarket or retail and food stores, with the only local businesses profiting being the service stations when workers leave town at the end of their shift. An individual submission from a Dysart resident suggested that re-employing locals, possibly at a lower rate of pay, instead of FIFO workers would bring the town back to life and ease housing stress.

CSIRO's Local Voices Anchor Survey also elicited resident's views towards trust and acceptance of mining operations in their region. The survey determined that strongest predictors of trust and acceptance was the creation of local jobs by mining companies in Moranbah and Dysart (CSIRO, 2019).

5.5 Health and community wellbeing

Health and community wellbeing is important to communities. This section provides an overview of health and community wellbeing indicators relevant to health determinants, health outcomes, the wellbeing of mining workers and their families, community safety and vulnerable groups. Health indicators are typically available at LGA level and as such, limited data is provided on health indicators for Dysart.

5.5.1 Health determinants

Health determinants are the factors that contribute to an individual's or community's health, including factors that influence how likely an individual is to stay healthy or to become ill or injured (AIHW, 2016). There are three key determinants of health: social determinants, biomedical risk factors and behaviour risk factors. The factors relevant to this SIA include disadvantage, access to health services and social supports, health behaviours and the physical environment.

The Socio-Economic Indices for Areas (SEIFA) Index of Relative Socio-Economic Advantage and Disadvantage summarises information about economic and social conditions, derived from Census variables including income, percentage in skilled occupations, housing expenditure and educational attainment. Scores are compared to the standardised baseline (State) score of 1,000, with a low score indicating relatively greater disadvantage. At the 2016 Census, Dysart recorded a low SEIFA score, at 956, indicating that the town experiences greater disadvantage compared to other towns in Queensland (Table 5-15).

Table 5-15 SEIFA scores, 2011 and 2016

Locality	2011 Score	2016 Score
Dysart (ABS state suburb)	1032	956
Moranbah (ABS state suburb)	1054	1011
Isaac LGA	1028	987
Queensland	1,000	1,000

Source: Socio-Economic Indexes for Australia 2016, Cat. 2033.0.55.001, Australian Bureau of Statistics.

The SEIFA score for Dysart has declined from 2011, consistent with the outmigration of high-income households at the mining downturn prior to 2012. The SEIFA score has also declined for Isaac LGA between the 2011 and 2016 Census. Therefore, the data indicates that Dysart and the broader Isaac LGA region are relatively disadvantaged compared to the Queensland average.

Further insight into disadvantage is provided through data on the proportion of the population who receive welfare payments from Australian Government's Department of Social Services, which is available at LGA level. Payment type include the age pension, carer allowance, disability support pension, JobSeeker payment, single

parent allowance, youth allowance and commonwealth rent assistance. Between March 2017 and March 2021, the number of recipients across all payment types in the Isaac LGA declined or remained unchanged, except for the age pension and the JobSeeker payment (Table 5-16). This is commensurate with the growing proportion of older people in Dysart and the Isaac LGA region. The number of JobSeeker payment recipients within Isaac LGA increased between 2020 and 2021, which can be attributed to the impact of COVID-19 on businesses.

Table 5-16 DSS payment recipients and payment type, Isaac LGA

Payment type	March 2017	March 2018	March 2019	March 2020	March 2021	Change 2017 – 2021 (%)
Age pension	559	565	577	593	615	10.0
Carer Allowance	201	192	212	191	187	-7.0
Disability Support Pension	211	206	206	201	202	-4.3
JobSeeker payment	315	306	272	281	398	26.6
Single parent payment	198	175	178	161	198	0.0
Youth allowance (student, apprentice and other)	69	42	40	44	62	-10.1
Commonwealth rent assistance	n/a	424	379	371	494	n/a

Source: Payment demographic data June 2019, Department of Social Services.

In addition to socio-economic disadvantage, behaviour risk factors are health determinants, such as smoking, risky alcohol consumption, usage of illicit drugs, not getting enough exercise and poor eating patterns can have detrimental effects on health. These are attributes, characteristics or exposures can increase the likelihood of a person developing a disease or health disorder (AIHW, 2019). Table 5-17 outline indicators of behaviour and health risk factors for the Isaac LGA, the Mackay Hospital and Health Service (HHS), which is the Queensland Government governed health district incorporating Isaac LGA, and the North Queensland Primary Health Network, which is governed by the Australian Government and incorporates the Mackay HHS and in addition to three other HHS located to the north of Mackay.

Table 5-17 Health risk factors, 2019

Health determinant indicator	Isaac LGA	Mackay HHS	North Queensland Primary Health Network
Daily smokers (%)	16.1	14.6	13.8
Overweight and obese (%)	69.0	64.4	61.6
Alcohol consumption aged 18+, life time risky drinking (%)	34.4	29.1	27.1
Those who do sufficient physical activity at least five days a week (%)	54.3	58.4	60.7

Source: NQPHN, 2019.

Indicators suggest that overall residents in Isaac LGA are more likely to engage in risky behaviour, including risky alcohol consumption, indicating a greater demand for health and social support services.

Access to health and social support services is an indicator of health and community wellbeing, as challenged access to health services can lead to worse health outcomes. As detailed in Section 5.6.1., Dysart comprise a hospital and medical centre, providing general health and medical services for residents and non-residents of Dysart and surrounds. Dysart residents requiring access to higher order services, such as radiology, typically travel to Mackay. Supporting health services in Dysart is a telehealth hub. A telehealth hub is a central location available for community members, health providers and other service providers to access telehealth technology and to receive services that are not available locally (NQPHN, 2019).

The Isaac 2035 Plan identified that limited health services or professionals in the region is a weakness (IRC, 2015). Challenges in attracting and retaining healthcare workers in the region can impede access to health services. Research conducted by Constantine and Battye (2013) determined that there was a significant health workforce shortage in the Bowen Basin in 2012, which was driven by the significant increase in non-resident population. In particular, there were increasingly more mining-related workplace injuries including fractures,

sprains and stress-related conditions often requiring acute care and then ongoing specific referral and rehabilitation. The identified challenges in attracting and retaining the health workforce in the Bowen Basin were:

- Lack of availability of affordable housing hindering growth of medical, nursing and allied health services.
- Shortage of affordable clinical space for private allied health workers to work.
- Access to childcare for health workers, which contributed to high levels of part time staff.

The research concluded that residents of Dysart and Moranbah generally displayed a good understanding of the health services available to them.

5.5.2 Health outcomes

Typically, rural Australians fare poorly on a number of health outcomes (Alston, 2002). According to the Australian Institute of Health and Welfare, Australians living in rural and remote areas have shorter lives, higher levels of disease and injury and poorer access to and use of health services, compared with people living in metropolitan areas (AIHW, 2019). Poorer health outcomes in rural and remote areas may be due to multiple factors and health determinants including lifestyle differences and a level of disadvantage related to education and employment opportunities, as well as access to health services.

Quantitative data on health outcomes are only available at larger geographical boundaries, and include Isaac LGA, Mackay LGA and Queensland. In the year 2016-17, there were 5,969 hospitalisations in the Isaac LGA (Table 5-18).

Table 5-18 Health outcomes indicators

Indicator	Year	Isaac LGA	Mackay LGA	Queensland
Modelled estimated age standardised rate per 100				
People 18+ with mental or behavioural problems	2011-12	12.5	13.4	14.4
People 18+ with respiratory system diseases	2011-12	25.6	26.7	5.1
Hospital admissions by principal diagnosis, modelled estimates age standardised rate per 100,000				
Number of hospitalisations	2016-17	5,969	51,996	n/a
People admitted to public hospital for mental health related conditions	2012-13	545.1	856.9	796.1
People admitted to public hospital for all cancers	2012-13	587.5	1,224.3	3,207.8
People admitted to all hospitals for respiratory disease	2012-13	1,789.7	1,927.5	1,919
People admitted to all hospitals for circulatory system disease	2012-13	1,732.5	2,796.6	2,445.2
People admitted to all hospitals for injury, poisoning and other external causes	2012-13	3,528.2	3,199.9	2,953.9
People admitted to public hospitals for infectious, parasitic diseases	2012-13	579.7	401.0	553.2
Emergency Department presentations	2012-13	7,236.7	35,162.6	27,440.6

Source: PHIDU, 2019.

Mental health is an important component of health and community wellbeing. While the prevalence of mental health disorders in rural and remote areas in Australia is similar to that in urban areas, suicide rates are reportedly higher (AIHW, 2019). In the Mackay Hospital and Health Service area, 1,703 out of 100,000 persons reported mental and behavioural disorders in 2016. In the same year, the suicide rates (per 100,000 people) in the MHHS area was 17.4, compared to 14.0 for Queensland (NQPHN, 2019). Factors that might contribute to this include geographic and interpersonal isolation, economic pressures, environmental adversities, government policies, stigma and a greater proportion of high-risk groups such as Aboriginal and/or Torres Strait Islander peoples, as well as poor or limited service availability, accessibility, funding, staffing and supervision (AIHW, 2019).

5.5.3 Wellbeing of mining workers and their families

The government inquiries into FIFO practices has spurred the development of research into the health and wellbeing of mining workers and their families.

Recent research conducted by O'Mullan et al (2018) determined that health and community service providers in Dysart and Moranbah perceived shift work, comprising of work schedules that extend beyond a typical 9-to-5 day, as negatively affecting mental, physical, and social well-being, leading to the adoption or worsening of risk-taking behaviours among mining employees and their families. They also identified that the FIFO/DIDO work camp culture as a determinant of risk taking for mining employees, with respondents noting that variables such as boredom, loneliness and peer pressure underpin risk taking for workers in WAVs (O'Mullan et al., 2018). Petkova et al (2009) also assert that non-standard work hours have been linked to a breakdown in meaningful family relationships and a lack of community connectedness. In another study, shift works has also been associated with higher levels of mental health disorders, such as anxiety and depression (Carrillo and Becerra, 2013), potentially contributing to the adoption of unhealthy coping behaviours.

While the prevalence of mental health conditions in FIFO workers is currently unknown, there is a clear recognition that they are likely to be specific aspects of the FIFO role that puts workers, their families and communities at risk for mental health problems (BeyondBlue, 2015). These factors include social isolation, disruptions to normal family life and routines and shift rosters. The demographic profile of FIFO workers also overlaps with the age when men are more likely to experience depression and anxiety, and when the most number of deaths by suicide occur.

Misan and Rudnik (2015) interviewed 104 FIFO workers and partners of FIFO workers on the pros and cons of long-distance commuting. Partners with children commented on feeling like a single parent and expressed some resentment on having to manage all household chores and decisions while the partner was away. Considine et al (2017) surveyed 1,457 mining employees across eight coal mines in Australia. The survey determined that psychological distress levels within the sample was significantly higher in comparison with a community sample of employed Australians. The following factors contributed to significantly to levels of psychological distress: lower social networks, a past history of depression, anxiety and/or drug/alcohol problems; high recent alcohol use; work role and set of work characteristics (level of satisfaction with work, financial factors and job insecurity, perception of lower workplace support for people with menta health problems.

Bowers et al (2018) surveyed 1,124 mining workers at remote construction and open cut and underground mining sites across Australia. The survey concluded that these mining workers had higher rates of psychological distress than the general Australian community. Common stressors included relationship problems with partners, financial stress, shift rosters, and social isolation. The survey also identified that stress associated with the stigma attached to mental health problems was the strongest predictor of high psychological distress. Given that 40 per cent of respondents rated stigma a source of stress, this finding highlights the importance of early interventions and suicide prevention programs based on improving mental health literacy.

5.5.4 Community safety

A strength identified in the Isaac 2035 Plan is safe communities (Isaac Plan, 2019). A review of other literature and outcomes of community and stakeholder engagement also confirm that residents view their community as safe. Modelled estimates determined that around 61.8 per cent of residents aged 18 and over in Isaac LGA indicated that they felt very safe or safe walking alone in their local area after dark in 2014 (PHIDU, 2019). This is higher than the rates recorded for Mackay LGA and Queensland as a whole, with 46.8 per cent and 50.9 per cent respectively. This confirms that perceptions of community safety in Isaac LGA are better than average.

Overall, Isaac LGA generally recorded lower rates of crime compared to Mackay LGA and Queensland as a whole. In Isaac LGA, the total number of offences recorded was 1,350 in 2017/18, including 110 offences against the person, 485 offences against property, and 755 other offences. Isaac LGA recorded an offence rate of 6,482 per 100,000 persons. By comparison, Queensland had a rate of 10,084 per 100,000 persons. The offence rate for Isaac LGA has increased from previous years, with 2015/16 recording an offence rate of 5,264 and 2014/15 a rate of 4,681 per 100,000.

5.5.5 Vulnerable groups

Vulnerability relates to a group's capacity to adapt to, or cope with, changes to their social environment (Cutter et al., 2008). An understanding of the vulnerable groups relevant to the Project is necessary as groups who display greater levels of vulnerability are likely to experience an impact differently. For example, low income households may have less capacity to benefit from the change. Understanding vulnerability and vulnerable groups in local and regional areas facilitates understand of the differential distribution of impacts across stakeholder groups.

There are certain demographic and social characteristics that make some groups more vulnerable than others. Broadly, social indicators associated with vulnerability include:

- Age, such as the very young and the elderly who are more likely to require care.
- Socio-economic status, such as people who are recipient to welfare and/or social housing and/or who are unemployed.
- People with a need for assistance, such as those people requiring assistance in the core activities of self-care, mobility and/or communication because of disability, long-term health condition or old age.
- Culturally and linguistically diverse populations, such as those people who do not speak English as a primary language.

Table 5-19 depict changes to key vulnerable groups in Dysart, with Queensland for comparison.

Table 5-19 Indicators of potentially vulnerable groups in Dysart with Queensland comparison

Indicator	2011	2016	Per cent change 2011 to 2016	
			Dysart UCL	Queensland
Population	3,003	2,443	-18.7	8.6
People aged 14 years or under	789	654	-17.1	4.9
People aged 65 years or older	55	71	29.1	26.2
Youth (15 to 24 years)	394	316	-19.8	4.3
Households earning less than $600/$650 a week	33	66	100.0	-63.3
People who need assistance	29	43	48.3	26.7
People who reside in social housing	22	18	-18.2	-3.1
Internet not accessed from dwelling	78	75	-3.8	-20.1
Unemployed	36	73	102.8	33.3

Source: Source: ABS 2011 and 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0).

Over the five years to the 2016 Census, some vulnerable groups in Dysart increased in size despite the decline in population. The growing vulnerable groups in Dysart include:

- People aged 65 years or older.
- People who need assistance, though likely influenced by the growing number of older people.
- Low income households earning less than $650 per week.
- Unemployed people.

The proportion of older people increased by 29.1 per cent over the five years, indicating a potential increase in demand for services and facilities to cater for this growing population. The AIHW particularly recognise that older Australians who live in rural or remote areas face heightened disadvantage that affect their mental and physical health and their opportunities for social and economic engagement within their communities (AIHW, 2017). The growth in older people has also increased the proportion of Dysart residents requiring assistance with core tasks, such as in relation to self-care, communication and mobility.

The number of low-income households and unemployed people has doubled or more during the five years to the 2016 Census. In particular, low-income households doubled from 33 low-income households to 66 low-income households, despite an overall decline in population in Dysart. The growth of low-income households in Dysart is likely influenced through the outmigration of high-income households from 2012.

5.6 Social infrastructure

Social infrastructure refers to community facilities, services, and networks that help individuals, families, groups and communities meet their social needs, maximise their potential for development and enhance community wellbeing. Deficient social infrastructure can have adverse impacts on a town or region's ability to attract inward migration and to retain a permanent population to contribute to community development and economic growth. Major projects may impact both demand for and supply of social infrastructure and community facilities. A weakness identified in the Isaac 2025 Plan (2019) was ageing infrastructure across the region, particularly in the area of health.

The section describes the key infrastructure, facilities, and community services in Dysart, and their existing capacities to provide services to the community.

5.6.1 Hospital, medical and health services

Public health services in Dysart and the broader Isaac LGA are governed by the Mackay HHS. The geographical catchment of the Mackay HSS spans 90,364 km^2, including the Isaac LGA and the towns of Dysart and Moranbah. Based on the Mackay HSS Annual Report 2016-2017, the HHS was positioned as one of the top performing health services in Queensland (Mackay Health Service, 2017).

District level hospitals are available in Dysart and Moranbah. Dysart Hospital, which is located in the centre of town provides nine beds, a 24-hour emergency department, general medical services, palliative and respite care, and telehealth services. Supporting Dysart Hospital is a number of visiting clinics and services, including children's health, mental health, physiotherapy, radiology, speech pathology and antenatal/postnatal services. Community health services include aged care, community nursing, immunisation, and newborn and new mother's support groups. As of May 2019, Dysart Hospital employed 14 nurses. Many speciality services are not available in the Isaac LGA, prompting residents to seek higher-order health services in Mackay or in other regional cities. The Mackay Base Hospital, located approximately 241 km from Dysart via the Fitzroy Development Road and the Peak Downs Highway, is the referral hospital for the region.

In addition to Dysart Hospital, there is a medical centre in Dysart, with Dysart Medical Centre having received $750,000 from Queensland Government's *Royalties for the Regions* program in 2013 to upgrade and expand the medical centre. At time of SIA preparation, there was only one General Practitioner (GP) based in Dysart.

5.6.2 Emergency services

The Mackay Local Ambulance Service Network covers the Isaac LGA region, including the towns of Dysart and Moranbah. Dysart Ambulance Station is staffed by one full-time paramedic who is supported by volunteers, who assist paramedics with tasks such as driving the vehicle.

Dysart Police Station is located in the centre of town and as at October 2019, is open Monday to Thursday from 9am to 4pm. In addition to typical policing duties, the police station provides other government services including licensing on behalf of Queensland Transport including facilitating practical driving tests, criminal history check inquiries and weapons licencing.

The Dysart Fire Station is an auxiliary station, which is not crewed full-time and is typically run by volunteers.

5.6.3 Schools, education and training facilities

Dysart comprise of two schools, a day care centre and a kindergarten (Table 5-20).

Table 5-20 Schools, education and training facilities

Facility	Description
Dysart State High School	• Established in 1982 • 2011: 165 enrolled students, supported by 20 staff • 2020: 172 enrolled students, supported by 18 staff
Dysart State School	• Established in 1973 • 2012: 356 enrolled students, supported by 27 staff • 2020: 329 enrolled students, supported by 21 staff
Lady Gowries Day Care Centre	• Opens Monday to Friday, 7am to 5:45pm • 39 children aged 6 weeks to pre-school age • Established in 1994 • 39 approved places per day
Dysart Kindergarten (C&K)	• 3.5 to 4.5 year old • Two groups, with 22 children in each group • Operating 9am to 6pm • 50 approved places in facility
Playgroup Queensland (two groups)	• One playgroup meets on Wednesday mornings at Dysart state school • 0 to 5 years

Source: myschool.edu.au, Australian Curriculum, Assessment and Reporting Authority

Dysart State School established in 1973 while Dysart State High School established in 1982. In line with high rate of population mobility in Dysart, student enrolments for both schools fluctuate. At 2020, there were 172 students enrolled at Dysart State High School supported by 18 staff and 329 students at Dysart State School supported

by 21 staff. Enrolment numbers has decreased slightly from 2012, where 165 students were enrolled at Dysart State High School and 356 students enrolled at Dysart State School (Figure 5-7).

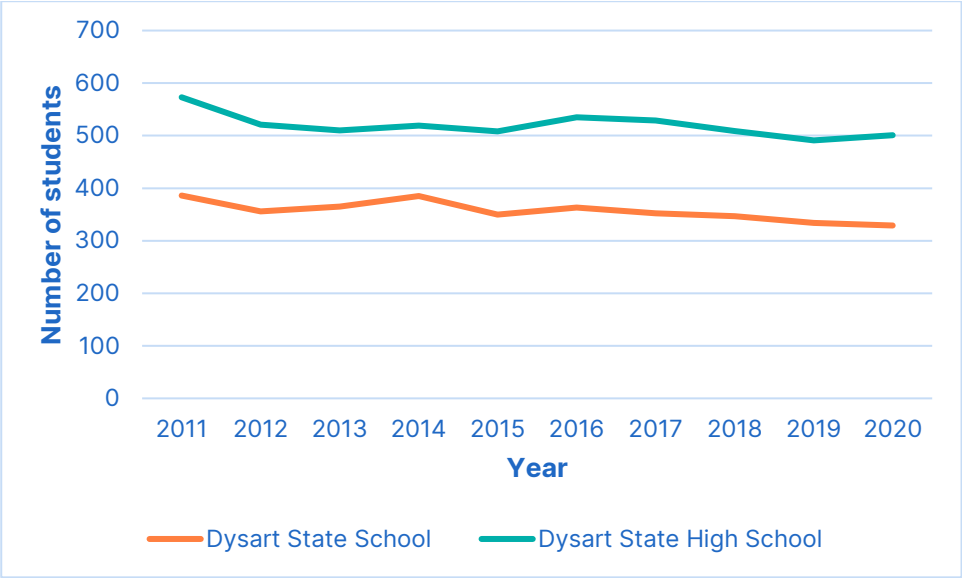

Figure 5-7 Number of students enrolled at Dysart Schools, 2011 to 2020

Source: myschool.edu.au

Lady Gowries Day Care Centre has capacity for 39 children aged from 6 weeks to pre-school age, while Dysart Kindergarten has capacity for 50 children aged from 3.5 to 4.5 years old.

5.6.4 Social services and community and recreation facilities

There are a range of social services and community facilities available in Dysart, ranging from support for the elderly to churches. The Isaac 2035 Community Strategic Plan (2015) recognised sports and recreation facilities and opportunities in the region as a strength. Table 5-21 outline the social services, community and recreation facilities available in Dysart.

Table 5-21 Social services and community facilities in Dysart

Facility / centre	Description
Community support services	
Dysart Community Support Group Inc	Provide events and activities that bring local residents, groups and other organisations together with a purpose to promote community connectedness amongst individuals, families and groups. A specialist homelessness service that provides crisis/short-term supported accommodation and associated support service for homeless, with a target group of women and children escaping family and domestic violence. The not-for-profit organisation employs one person on a full time basis and two persons on a part time basis, and supported by around 25 volunteers (Australian Charities and Not-for-Profits Commission, 2019).
Hinterland Community Care (HCC)	A non-government, not for profit, community-based organisation funded by the Queensland Government. Provides in-home and community linking services to the frail, aged and people living with a disability. HCC provides services in Dysart, Moranbah, Nebo, Glenden, Coppabella, Middlemount, Tieri, Clermont and surrounding districts.
Religious facilities	
St Therese Catholic Church	The Church is part of the Western Deanery within the Diocese of Rockhampton. Mass is held every fourth Sunday of the month at 10am. The Church also has a thrift shop, open on Tuesday and Thursday mornings.
Recreation facilities	

Facility / centre	Description
Dysart Civic Centre	The Civic Centre is managed by IRC and comprises a theatre with capacity for 560 people and a cabaret theatre with capacity for 300 people. Supporting facilities include a kitchen, bar facilities, tables and chairs, and audio-visual services. The venue is available for hire.
Dysart Recreation Centre	The recreation centre is managed by IRC. The Centre host a number of programs, including school holiday sports program, after school sport program, an adult fitness program and a toddler program.
Dysart Golf Course and Club	Dysart Golf Course and Club was established through investment from BMA.
Dysart Public Swimming Pool	The public swimming pool was established soon after the Dysart township was built. At time of SIA preparation, the pool is undergoing major refurbishment costing $2 million, with an anticipated completion date in November 2019. IRC manages and maintains the swimming pool.
Parks	A number of parks are located in Dysart township. Key parks include the Leichardt Recreation Park, which includes a skate park and children's play equipment. Parks are maintained by Isaac Regional Council.

Source: Google Maps.

5.6.5 Regional infrastructure and services – secondary study area

Moranbah is the key regional service centre in the Isaac LGA and is the base for Isaac Regional Council. Due to its strategic importance and size, Moranbah comprise a number of significant social infrastructure and services. Residents of Dysart may travel to Moranbah to access specific social infrastructure and services, such as medical centres, recreation clubs and the library. Table 5-22 summarises the key social infrastructure and community services available in Moranbah.

Table 5-22 Social infrastructure in Moranbah

Facility type	Facility
Early childhood education and care services	• 1 kindergarten • 2 long day care • 2 school aged care
Schools	• Moranbah East State School • Moranbah State High School • Moranbah State School
Health and emergency services	• Moranbah Hospital • Oaktree Family Medical Centre • Sonic HealthPlus Medical Centre • Moranbah Community Health Centre • Moranbah Police Station • Moranbah Ambulance Station • Moranbah Fire and Rescue Service • Moranbah Court House
Community and family support	• Moranbah Community Centre • Moranbah Youth and Community Centre
Sport and recreation	• Greg Cruikshank Aquatic Centre • Darryl Bourke Oval, Will Kiehle Oval, Ted Rolfe Oval and Eastern Sporting Field • Moranbah Speedway and Association • BMX Track and Club • Moranbah Pony Club and Rodeo Grounds • Moranbah Golf Club

Facility type	Facility
	• Moranbah Miners' League Club • Moranbah Tennis Courts • Moranbah Bowls Club • Moranbah Rifle Range and Pistol Club • Clubs and organisations including football, hockey, netball, Basketball, Volleyball, Cricket, Gymnastics, Boxing Club, Karate, Fishing, Darts, Motorcycle Riders, Race Club
Arts, culture and amenity	• Moranbah Library • Coalface Art Gallery • Moranbah Arts Council • Moranbah Civic Centre
Religious	• Moranbah Anglican Church • Moranbah Christian Fellowship • St Joseph the Worker Catholic Church • Oasis Life Church

5.7 Labour force

Labour supply and demand in Dysart and the broader Isaac LGA is characterised by its reliance on the mining industry. This section provides an overview of the labour market across the study areas. It includes detail on labour supply and demand, unemployment trends, and key industries and occupations of employment. The labour force profile informs the assessment of the likely availability of workers with skills relevant to the Project, including the construction and mining industries.

5.7.1 Labour force characteristics

Overall, Dysart recorded comparable labour force characteristics to those recorded in Queensland as a whole at the 2016 Census. Around 61.1 per cent of Dysart's resident population aged 15 years or older participated in the labour force, compared with 67.1 per cent for Isaac LGA and 61.0 per cent for Queensland (Table 5-23). Dysart's labour force also reported similar labour force participation rates for males and females as to Queensland. However, Dysart recorded a lower level of youth who participated in the labour force, with 48.1 per cent of people aged 15 to 24 years participating in the labour force at the 2016 Census, compared to 63.6 per cent and 64.4 per cent for Isaac LGA and Queensland respectively.

Table 5-23 Labour force characteristics, 2016

Labour force indicator (%)	Dysart UCL		Isaac LGA		Queensland	
	2011	2016	2011	2016	2011	2016
Labour force participation rate	73.8	61.1	73.0	67.1	62.8	61.0
Female	65.3	57.2	65.4	61.4	58.0	57.2
Male	80.3	64.1	78.8	71.6	67.8	65.0
Aboriginal and/or Torres Strait Islander	*n/a*	*n/a*	77.0	74.7	54.8	54.7
Youth (15 to 24 years)	66.5	48.1	73.5	63.6	65.6	64.4
Unemployment rate	2.2	6.7	2.0	4.9	6.1	7.6
Female	3.4	9.8	3.3	6.8	6.1	7.4
Male	1.5	3.6	1.1	3.7	6.1	7.8
Aboriginal and/or Torres Strait Islander	-	-	2.3	6.2	18.0	20.1

Labour force indicator (%)	Dysart UCL		Isaac LGA		Queensland	
	2011	2016	2011	2016	2011	2016
Youth (15 to 24 years)	4.6	13.8	3.9	9.7	12.7	15.8

Source: 2016 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

At the 2016 Census, Dysart and Isaac LGA recorded lower rates of unemployment compared to Queensland. The female population of Dysart recorded an unemployment rate almost three times the rate recorded for males.

Aboriginal and/or Torres Strait Islander peoples were also an under-represented group in Dysart's labour force. At the 2016 Census, there were 109 Aboriginal and/or Torres Strait Islander peoples who resided in Dysart, of which eight were unemployed. This equates to an unemployment rate of 18.2 per cent within this group, which is similar to the unemployment rate recorded for Queensland as a whole at 20.1 per cent. Through targeting employment opportunities for Aboriginal and/or Torres Strait Islander people in Dysart, the Project has the potential to benefit this group, indirectly enhancing their socio-economic wellbeing.

The baseline analysis and outcomes of consultation also identified young people of Dysart (aged 15 to 24 years) as an under-represented group in the labour force. The unemployment rate of Dysart youth was 13.8 per cent in 2016, higher than that recorded for Isaac LGA as a whole at 9.7 per cent. Further, engagement with stakeholders for the SIA determined that many youth in Dysart migrate out of the region in search for employment and education opportunities. Apprenticeships and traineeships are vital to ensuring local young people have opportunities to enter the mining workforce and subsequently remain in local towns. The higher rates of unemployment among females, Aboriginal and/or Torres Strait Islanders and youth in Dysart indicate there are opportunities to target employment to these groups.

Data obtained from the Small Area Labour Markets provides a more accurate estimate of unemployment rates. Quarterly data on unemployment rates is not available at the Dysart UCL level. Such data is available at the ABS Statistical Area Level 2 (SA2), and the relevant SA2 comprising Dysart UCL is Broadsound-Nebo SA2. Unemployment rates for Broadsound-Nebo SA2 and Isaac LGA were almost identical from December 2010 to September 2021 and was mostly under two per cent (Figure 5-8).

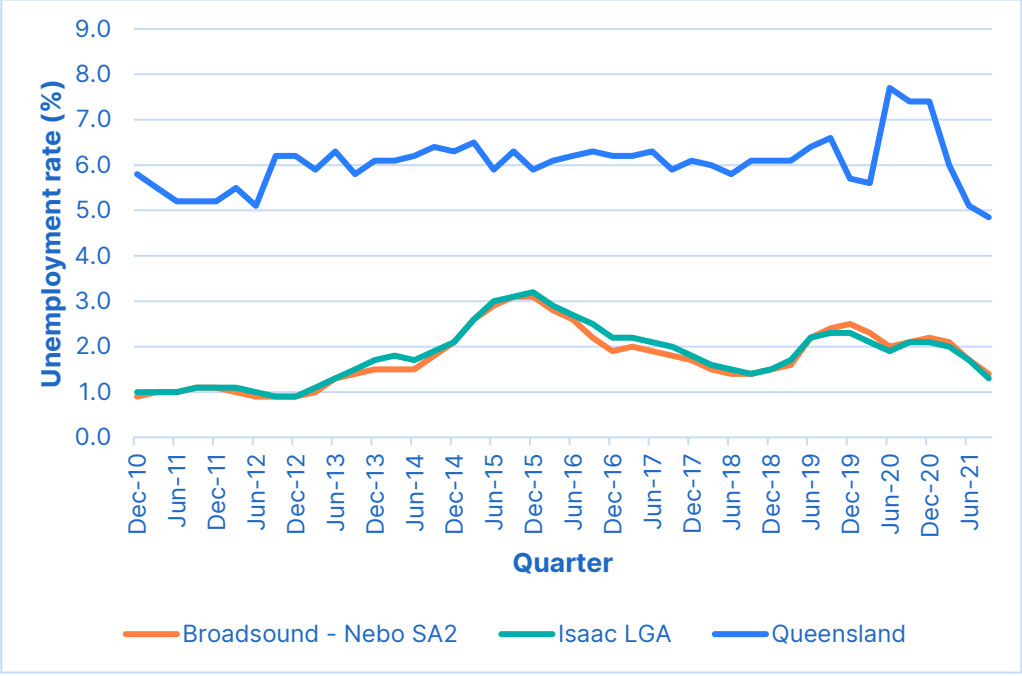

Figure 5-8 Unemployment rate, December 2010 to September 2021
Source: Small Area Labour Markets, Department of Employment, Skills and Small Family Business – September quarter 2021.

Over the eight-year period from 2011, unemployment rates for both Broadsound-Nebo SA2 and Isaac LGA peaked in March 2016, at 2.8 per cent and 2.9 per cent respectively. At September 2021, the estimated unemployment rate for Broadsound-Nebo SA2 was 1.4 per cent (69 unemployed persons) and 1.3 per cent (166 unemployed persons) for Isaac LGA, considerably lower than the unemployment rate for Queensland as a whole at 4.9 per cent. Despite the COVID-19 pandemic beginning in March 2020 and subsequently impacting on the Australian labour market, unemployment rates continue to decline in Broadsound-Nebo SA2 and Isaac LGA. Low

rates of unemployment may reflect the ability of skilled workers obtaining employment elsewhere, such as other nearby mining projects.

Mining has been the dominant industry of employment in Dysart since the town's establishment in the 1970s and in the Isaac LGA more broadly. At the 2016 Census, almost half (48.5 per cent) of employed residents in Dysart worked in the mining industry. This is reflective of Dysart's history and identity as a purposely built mining town, in addition to the growing number of mining projects within reasonable driving distance (see Appendix A). The top three industries of employment in Dysart at the 2016 Census were:

- Mining (496 people, 48.5 per cent).
- Education and Training (75 people, 7.3 per cent).
- Accommodation and Food Services (69 people, 6.8 per cent).

Those employed in the Education and Training, and Accommodation and Food Services industries may be in roles that support the mining industry, such as in WAVs. The dominance of the mining industry in the labour force indicates that Dysart's economy lacks employment diversification, which contributes to the town's vulnerability to fluctuation of external demand for minerals and subsequent supply and demand of labour (Marais et al., 2018). Dominant occupation groups of employed Dysart residents typically reflect occupations associated with the mining industry. The top three occupations in Dysart at the 2016 Census were:

- Machinery Operators and Drivers (318 people, 30.9 per cent).
- Technicians and Trades Workers (229 people, 22.3 per cent).
- Labourers (122 people, 11.9 per cent).

At February 2022, there were five jobs advertised locally with the role based in Dysart within the previous month, including an au pair, a housekeeper, a secondary teacher at Dysart State High School, a site administrator and a motor mechanic (CQ Joblink, 2022). Jobs in the mining industry are not typically advertised via the regional job board, CQ JobLink, and are typically advertised via common channels such as Seek.com.au.

Mining is also the dominant industry of employment in the Isaac LGA. The top three industries of employment in Isaac LGA were:

- Mining (3,757 people, 37.7 per cent)
- Agriculture, Forestry and Fishing (1,041 people, 10.4 per cent).
- Education and Training (657 people, 6.6 per cent).

Like Dysart, dominant occupations typically reflect those associated with the mining industry, with the top occupations of employment in Isaac LGA being machinery operators and drivers, technicians and trades workers, and managers.

5.7.2 Construction and mining employment profile

As per object of the SSRC Act, large resource projects must benefit residents of nearby regional communities. A way to deliver benefits to these residents of nearby regional communities is to facilitate their employment participation in the construction and operation of large resource projects. This section focuses on construction and mining employment trends in the key areas of Dysart and the Isaac and Mackay LGAs.

Dysart

The number of Dysart residents employed in the construction and mining industries has significantly declined over the five-year period to 2016. The number of residents employed in the mining industry declined from 813 mining workers in 2011 to 496 mining workers in 2016 (Table 5-24).

Table 5-24 Changes in employment numbers for Dysart residents by industry, 2011 and 2016

Industry	2011	2016	Change 2011-2016	Change 2011-2016 (%)
Mining	813	496	-317	-39.0
Construction	61	31	-30	-49.2
Total (all industries)	1,602	1,022	-580	-36.2

Source: 2016 and 2011 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

This is likely reflective of the loss of jobs associated with the closure of the Norwich Park Coal Mine, in addition to a general downturn of mining activity in the region from 2012. The loss of mining jobs is strongly likely to have contributed to the population decline of Dysart. Of the residents employed in the mining industry in 2016, around:

- 52.2 per cent were Machinery Operators and Drivers.
- 25.8 per cent were Technicians and Trades Workers.
- 8.3 per cent were Professionals.
- 6.5 per cent were Clerical and Administrative Workers.
- 3.8 per cent were Labourers.

At the 2016 Census, Dysart residents employed in the construction industry only comprised 3.0 per cent of total jobs. Like the mining industry, the number of residents employed in the construction industry declined from 2011 to 2016, at a rate of 49.2 per cent. This is less than the loss of construction jobs recorded for Isaac LGA during the same time period, which saw the number of Isaac LGA residents employed in the construction sector decline by more than half, from 760 construction workers in 2011 to 346 construction workers in 2016. The small number of residents in Dysart employed in the construction sector indicate that Dysart is likely to have constrained capacity to provide construction workers.

At the 2016 Census, there were seven women employed in the construction industry, comprising 22.6 per cent of construction jobs in Dysart (ABS, 2016). At the same time, there were 90 women employed in the mining industry, comprising 18.1 per cent of mining jobs in Dysart. These participation rates are lower than the overall participation of women in Dysart's labour force, at 38.5 per cent, indicating that women are underrepresented in construction and mining employment in Dysart.

Isaac LGA and Mackay LGA

A construction and mining employment profile is provided for both the Isaac and Mackay LGAs. Mackay LGA, with a population of around 114,969 people at the 2016 Census, is considered a key source of DIDO workers for mining projects in the northern Bowen Basin. As at March 2019, there were 75,008 people participating in the labour force across both the Isaac and Mackay LGAs, with a combined unemployment rate of 3.9 per cent (Australian Department of Employment, Skills, Small and Family Business, 2019).

At the 2016 Census, there were 6,380 people employed in the mining industry and 4,334 people employed in the construction industry who resided in the Isaac and Mackay LGAs (Table 5-25). Isaac LGA experienced a decline in both the construction and mining industries. The mining industry between the 2011 and 2016 Census in Isaac LGA reportedly experienced a loss of over 1,000 employed mine workers, while the construction industry experienced a loss of 141 employed construction workers, which represented over half of employed construction workers at the 2011 Census.

Table 5-25 Changes in employment numbers for Isaac LGA and Mackay LGA residents by industry, 2011 and 2016

Industry	Isaac LGA				Mackay LGA			
	2011	2016	Change 2011-2016	Change 2011-2016 (%)	2011	2016	Change 2011-2016	Change 2011-2016 (%)
Mining	4,764	3,757	-1,007	-21.1	2,084	2,623	+539	25.9
Construction	760	346	-141	-54.5	5,372	3,988	-1,384	-33.2
Total (all industries)	12,068	9,972	-2,096	-17.4	50,976	47,975	-3,001	-5.9

Source: 2016 and 2011 Census of Population and Housing, General Community Profiles (Cat. No. 2001.0), Australian Bureau of Statistics.

On the other hand, the number of employed mining workers has increased in Mackay LGA between 2011 and 2016, by 539 workers, or 25.9 per cent. This may be due to mining workers migrating out of Isaac LGA and into Mackay LGA while still retaining their mining job or accepting a DIDO position with another project. The construction industry in Mackay LGA experienced a significant decline in the number of employed construction workers between 2011 and 2016, with a loss of 1,384 construction workers, or 33.2 per cent.

A key driver of the SSRC Act is to maximise employment opportunities locally where feasible. Employment capacity is a simple way of looking at whether Isaac LGA could theoretically provide jobs for all its residents if they were to choose to work locally. Employment capacity is simply the number of local jobs in an industry, divided by the number of local residents employment (anywhere) in that industry. Under 1.0 means there are more residents employed than jobs available in that sector. This is a theoretical exercise as, even if there are enough jobs provided locally, there will always be some people who choose to commute out of the area.

At the 2016 Census, there were more jobs recorded in Isaac LGA than employed residents. In particular, there were three times more jobs in the mining industry than residents employed in the industry (Table 5-26). This has

increased from the 2011 Census, where the ratio of mining jobs to residents employed in the industry was 2.3. There were also more construction jobs in the region than residents employed in construction, though at a smaller ratio than that recorded for the mining industry. There were 665 people working in the construction industry within Isaac LGA, while there were only 346 Isaac LGA residents who worked in the construction industry.

Table 5-26 Jobs to workers ratio in mining and construction industries in Isaac LGA, 2011 and 2016

Industry	2011			2016		
	Jobs in Isaac LGA	Employed residents	Ratio of jobs to residents	Jobs in Isaac LGA	Employed residents	Ratio of jobs to residents
Mining	10,778	4,764	2.3	11,917	3,757	3.2
Construction	1,785	760	2.3	665	346	1.9

Source: 2016 Census of Population and Housing, Working Population Profile (Cat. No. 2006.0), Australian Bureau of Statistics.

Isaac LGA is the top place of usual residence for construction workers who work in Isaac LGA. The other top places of usual residences include Mackay LGA, Moreton Bay LGA and Whitsunday LGA.

In the mining industry, there were more people who worked in mining in the Isaac LGA and resided elsewhere. The top place of residence for people who work in the mining industry in Isaac LGA was Mackay LGA, with 3,956 mining workers, or 30.2 per cent of Isaac LGA's mining workforce. The top places of usual residence for mining workers who work in Isaac LGA are:

- Mackay LGA, with 3,956 mining workers.
- Isaac LGA, with 3,232 mining workers.
- Central Highlands LGA, with 689 mining workers.
- Sunshine Coast LGA, with 557 mining workers.
- Whitsunday LGA, with 553 workers.

The above indicates that a high proportion of people employed in the mining industry within Isaac LGA permanently reside in Mackay LGA and DIDO to and from their shift.

5.7.3 Construction and mining skills shortages and employment projections

Based on the skills required to fulfil the Project's workforce requirements, a review of available literature and government and industry reports has been carried out to determine potential skills shortages for the Project.

Construction industry

In 2018, the Australian Department of Jobs and Small Business published survey findings on employment in the construction sector in Queensland (Department of Jobs and Small Business, 2019). It concluded that:

- Construction employers had more difficult recruiting for construction trades in 2018 compared with the previous year.
- Overall the proportion of vacancies filled fell from 66 per cent in 2017 to 49 per cent in 2018.
- Construction employers in regional areas of Queensland had greater difficulty recruiting for construction trades compared with employers in Brisbane. Regional employers filled 39 per cent of their vacancies while metropolitan employers filled 62 per cent.

Furthermore, the Australian Industry Group Construction Outlook Survey found that that with workforce demand expected to continue at high levels in line with elevated major project activity, construction labour sourcing difficulties are expected to remain widespread (AiGroup, 2018). However, data provided by the Labour Market Information Portal indicate that construction employment is projected to remain stagnant in the Mackay-Isaac-Whitsunday region in the five years to May 2024, with a predicted growth of 0.4 per cent (Labour Market Information Portal, 2019). Across Australia, there is strong projected growth in the non-residential construction and the heavy and civil engineering construction sectors (Labour Market Information Portal, 2019).

Mining industry

In the five years to 2018, the mining industry in Queensland reportedly experienced a significant decline in available mining jobs. The National Occupational Cluster Reports from the Department of Jobs and Small Business concluded that:

- Employers recruited for mining engineers with relative ease and this occupation was not in shortage in 2017-18. Overall, 77 per cent of vacancies were filled and there were large fields of applicants.

- Labour market conditions in the mining industry have strengthened over the last year, reflecting strong commodity prices.

However, recent research indicates that demand for skilled mining workers is increasing in Queensland, with a report by the Australian Resources and Energy Group (AMMA, 2019) predicting that there will be an extra 5,714 mining jobs in Queensland by 2024.

More recent data provided by the Labour Market Information Portal indicate that mining employment is projected to grow by 19.9 per cent (an additional 3,400 jobs) in the Mackay-Isaac-Whitsunday region in the five years to May 2024 (Labour Market Information Portal, 2019). At May 2019, there were an estimated 17,300 mining jobs located within the Mackay-Isaac-Whitsunday region. A deficit in mining engineering graduate numbers across Australia is likely to exacerbate the shortage of skilled mining labour (Knights, 2020).

5.8 Business and industry

The mining sector is the key industry in the Isaac LGA. The total output generated by the Isaac economy is estimated at $22.5.641 billion, with mining accounting for around 86.6 per cent of Isaac LGA's output (REMPLAN, 2022).

5.8.1 Local business and industry

Dysart has few secondary industries outside the mining sector. The Dysart Garden Plaza host many of the town's retail businesses, including:

- Bakery.
- IGA.
- Newsagency and post office.
- Hairdresser.
- Dysart Bowls Club.

Stakeholders have expressed that businesses in Dysart suffered during the downturn of the mining industry from 2012, with businesses closing such as the ANZ bank, the butcher and clothing stores. This was noted to also be exacerbated by the presence of the WAVs, which typically provide an on-site general store. Further, community groups have stated that the normalisation of the FIFO workforce and WAVs has negatively impacted local businesses in Dysart, with the only locally businesses that profit are the service stations as workers by fuel as they are leaving town.

A major concern raised by all stakeholders was the state of the Dysart Shopping Centre. The Dysart Shopping Centre was once viewed as the heart of Dysart. However, high rents and subsequent high turnover of tenants has resulted in much of the shopping centre now being empty. Dysart residents typically travel to Middlemount for their shopping, which is approximately a 45-minute drive from Dysart.

5.8.2 Regional business and industry

Business counts are based on snapshots of actively trading businesses from the ABS Business register. There were 11,775 businesses registered in the Isaac and Mackay LGAs at June 2021, of which 57.1 per cent were non-employing businesses, such as sole traders (Table 5-27). There were no businesses registered in the Isaac LGA that employed more than 200 people.

Table 5-27 Business counts of all industries, total, by employee size, Isaac LGA and Mackay LGA

Employee size of business	Isaac LGA				Mackay LGA			
	June 2017	June 2019	June 2021	Change in number of businesses, 2017 to 2021 (%)	June 2017	June 2019	June 2021	Change in number of businesses, 2017 to 2021 (%)
Non employing business	1,014	1,071	1,150	13.4	5,889	5,582	5,569	-5.4
1-19	582	647	664	14.1	3,581	3,690	4,035	12.7
20-199	32	28	42	31.3	262	291	297	13.4

Employee size of business	Isaac LGA				Mackay LGA			
	June 2017	June 2019	June 2021	Change in number of businesses, 2017 to 2021 (%)	June 2017	June 2019	June 2021	Change in number of businesses, 2017 to 2021 (%)
200+	0	0	0	0.0	9	9	11	22.2
Total	1,628	1,743	1,861	14.3	9,741	9,569	9,914	1.8

Source: ABS Counts of Australia Businesses, including Entries and Exits, Cat. No. 8165.0.

Of the registered businesses in Isaac LGA, 195 businesses, or 10.5 per cent, were based in the construction industry. More than half of the construction businesses (53.3 per cent) were non-employing businesses (Figure 5-9).

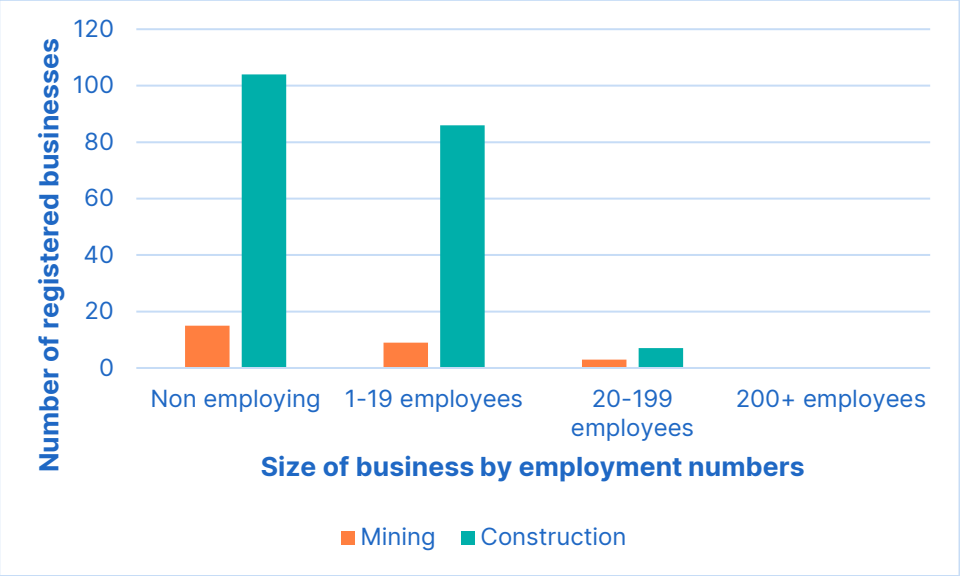

Figure 5-9 Construction and mining businesses in Isaac LGA, June 2021
Source: ABS Counts of Australia Businesses, including Entries and Exits, Cat. No. 8165.0.

Additionally, there were 27 businesses in the Isaac LGA registered in the mining industry, comprising of 1.5 per cent of total businesses. The majority of the mining businesses in Isaac LGA were non-employing, likely to be sole traders. Only three mining businesses employed between 20 to 199 people. A higher number of mining and construction businesses are located in Mackay LGA. At June 2021, Mackay LGA comprised of 104 mining businesses and 1,524 construction businesses.

5.8.3 Aboriginal and/or Torres Strait Islander businesses

The Queensland Aboriginal and Torres Strait Islander Business Directory, Black Business Finder, indicate there are eight businesses registered in Isaac LGA that are owned by Aboriginal and/or Torres Strait Islander peoples (Black Business Finder, 2019). Of these businesses, two are located in Moranbah, including a uniform and safety equipment provider and a management consultancy service for the resources sector. Other businesses are located in Clermont, Nebo and Capella. There are 18 businesses registered in Mackay LGA that are owned by Aboriginal and/or Torres Strait Islander peoples.

5.9 Transport and connectivity

Transport and connectivity are important elements for remote communities, especially for those communities located in the Bowen Basin. Dysart is located at the junction of:

- Saraji Road to the north, connecting Dysart to the Peak Downs Highway and access to Moranbah.
- Dysart Clermont Road to the west, connecting Dysart to Gregory Highway and Clermont.
- Dysart Middlemount Road to the south, connecting Dysart to Middlemount and Tieri.
- Golden Mile Road to the east, connecting Dysart to the Fitzroy Developmental Road.

SIA engagement and fieldwork observation indicate that many Dysart residents and non-resident workers utilise Saraji Road to access good and services in Moranbah, in addition to accessing Moranbah Airport. Saraji Road was upgraded in 2018 through Australian Government's commitment to improve roads across the Isaac LGA, in recognition of Saraji Road as one of the region's key freight corridors. Isaac LGA has been allocated a further $7 million from 2019 to 2024 from Australian Government's Road to Recovery Program to upgrade the existing road infrastructure.

The Peak Downs Highway is also a key road transport route in the Isaac LGA, running for a total of 266 km and links the towns of Mackay and Clermont. The Peak Downs Highway is a critical link to the towns of Nebo, Moranbah and Clermont and is the primary access route for workers, fuel, machinery and other supplies to the Bowen Basin (IRC, 2019a). It is estimated that 21,462 people work in Isaac LGA, of which around 40 per cent of the workers reside in Isaac LGA while 25.7 per cent of workers recorded their usual place of residence in Mackay LGA (ABS, 2016). This indicates that many workers may travel back to Mackay after their shift, with the main road being Peak Downs Highway.

Recent research conducted by Akbar et al. (2018) identified levels of satisfaction regarding road travel experience in the Bowen Basin. A key issue emanating from their survey was that of road quality, with participants citing problems with potholes, narrow shoulders, inadequate signing, inadequacy in the number of passing lanes and the delay that road work activity caused to travel time. Between 2018 and 2019, there were four fatal crashes in the Isaac LGA, resulting in five fatalities. One crash involved heavy rigid truck involvement while another involved an articulated truck (BITRE, 2019). All four fatal crashes occurred on weekends. Since 2010, there has been nine road crashes on Saraji Road between Dysart and Moranbah, of which three required hospitalisation and the remainder required medical treatment (DTMR, 2019).

Due to the remote location and small size of Dysart township, there is no public transport available, including school bus routes. The small size of Dysart typically indicates that school students are likely to walk to and from school. However, engagement with key stakeholders in Dysart indicated that the lack of public transport or a taxi service generates challenges for the vulnerable residents, such as the elderly, to access services in town such as the medical centre. A Greyhound bus operates between Middlemount and Moranbah with a stop in Dysart on a fortnightly basis, which enables residents without private transport to access services and retal in Moranbah or Middlemount.

The nearest commercial airport to the Project is Moranbah Airport, located approximately a 51 minute, or 77 km, drive from Dysart. The Airport is serviced by QantasLink with regular flights to Brisbane. In 2017, the airport recorded a total of 115,373 passengers ranking it as the 44th busiest regional airport in Australia. IRC has approved plans for the airport to expand and increase the long-term capacity to cater for almost half a million passenger movements per year (IRC Tourism Plan, 2019). Mackay and Emerald also have commercial airports.

5.10 Summary existing social environment

As the SIA is to include a detailed assessment of the key SIA matters in accordance with the SIA Guideline, Table 5-28 provides a summary of the existing social environment across the key SIA matters of:

- Workforce management.
- Housing and accommodation.
- Local business and industry procurement.
- Health and community wellbeing.

The summary existing social environment informed the impact assessment as follows in the next section.

Table 5-28 Summary of existing social environment

Summary of existing social environment
Workforce Management
• Very low rates of unemployment, with recent estimates at September quarter 2020 indicating an unemployment rate of 1.4 per cent, or 69 unemployed residents, in Dysart, compared to Queensland as a whole with an unemployment rate of 4.9 per cent. The Isaac LGA region recorded an estimated unemployment rate of 1.3 per cent, or 166 unemployed persons. Despite the advent of the COVID-19 pandemic from March 2020, unemployment rates in Dysart and the Isaac LGA region continue to decline. Low rates of unemployment may reflect the ability of skilled workers obtaining employment elsewhere, such as other nearby mining projects. • The identified underrepresented groups in Dysart's labour force include women, Aboriginal and/or Torres Strait Islander peoples and youth (aged 15 to 24 years), with the number of unemployed persons across these groups increasing. Youth unemployment was identified by stakeholders as a key issue in Dysart, with 13.8 per cent of Dysart's youth unemployed and looking for work at the 2016 Census.

Summary of existing social environment

- Mining has been the dominant industry of employment in Dysart since the town's establishment in the 1970s. At the 2016 Census, almost half (48.5 per cent) of employed Dysart residents worked in the mining industry. However, the number of Dysart residents employed in the mining industry significantly declined over the five-year period to 2016, with a loss of 317 resident mining workers between 2011 and 2016. This is likely reflective of the loss of jobs associated with the general downturn of mining activities in the Bowen Basin region and subsequent outmigration of residents from 2012, including the decommissioning of the Norwich Park Mine near Dysart. Despite the high proportion of Dysart residents who are employed in the mining industry, these workers are typically skilled in surface mining. As such, there are limited skills in underground mining available in Dysart.
- At the 2016 Census, there were more people who worked in the mining industry in the Isaac LGA region yet resided outside of the region. The top place of residence for people who work in the mining industry in Isaac LGA region was Mackay LGA, with 3,956 mining workers, or 30.2 per cent of Isaac LGA's mining workforce. Mining employment is projected to grow by 14.2 per cent in the Mackay-Isaac-Whitsunday region by May 2023.
- There is an anticipated high cumulative demand for construction and operational workers over the next ten years, with seven major mining projects proposed in the Isaac LGA region to commence construction and operation. These seven projects are expected to require up to 4,280 construction workers and 3,866 mining workers, far outstripping the available labour in Isaac LGA region. Other proposed major projects near to the Project include the Olive Downs Project (Pembroke Olive Downs Pty Ltd), Saraji East Mining Lease Project (BMA Pty Ltd) and Winchester South Project (Whitehaven Coal Ltd).
- Other key industries of employment for Dysart residents include education and training (7.3 per cent) and accommodation and food services (6.8 per cent). Those employed in the accommodation and food services industries may be in roles that support the mining industries, such as in WAVs. At the 2016 Census, there were 31 Dysart residents employed in the construction industry.
- The Lake Vermont Mine currently employs up to 750 people, of which 14.4 per cent identify as female and 4.9 per cent identify as Aboriginal and/or Torres Strait Islander. The principal mining contractor is Thiess

Housing and Accommodation

- There is a high proportion of unoccupied dwellings in Dysart, with 511 dwellings unoccupied at the 2016 Census, equating to 42.5 per cent of total dwellings. The number of unoccupied dwellings in Dysart increased significantly between 2011 and 2016. However, this is likely reflective of the town's declining residential population, exacerbated by the previously downturn of the mining industry (including closure of BMA's Norwich Park operation) with more people having migrated out of town than people migrating in. Further, a proportion of unoccupied dwellings in Dysart are likely to be owned by mining companies or contractors and are vacant or reserved for future resident employees or are awaiting sale. A significant proportion of unoccupied housing is owned by BMA, with BMA owning 528 dwellings in Dysart as at March 2019, of which 36.0 per cent was unoccupied. Consultation with stakeholders indicated that many of these unoccupied dwellings are in poor condition and require maintenance and upgrade.
- Reflective of the relatively high residential population turnover, Dysart recorded high rates of rented dwellings and lower rates of homeownership, with around 69.3 per cent of occupied dwellings being rented in 2016. Of the rented dwellings, 40.4 per cent were rented from a real estate agent and 44.4 per cent were rented from an employer, such as a mining company or a Government agency. High rates of company-provided and/or subsidised housing reflect the lower levels of median weekly rents in Dysart and the broader Isaac LGA region, at $120 and $90 per week respectively. The vacancy rate of rental housing in Dysart has fallen from 6.5 per cent in June 2018 to 4.9 per cent in December 2018. Vacancy rates were at their highest at 20 per cent in July 2013.
- Engagement with the Queensland Department of Housing and Public Works identified that the Department manages approximately 20 houses in Dysart, most of which were occupied. Consultation with other relevant stakeholders indicated that there is currently no demand for affordable housing in Dysart, with the town having sufficient availability of rental housing that is affordable for low income households.
- There are four WAVs in Dysart, providing a total of 3,275 beds, with a total approved capacity of 3,670 beds. The WAVs are BMA Dysart Village (closed to public), Lake Vermont Accommodation Village (closed to public), Civeo Dysart Village (open to public) and Stayover by Ausco (open to public). There are also two short-term accommodation providers in Dysart, catering for tourists and people visiting on short-term business. They include the Jolly Collier Hotel and the Country Roads Motor Inn.

Local Business and Industry Procurement

- Dysart has a number of small businesses, including a newsagency, IGA, bakery, hairdresser and food outlets. Stakeholders have expressed that businesses in Dysart suffered during the downturn of the

Summary of existing social environment

mining industry from 2012, with businesses closing such as the ANZ bank, the butcher and clothing stores. This was noted to also be exacerbated by the presence of the WAVs, which typically provide an on-site general store.

- A major concern raised by all stakeholders was the state of the Dysart Shopping Centre. The Dysart Shopping Centre was once viewed as the heart of Dysart. However, high rents and a subsequent high turnover of tenants has resulted in much of the shopping centre now being empty. Dysart residents typically travel to Middlemount for their shopping, which is approximately a 45-minute drive from Dysart.
- At June 2021, there were 1,861 registered businesses operating in the Isaac LGA region, of which 61.8 per cent were non-employing businesses, such as sole traders. Of the registered businesses, 195 businesses were construction businesses and 27 businesses were mining businesses. A higher number of mining and construction businesses are based in Mackay LGA, with 104 mining businesses and 1,524 construction businesses.
- At October 2019, the Black Business Finder indicated there are eight businesses registered in Isaac LGA region that are owned by Aboriginal and/or Torres Strait Islander peoples. These businesses include a uniform shop, car repairers, and a mining consultancy. There is one Aboriginal and/or Torres Strait Islander owned or managed business in Dysart, providing drill and blasting services, and mining and quarrying machinery.
- The Lake Vermont Mine has been operating since 2013 and as such, have already established supply arrangements with local and regional businesses. In the year to June 2019, the Lake Vermont Mine spent $6,856,820 on local suppliers within the Mackay, Clermont, Moranbah and Dysart areas. Annual spend increased in the year to June 2020, to $6,930,503, of which over $2 million (30 per cent) was spent within the Dysart postcode.
- Consultation during the SIA identified that Isaac Regional Council are seeking to establish a Chamber of Commerce for the Isaac region, which includes Dysart and Moranbah. Further, the Department of State Development, Manufacturing, Infrastructure and Planning has developed a Supply Chain Development Program for mining proponents and principal contractors of major projects in the Mackay-Isaac-Whitsunday Region. The program includes a suite of products and services, including the Industry Capability Network (ICN) which proponents and principal contractors can access to support job creation, regional growth, increase innovation and the improvement and development of regional supply chains.

Health and Community Wellbeing

- Prior to 2020, the population of Dysart had been steadily declining since it peaked in 2007 with 3,138 people. Over the ten-year period to June 2020, Dysart's population declined to 2,342 people (representing a loss of 649 people). Significant population losses were experienced between 2014 and 2015, which were attributed to the downturn in the mining industry (circa 2012-2017) including mine closures and downsizing of mining projects.
- In the year to June 2020, Dysart experienced minor population growth with an estimated population of 2,342 people, an increase of 12 people from June 2019. This population growth is potentially attributed to the recent increase in workforce size at Lake Vermont Mine, the COVID-19 pandemic and associated travel restrictions resulting in non-resident workers electing to remain in Dysart on a full-time basis and increase in economic activity stimulated by other nearby mining projects.
- At June 2020, the estimated full-time equivalent population of Dysart was 3,995 people, with 41.9 per cent being non-resident workers. The proportion of non-resident workers in Dysart is higher than that recorded for Isaac LGA region as a whole at 38.0 per cent (12,770 non-resident workers). The non-resident population of Isaac LGA region is projected to peak at 14,510 persons in 2024 before falling to 14,430 by 2026.
- The population of Dysart is typically younger with a lower median age relative to Queensland, with a higher proportion of people aged 14 years or younger and a significantly lower proportion of older people aged 65 years or older. This age profile reflects the family-oriented nature of Dysart, and the lack of aged care infrastructure and services available in Dysart. Further, residents who retire are typically more likely to migrate out of Dysart and retire elsewhere.
- Mining towns are historically high-income towns. The average individual income in Dysart has exceeded the Queensland average since the 2001 Census. At the 2016 Census, median weekly incomes of the household and individual in Dysart were $2,128 and $1,103 respectively.
- There are certain demographic and social characteristics that make some groups more vulnerable than others. Over the five years to the 2016 Census, some vulnerable groups in Dysart increased in size despite the decline in population. The growing vulnerable groups in Dysart include people aged 65 years

Summary of existing social environment

or older, people who need assistance, low income households earning less than $650 per week, and unemployed people.

- Outcomes of recent public surveys indicate that residents of Isaac LGA, including Dysart and Moranbah, expressed that their towns are family oriented and they feel a strong sense of belonging to their area. The surveys also identified that local schools, cultural facilities and sports and leisure facilities in the towns were rated positively. However, respondents indicated that shopping for some everyday household items can be difficult, and access to childcare services and some medical services is challenging in Moranbah and Dysart. This was further confirmed through stakeholder engagement for the SIA.
- Stakeholders engaged for the SIA identified a key challenge in Dysart being constrained access to health services and childcare, exacerbated by challenges in attracting and retaining qualified workers. There is currently one General Practitioner resident in Dysart serving the local population and surrounding area. Dysart also comprise of one childcare centre, the Lady Gowrie Childcare Centre, which has an existing capacity for 39 children. Stakeholders stated that there is demand to expand capacity of the childcare centre and a key challenge is attracting diploma qualified childcare workers to Dysart.
- Emergency services in Dysart comprise of Queensland Ambulance Service, Queensland Police Service and Queensland Fire and Emergency Services. Dysart Ambulance Station is staffed by one full-time paramedic who is supported by volunteers. Dysart Police Station is open Monday to Thursday and in addition to typical policing duties, provides other government services including licensing on behalf of Queensland Transport, criminal history check inquiries and weapons licensing. The Dysart Fire Station is an auxiliary station, which is not crewed full-time and is typically run by volunteers.
- There are two schools based in Dysart, including Dysart State School and Dysart State High School, and one kindergarten, the Dysart Kindergarten (C&K). In addition, there is one childcare facility, the Lady Gowrie Day Care Centre. There are good community facilities available in Dysart, including parks, recreational facilities and churches. Dysart Community Support Group is a key community support service providing events and activities for local residents, and also provides a specialist homelessness service.
- While stakeholders engaged for the SIA expressed positive sentiment towards Dysart's community facilities, including the community centre and the Dysart public swimming pool, some stakeholders noted that there needs to be more consideration of entertainment for school-aged children, in particular alcohol-free events.

6 Impact assessment

This section analyses the potential impacts which may occur as a result of the Project and identifies the associated impact mitigation and benefit enhancement measures (consistent with the SIA Guideline, these will be referred to collectively as 'management measures'). The impact significance evaluation is also included in this section. The impacts, both negative and positive, are discussed under each relevant key SIA matter, including:

- Workforce management (Section 6.1).
- Housing and accommodation (Section 6.2).
- Health and community wellbeing (Section 6.3).
- Local business and industry (Section 6.4).

As community and stakeholder engagement is a cross-cutting SIA matter, impacts associated with community and stakeholder engagement are included within the other key SIA matters where relevant. This section also provides an assessment of potential cumulative effects that the Project may contribute to (Section 6.5) and impacts associated with the Project not proceeding (Section 6.6).

6.1 Workforce Management

This section assesses potential impacts associated with workforce management including employment and training as well as worker wellbeing. The key social change processes likely to be invoked by the Project that relate to workforce management matters include:

- Change in supply and demand of labour due to generation of new employment opportunities with the Project.
- Change in availability of skills and capacity building training programs due to the Project providing opportunities in skills and training relating to mining.
- Change to worker wellbeing due to new workers adopting block shift rosters and/or FIFO arrangements.

These social change processes lead to social impacts, which are discussed below.

6.1.1 Change in supply and demand of labour due to Project generating employment opportunities

The Project will generate both positive and negative impacts for a range of stakeholder groups relating to workforce management matters. However, the overall effect is anticipated to be minimal as job losses associated with Lake Vermont Mine will be offset through the generation of new employment opportunities associated with the Project. Overall, the Lake Vermont Meadowbrook Complex will result in maintaining a total of 860 jobs during operations at the Lake Vermont Complex, while the Project will generate up to 250 jobs during construction for a period of two years from late 2022.

As such, the **Project has the potential to increase labour force participation rates in local and regional communities**. An increase in labour force participation would indirectly reduce unemployment levels and subsequently enhance socio-economic wellbeing for individuals and communities. This impact is likely to benefit unemployed people and job seekers in Dysart and the Isaac LGA region, Isaac Regional Council, and identified underrepresented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people.

As discussed in Section 5.7.1 of the baseline analysis, Dysart and the broader Isaac LGA region experienced significant job losses in the construction and mining industries between the 2011 and 2016 Censuses. These job losses subsequently led to population outflows in communities across the region including Dysart, and an overall reduction in the size of the labour force. Demonstrating the outflow of jobs, Dysart's labour force participation rate declined from 73.8 per cent in 2011 to 61.1 per cent in 2016. However, unemployment rates remained relatively low. At September 2021, the estimated unemployment rate for Broadsound-Nebo SA2 (which includes Dysart) was 1.4 per cent (69 unemployed persons) and 1.3 per cent (166 unemployed persons) for Isaac LGA, considerably lower than the unemployment rate for Queensland as a whole at 4.9 per cent. Despite the COVID-19 pandemic beginning in March 2020, unemployment rates continue to decline in Broadsound-Nebo SA2 and Isaac LGA. Low rates of unemployment may reflect the ability of skilled workers obtaining employment elsewhere, such as other nearby mining projects.

Despite the low rates of unemployment, the Project would positively benefit Dysart and the broader Isaac LGA through generation of new employment opportunities during its construction and operation, thereby increasing the size of the labour force. Dysart is the priority town as it is the only town within a one-hour drive time from the Project. Furthermore, outcomes of SIA engagement identified preference by stakeholders for employing local people where feasible. The Project is likely to attract both currently employed workers as well as unemployed

workers, particularly people who were previously employed in underground mining but had their employment terminated or converted to a contract, and people who would prefer residential positions to their current FIFO positions. The existing Lake Vermont Mine recruitment strategy prioritises people who reside local to the Project and this will continue with the Project.

Therefore, the generation of employment opportunities by the Project are likely to benefit these communities, including providing employment opportunities for existing local and regional residents leading to population retention, and through encouraging new workers to relocate to the local and regional areas stimulating population growth, in addition to enhancing the socio-economic wellbeing of the towns.

To enhance the benefits associated with the generation of employment opportunities for Dysart and the broader Isaac LGA, the Proponent has committed to maximising local employment through application of a recruitment hierarchy, including actions to:

- Scheduling of recruitment advertising to be staggered, with employment opportunities to be advertised via local and regional channels in the first instance, such as via CQ Job Link, and then to state-wide channels. CQ Job Link is a partnership between the Central Highlands Regional Council and the Isaac Regional Council, with the support of the Local Buying Foundation, providing a free online platform to connect employers and jobseekers in the Bowen Basin region.
- Establish a project information office at the existing Accommodation Village in Dysart during Years 1 to 3 and provide a dedicated website which enables the opportunity for interested local residents to enquire about opportunities and make an appointment for a face to face meeting.
- Provide workforce transition incentives for new workers or existing workers on FIFO arrangements (regardless of whether employed by the Proponent or a contractor) to relocate to Dysart, through provision of $130 per week allowance which is included in their gross pay.
- No job opportunities will be advertised as FIFO only position to fully comply with the Anti-Discrimination Act 1991 provisions in the SSRC Act.

The **generation of new employment opportunities by the Project would also benefit under-represented groups in the labour force**. As detailed in Section 5.7.1, the baseline analysis identified that the under-represented groups in Dysart and Isaac LGA's labour force include women, Aboriginal and/or Torres Strait Islander peoples and young people, with higher rates of unemployment across these groups when compared to the total population. The female population of Dysart recorded an unemployment rate almost three times the rate recorded for males. The baseline analysis and outcomes of SIA engagement also identified young people of Dysart (aged 15 to 24 years) as an under-represented group in the labour force and apprenticeships and traineeships are vital to ensuring local young people have opportunities to enter the mining workforce and subsequently remain in local towns. As such, there presents opportunities for the Project to target employment to these groups.

The generation of 250 jobs during the Project's construction and maintenance of 860 jobs during operations of the Lake Vermont Meadowbrook Complex will benefit the under-represented groups in the labour force. In addition to potentially reducing unemployment rates for these under-represented groups, employment with the Project may increase personal incomes and financial security, benefiting their families and broader community.

As an existing mine operator, the Proponent has already established a process to ensure equity and transparency frame workforce recruitment. Employing the best qualified person for the position is a paramount consideration while also ensuring that those who are under-represented in labour force are provided equitable access to employment opportunities. To further maximise employment opportunities for identified under-represented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people, the Proponent is committed to the following actions:

- Implement the Equal Employment Policy as currently applied for the existing Lake Vermont and Jellinbah mines.
- Job advertisements to include statement demonstrating proponent's commitment to recruiting a diverse and inclusive workforce, such as, "*we are an Equal Opportunity employer and we encourage applications from women and Indigenous people*".
- Ensure accessible and inclusive recruitment processes.
- Maintain implementation of the *Sisters in Mining* initiative, a pre-employment program for Indigenous women that teaches life skills and presents opportunities for employment in the mining industry.
- Identify specific roles that can be structured such as job-share or flexible shift arrangements to attract women to apply to these roles.

While the Project is likely to potentially benefit communities through generation of employment opportunities, it also has the potential to **contribute to local and regional competition for labour skilled in construction and underground mining, resulting in negative impacts for some stakeholder groups**. An increase in labour

competition may outstrip the labour supply available in local and regional labour markets, and if not appropriately managed, negative impacts can include a disproportionate share of the local and regional labour market.

The Project's construction phase requires a peak of 250 workers from late 2022 for a period of two years, while overall operation of the Lake Vermont Meadowbrook Complex would maintain 860 jobs from 2028. As detailed in Section 5.7.3 of the baseline analysis, there has been difficulty in the construction industry to attract workers, particularly in regional Queensland. At the 2016 Census, there were 31 Dysart residents and 346 Isaac LGA residents employed in the construction industry. The number of residents employed in the construction industry across the local and regional area declined by almost half from the 2011 Census. However, on the other hand, the number of people employed in the construction industry increased in Mackay LGA, indicating that some construction workers may have relocated from Isaac LGA to Mackay LGA to gain greater access to employment opportunities. As such, it is expected that a proportion of the construction workforce would be drawn from the Mackay LGA.

Similar to the construction industry, the number of Dysart and Isaac LGA residents employed in the mining industry declined between 2011 and 2016. In Dysart, there were 496 residents who were employed in the mining industry in 2016, a decline from 813 people in 2011. Isaac LGA experienced a less significant decline, with 3,757 residents employed in the mining industry in 2016, compared to 4,764 in 2011. Despite the decline in people employed in mining jobs, mining remains the dominant industry of employment for Dysart residents.

As such and coupled with the number of other proposed large resource projects in the region, the Project has the potential to exacerbate shortage in construction and mining skills and labour in the Isaac LGA due to the limited labour available locally. However, considering the size of the workforce with skills and experience in the mining sector, the additional demand for operations workers created by the Project (up to 70 incremental jobs) is unlikely to have any substantial effect on the availability of labour in the region. To minimise the impact, the Proponent has committed to the following actions:

- Work with local government and State Government agencies to identify skills gaps in local and regional communities and to tap into opportunities, such as engaging in the 'Skilling Queenslanders for Work' program which support target groups such as youth to access employment opportunities supported positions rather than on casual contracts.
- Maintain partnerships with Dysart State School and Dysart State High School to increase Science, Technology, Engineering and Mathematics (STEM) resources, including:
  - Donation of Robotic Kits, including provision of tutorial and support sessions for students and teachers.
  - Provide support to the annual Science Week, such as employees giving presentations and participation in class challenges with the students.

The Project has the potential to generate **benefits for the Dysart community through retention of existing Dysart residents employed at Lake Vermont Mine**. The population of Dysart has been steadily declining since it peaked in 2007, with more residents migrating out of town than moving in. Lake Vermont Mine has been operating near to Dysart since 2009. The Proponent and the principal contractor Thiess Mining Services has supported, and continues to support, provision of local employment opportunities and community development initiatives that support the overall sustainability of Dysart.

At January 2021, the Lake Vermont Mine employed 860 workers who support the open-cut operations. Of these, 71 workers were resident in Dysart. These workers sourced their own housing, either through renting or purchasing of a dwelling - noting that an incentive payment of $130/ per week is paid to any employee who chooses to live locally. The Lake Vermont Mine is anticipated to ramp down its coal output by 2028, with a subsequent loss of approximately 330 jobs. Some of these jobs are expected to be held by existing Dysart residents and these residents may relocate from Dysart as a result. The outmigration of residents has potential to catalyse a range of socio-economic effects on the town of Dysart.

However, the Project would result in the retention of some existing Dysart residents employed at Lake Vermont Mine. It is the Proponent's intention to provide opportunities, where appropriate, for many of these roles to transition from the slowing of open-cut operations, to the ramping up of the Project, thereby promoting workforce retention and job security for employees and contractors. Specifically, it is the Proponent's intention to retain as many Lake Vermont Mine employees as possible that are Dysart residents. Where a position is to be made redundant and the worker is an existing Dysart resident, the worker will be given priority to transition to a new role with the Project, including priority to retrain in underground mine operations. As such, the Project will generate the positive impact of retention of existing Dysart residents employed at Lake Vermont Mine, indirectly maintaining sustainability of Dysart town.

To enhance the benefit, the Proponent has committed to:

- Prioritise promotion of Project employment opportunities internally to existing Lake Vermont Mine workers to transition to the Project prior to external recruitment, to maintain existing locally resident workers.

- Prioritise retraining opportunities in underground mining for existing Lake Vermont Mine workers who live locally to transition to employment with the Project.

6.1.2 Change in availability of skills and training development opportunities

The Project's construction and operational phases represent an important source of potential training and career pathway development, which will benefit local and regional communities. As such, the Project has the potential to **increase opportunities for young people or those people with no previous mining experience to gain skills relevant to the Project.** For example, the provision of apprenticeships during the Project's operation contributes to the increased availability of training development opportunities for entry-level job seekers, such as young people or those currently working on nearby cattle properties.

There are no post-secondary training facilities in Dysart due its remote location. Training facilities in mining skills are available in Moranbah, including the Coalfields Training Excellence Centre. As detailed in Section 5.7.3 of the baseline analysis, demand for skilled construction and mining labour is expected to increase in Queensland. The provision of training and upskilling opportunities by the Project would enable local and regional residents to enter the construction and mining labour force.

In addition, the provision of upskilling and capacity building opportunities for the workforce would benefit the Proponent, through indirectly contributing to enhanced workforce retention rates. High rates of workforce retention on the Project would also indirectly result in positive impacts for the Dysart community, through supporting population retention of resident workers.

To enhance the benefit of increase in skills and training development opportunities, the Proponent has committed to:

- Prioritise promotion of Project training initiatives targeting residents from Dysart, Moranbah and Middlemount, and those people resident on surrounding agricultural properties.
- Establish a Vacation Program, which provides a 12-week placement for up to eight University students per year from various disciplines.
- Provide two apprenticeship positions each year, which combines paid work and training delivered through nationally registered training organisations.
- Maintain partnership with Dysart High School to support pathways to sustainable employment opportunities through interaction with people from the mining workforce, including sharing information on training and entry-level employment opportunities, and encouraging Project workers to deliver career pathway presentations to students.

6.1.3 Change to worker wellbeing and their families

The Project may negatively affect worker wellbeing and their families during both the construction and operations phases. Worker wellbeing can be impacted through roster and shift-scheduling arrangements, the quality and services provided at WAVs, and access to support services.

As detailed in Section 5.5.3 of the baseline analysis, FIFO work practices can negatively affect mental, physical and social wellbeing of workers. During construction, the Project will engage up to 250 construction workers and it is anticipated that some construction activities would occur 24 hours a day, seven days a week. Shifts of 12 hours are expected, with rosters likely to be 21 days on and seven days off, or as agreed by the construction contractors in consultation with the Proponent and the relevant workers' unions. Non-resident construction workers would stay at a WAV in Dysart. As such, the Project has the potential to negatively affect the wellbeing of construction workers through adoption of FIFO work practices. However, due to the short construction period, and the management measures proposed to minimise the extent of impact, it is anticipated that the negative impact would be of low significance.

The extent of impact on worker wellbeing during the operations phase is anticipated to be of low significance when managed. At January 2021, the Lake Vermont Mine employed 860 workers. As the Project moves into full operational phase by 2028, there will be maintenance of this 860 workforce at the Lake Vermont Meadowbrook Complex, some of whom will be employed on a FIFO basis and reside at the Lake Vermont Accommodation Village while on shift.

However, the anticipated job losses associated with the ramping down of Lake Vermont Mine is likely to increase risk of mental health, safety and wellbeing of workers through the generation of stress and anxiety. This has the potential to increase demand on health and social services in Dysart.

To minimise the negative effect of increase in risk to mental health, safety and wellbeing of workers, the Proponent has committed to the following actions:

- Comply with relevant legislation and policies, including DNRME's Fatigue Management Guidelines and Health and Safety Policies, including implementing procedures to manage fatigue risk through implementation of

the Fatigue Management Standard and associated Fatigue Assessment Form and Fatigue Risk Assessment Chart.

- Provide first aid facilities at Project site and at Lake Vermont Accommodation Village, including ensuring there are trained first aid officers on every shift.
- Provide emergency service providers in Dysart with advance notice of workforce mobilisation and operational changes.
- Promote uptake of Employee Assistance Program for workers and their families through displaying information and contact details of the Employee Assistance Program at Project site and at the Lake Vermont Accommodation Village.
- Manage the workforce health and safety through implementation of the Health and Safety Management Systems, including in relation to management of risks associated with drugs and alcohol, and workforce hygiene.

The adoption of FIFO work arrangements can also **increase stress and anxiety for families of workers who are employed on a non-resident basis**. As described in Section 5.5.3 of the baseline analysis, a FIFO work arrangement can disrupt home family life and routines. The absence of one parent while on roster places additional pressure on the other parent who effectively becomes a sole parent during the worker's absence. However, due to the small number of workers required during the Project's construction and operations, the negative effects associated with change to worker wellbeing and their families are expected to be low significance.

To minimise the negative effect of increase in stress and/or anxiety for families of workers who are employed by the Project, the Proponent committed to the following actions:

- Promote uptake of Employee Assistance Program for workers and their families through displaying information and contact details of the Employee Assistance Program at Project site and at the Lake Vermont Accommodation Village.
- Provision of financial contribution $5,000 per annum to the Lives Lived Well program, a new service provider in the Isaac region providing free support for people impacted by alcohol or drugs or problems with mental health.

6.1.4 Impact evaluation

Table 6-1 summarises the identified impacts relating to workforce management and evaluates their significance by employing the approach detailed in Section 2.4.2.

Table 6-1 Workforce management impact, impact significance and management measure

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
Change in supply and demand of labour due to generation of new employment opportunities by with the Project and loss of employment opportunities with the Lake Vermont Mine. Overall, the Lake Vermont Meadowbrook Complex will result in an incremental increase of up to 70 additional jobs during operations, and the Project will generate 200 jobs during construction.	Increase in labour force participation and reduction in number of unemployed people, particularly for identified underrepresented groups in the labour force, indirectly enhancing socio-economic wellbeing of individuals and communities in the Isaac LGA region	Unemployed people and jobseekers in Dysart and Isaac LGA region	Construction Operations	Positive	Medium (B2)	• Maximise local employment through application of a recruitment hierarchy, including actions to: - Scheduling of recruitment advertising to be staggered, with employment opportunities to be advertised via local and regional channels in the first instance, such as via CQ Job Link, and then to state-wide channels. CQ Job Link is a partnership between the Central Highlands Regional Council and the Isaac Regional Council, with the support of the Local Buying Foundation, providing a free online platform to connect employers and jobseekers in the Bowen Basin region. - Establish a project information office at the existing Accommodation Village in Dysart during Years 1 to 3 and provide a dedicated website which enables the opportunity for interested local residents to enquire about opportunities and make an appointment for a face to face meeting. - Provide workforce transition incentives for new workers or existing workers on FIFO arrangements (regardless of whether employed by Jellinbah or a contractor) to relocate to Dysart, through provision of $130 per week allowance which is included in their gross pay. - No job opportunities will be advertised as FIFO only position to fully comply with the Anti-Discrimination Act 1991 provisions in the SSRC Act. • Maximise employment opportunities for identified under-represented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people, including actions to: - Implement the Equal Employment Policy as currently applied for the existing Lake Vermont and Jellinbah mines. - Job advertisements to include statement demonstrating proponent's commitment to recruiting a diverse and inclusive workforce, such as, *"we are an Equal Opportunity employer and we encourage applications from women and Indigenous people"*. - Ensure accessible and inclusive recruitment processes. - Maintain implementation of the *Sisters in Mining* initiative, a pre-employment program for Indigenous women that teaches life skills and presents opportunities for employment in the mining industry. - Identify specific roles that can be structured such as job-share or flexible shift arrangements to attract women to apply to these roles.	Medium (B3)
		Isaac Regional Council	Construction Operations	Positive	Medium (C2)		Medium (C2)
		Identified underrepresented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people (15 to 24 years)	Construction Operations	Positive	High (A2)		High (A1)
	Exacerbate shortage in construction and mining skills and labour in Isaac LGA region due to increase in competition for labour	Isaac Regional Council	Construction Operations	Negative	Low (C4)	• Work with local government and State Government agencies to identify skills gaps in local and regional communities and to tap into opportunities, such as engaging in the 'Skilling Queenslanders for Work' program which support target groups such as youth to access employment opportunities supported positions rather than on casual contracts. • Maintain partnerships with Dysart Primary School and Dysart State High School to increase STEM resources, including actions to: - Donation of Robotic Kits, including provision of tutorial and support sessions for students and teachers. - Provide support to the annual Science Week, such as employees giving presentations and participating in class challenges with the students.	Negligible (C4)
		Other nearby mining projects	Construction Operations	Negative	Medium (B3)		Low (B4)
	Retention of existing Dysart residents employed at Lake Vermont Mine	Lake Vermont resident workers	Operations	Positive	High (A1)	• Prioritise promotion of Project employment opportunities internally to existing Lake Vermont Mine workers to transition to the Project prior to external recruitment, to maintain existing locally resident workers. • Prioritise retraining opportunities in underground mining for existing Lake Vermont Mine workers who live locally to transition to employment with the Project.	High (A1)
		Dysart community	Operations	Positive	Medium (B2)		Medium (B2)
Change in availability of skills and capacity building training programs due to Project providing opportunities in skills and training	Increase in opportunities for young people or those with no previous underground mining experience to gain skills relevant to the Project	Young people or people with no previous underground mining experience	Operations	Positive	Medium (B2)	• Prioritise promotion of Project training initiatives targeting residents from Dysart, Moranbah and Middlemount, and those people resident on surrounding agricultural properties • Establish a Vacation Program, which provides a 12-week placement for up to eight University students per year from various disciplines • Provide two apprenticeship positions each year, which combines paid work and training delivered through nationally registered training organisations • Maintain partnership with Dysart High School to support pathways to sustainable employment opportunities through interaction with people from the mining workforce, including sharing information on training and entry-level employment opportunities, and encouraging Project workers to deliver career pathway presentations to students	Medium (B2)
Change to worker wellbeing and their families due to new workers adopting block	Increase in risk to mental health, safety and wellbeing of workers, including work stress exacerbated by fatigue and/or job losses	Project workforce	Construction Operations	Negative	Medium (B2)	• Comply with relevant legislation and policies, including DNRME's Fatigue Management Guidelines and Health and Safety Policies, including implementing procedures to management fatigue risk through implementation of the Fatigue Management Standard and associated Fatigue Assessment Form and Fatigue Risk Assessment Chart	Low (C3)

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
shift rosters and/or FIFO arrangements		Health and social services in Dysart	Construction Operations	Negative	Medium (B2)	• Provide first aid facilities at Project site and at Lake Vermont Accommodation Village, including ensuring there are trained first aid officers on every shift • Provide emergency service providers in Dysart with advance notice of workforce mobilisation and operational changes • Promote uptake of Employee Assistance Program for workers and their families through displaying information and contact details of the Employee Assistance Program at Project site and at the Lake Vermont Accommodation Village • Manage the workforce health and safety through implementation of the Health and Safety Management Systems, including in relation to management of risks associated with drugs and alcohol, and workforce hygiene	Low (C3)
		Emergency services in Dysart	Construction Operations	Negative	Medium (B2)		Low (C3)
	Increase in stress and/or anxiety for families of workers who are employed on a FIFO basis, indirectly contributing to family breakdown	Families of project workforce	Construction Operations	Negative	Medium (B2)	• Promote uptake of Employee Assistance Program for workers and their families through displaying information and contact details of the Employee Assistance Program at Project site and at the Lake Vermont Accommodation Village • Provision of financial contribution $5,000 per annum to the Lives Lived Well program, a new service provider in the Isaac region providing free support for people impacted by alcohol or drugs or problems with mental health	Low (C3)

6.2 Housing and Accommodation

This section assesses the potential impacts the Project may generate with regard to housing and accommodation matters. The identified social change processes which may lead to social impacts include:

- Change to supply and demand for housing and accommodation in Dysart due to increase in non-resident and resident workers.
- Change in demand for short-term accommodation in Dysart due to Project requiring short-term contractors.

These social change processes lead to social impacts, which are discussed below.

6.2.1 Change to supply and demand of housing and accommodation

A key social change process invoked by the Project's workforce is change to supply and demand of housing and accommodation. Potential impacts to supply and demand of housing and accommodation is limited to Dysart as it is the only community within a safe commute distance from the Project's main access. However, the overall incremental effect on Dysart's housing and accommodation market is anticipated to be minimal as job losses associated with Lake Vermont Mine will be offset through the generation of new employment opportunities associated with the Project.

However, the Project has potential to **result in temporary increases in rental prices due to perceived economic uplift in Dysart** contributed to by the generation of new employment opportunities. This has the potential to negatively affect low-income rental households. As detailed in Section 5.3.3 of the baseline analysis, a measure of households experiencing housing stress is associated with housing costs that are 30 per cent or less of a household income. At the 2016 Census, around 4.6 per cent of rental households in Dysart were experiencing housing stress, greater than the proportion recorded across Isaac LGA as a region. However, the rate of rental households experiencing housing stress in Dysart was significantly lower than that recorded for Queensland as a whole, with 12.8 per cent. This indicates there is a low level of rental housing stress in Dysart.

Engagement with the Queensland Department of Housing and Public Works identified that the Department manages approximately 20 houses in Dysart, most of which were occupied. The Department has sold and is seeking to sell housing stock in Dysart as part of a region-wide effort to reduce the quantity of housing stock held by the Department. Consultation with other relevant stakeholders indicated that there is currently no demand for affordable housing in Dysart, with the town having sufficient availability of rental housing that is affordable for low income households. Despite this, stakeholders include IRC and IAHT has consistently highlighted that access to affordable housing is a region-wide concern.

To minimise the negative effect on low-income rental households in Dysart, the Proponent has committed to:

- Provision of an annual contribution of $80,000 payable in July each year, for a period of 20 years or when production from the underground mine concludes, whichever occurs soonest.
- Provision of quality accommodation for non-local workforce, including accommodation at Lake Vermont Accommodation Village.
- If required, collaborate with Relevant Queensland Government departments and Isaac Regional Council to manage cumulative impacts to the local and regional housing market.

As such and coupled with the relatively low Project demand for housing in Dysart, the negative effect associated with potential for temporary increases in rental prices is considered to be of low impact significance with the application of management measures.

The Project also has the potential to **increase demand for quality houses sought after by families who relocate to Dysart** to take up employment with the Lake Vermont Meadowbrook Complex. Further, the **reduced availability of dwellings for rent or purchase may limit options for new resident operations workers.**

Over the five years to 2016, the number of private dwellings in Dysart has declined by 1.5 per cent. In addition, the proportion of private dwellings that are unoccupied grew by about 36.3 per cent between 2011 and 2016, from 375 unoccupied dwellings in 2011 to 511 unoccupied dwellings in 2016. As detailed in Section 5.3.1 of the baseline analysis, the increase in the proportion of unoccupied private dwellings is likely reflective of the town's declining population, with more people migrating out of town than people migrating in. However, engagement undertaken for the SIA suggests that many of the unoccupied dwellings are in poor condition and require substantial maintenance and upgrade in order to be attractive dwellings for families.

Stakeholders engaged in the course of the SIA identified that availability of quality housing was a key issue in Dysart. The lack of quality, large dwellings may present a barrier for families to relocate to Dysart.

As the Project is expected to result in a demand of 6 dwellings in Dysart, accounting for only 0.5 per cent of Dysart's existing housing stock, the impacts associated with increased demand for houses is anticipated to be of low impact significance.

To minimise the negative effects associated with potential increase demand for quality houses in Dysart and the reduced availability of dwellings for rent or purchase, the Proponent has committed to:

- Collaborating with BMA to release Dysart housing on to the market in instances where potential new resident workers encounter barriers in accessing housing in Dysart.

On the other hand, the Project has the potential to **positively benefit property owners in Dysart through increase in financial returns** driven by increased housing demand resulting in unoccupied dwellings coming back on the market. As detailed in Section 5.3.2 of the baseline analysis, the mining boom to 2012 has resulted in significantly increasing housing prices and rents in Dysart. This has led to issues in housing unaffordability, exacerbated by mining companies buying and selling houses, causing peaks and troughs in the number of sales and house prices (UQ CSG, 2018). The downturn of the mining industry has led to property prices decreasing in Dysart, with the median house price in Isaac LGA in 2018 being $138,500, approximately 51.5 per cent lower than the median house price five years prior.

6.2.2 Change in demand for short-term accommodation

During the Project's pre-construction, construction, operations and decommissioning phases, there is likely to be a demand for short-term accommodation to accommodate short-term workers providing specialist services to the Project, such as consultants. As detailed in Section 5.3.5 of the baseline analysis, there are two short-term accommodation providers in Dysart, including the Jolly Collier Hotel and the Country Roads Motor Inn. An increase in demand for short-term accommodation has the potential to generate both positive and negative effects for the short-term accommodation operations and tourists visiting Dysart.

The Project has the potential to **positively benefit short-term accommodation operators in Dysart through enhancing economic productivity** due to increase in patronage. This may indirectly maintain and/or increase employment opportunities in the non-mining accommodation sector in Dysart. The short-term accommodation providers typically cater for tourists and people visiting on short-term business. As detailed in Section 5.3.5 of the baseline analysis, business travel dominates Isaac LGA's purpose of visit to the region with approximately 56 per cent of the market share, while tourists hold around 23 per cent of the share. As such, the providers are likely to have capacity to benefit from increased patronage generated by the Project, subsequently enhancing economic productivity for the businesses and potentially catalysing additional employment opportunities.

On the other hand, the Project has the potential to **constrain access to short-term accommodation for tourists visiting Dysart**, particularly self-drive tourists, if the accommodation providers are routinely at capacity. This may indirectly reduce the number of tourists visiting Dysart. While the tourism industry isn't significant in Dysart, the Isaac Tourism Strategy identifies opportunities to increase in tourism across the region (IRC, 2019b). The Tourism Strategy also identified that self-drive tourism comprise a significant portion of Isaac LGA's tourism industry, largely attributed to the 'grey nomad' market, with popular months for visitors being from April to October and peaking in June/July. Surveys conducted by Mahadevan (2013) on the self-drive tourism market in regional Queensland concluded that grey nomad future visit trips would be adversely affected by a decrease in accommodation facilities and an increase in travel costs. As such, if short-term accommodation availability becomes constrained or inaccessible for tourists visiting Dysart, the number of tourists visiting or overnighting in Dysart may decline. However, due to the overall maintenance of the current operational workforce, it is anticipated that the negative impact to short-term accommodation providers in Dysart will be of low significance.

To mitigate the negative effect on short-term accommodation providers in Dysart, the Proponent is committed to:

- Where there is limited availability of short-term accommodation in Dysart, provide short-term contractors and consultants engaged on the Lake Vermont Meadowbrook Complex with accommodation at Lake Vermont Accommodation village or another public WAV in Dysart (ie. Dysart CIVEO).

6.2.3 Impact evaluation

Table 6-2 summarises the identified impacts relating to housing and accommodation and evaluates their significance by employing the approach detailed in Section 2.4.2.

Table 6-2 Housing and accommodation impact, impact significance and management measure

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
Change to supply and demand for housing and accommodation in Dysart due to increase in non-resident and resident workers of the Project	Potential for temporary increases in rental prices due to perceived economic uplift in Dysart contributed to by the Project, which may place some pressure on low-income rental households	Low-income rental households in Dysart Project workforce	Operations	Negative	Medium (A3)	• Provide an annual contribution of $80,000 payable in July each year, for a period of 20 years or when production from the underground mine concludes, whichever occurs soonest. • Provision of quality accommodation for non-local workforce, including accommodation at Lake Vermont Accommodation Village • If required, collaborate with relevant Queensland Government departments and Isaac Regional Council to manage cumulative impacts to the local and regional housing market	Low (B4)
	Increased demand for quality houses sought after by families who relocate to Dysart to take up employment with the Project	Project workforce Dysart community	Operations	Negative	Medium (C2)	• Avoid impact volatility on this segment of housing market through collaborating with major housing providers in Dysart (such as BMA and Department of Communities, Housing and Digital Economy) to provide early indications of housing demand and interventions such as potential purchase of housing stock as it becomes available, in order to stagger housing demand	Low (C3)
	Increase in financial returns for property owners in Dysart, with increase in demand for housing resulting unoccupied dwellings coming back on the market	Property owners and investors in Dysart	Operations	Positive	Medium (A3)	• *No management measure applicable*	Medium (A3)
	Reduced availability of dwellings for rent or purchase in Dysart may limit options for new resident operations workers	Project workforce	Operations	Negative	Medium (B2)	• Avoid impact volatility on this segment of housing market through collaborating with major housing providers in Dysart to provide early indications of housing demand and interventions such as potential purchase of housing stock as it becomes available, in order to stagger housing demand	Low (C3)
Change in demand for short-term accommodation in Dysart due to Project requiring short-term contractors	Enhanced economic productivity for short-term accommodation providers due to increase in patronage, indirectly maintaining and/or increasing employment opportunities	Short-term accommodation providers in Dysart	Construction Operations	Positive	Medium (B2)	• *No management measure applicable*	Medium (B2)
	Constrained access to short-term accommodation for tourists visiting Dysart, particularly self-drive tourists, indirectly reducing the number of tourists visiting Dysart	Tourists visiting Dysart	Construction	Negative	Low (B4)	• Where there is limited availability of short-term accommodation in Dysart, provide short-term contractors and consultants engaged on the Project with accommodation at Lake Vermont Accommodation Village or at other public WAV in Dysart (ie. Dysart CIVEO)	Negligible (C4)
		Isaac Regional Council	Construction	Negative	Low (C3)		Negligible (C4)

6.3 Health and Community Wellbeing

This section assesses the potential impacts the Project may generate with regard to health and community wellbeing matters. The key social change processes likely to be invoked by the Project that relate to health and community wellbeing include:

- Change in resident and non-resident population levels due to the Project requiring 250 construction workers and an incremental increase of 71 operational workers with the Lake Vermont Meadowbrook Complex.
- Change in demand on levels of service of health, social infrastructure and community facilities due to the loss of workers at Lake Vermont Mine and the influx of non-resident and new resident workers associated with the Project.
- Change to access and connectivity on local and regional road networks due to increase in vehicle volume as a result of the Project's construction activities (ie. heavy vehicles) and increase in non-resident and resident workers in Dysart.
- Change to amenity for nearby receptors at Project site and expansion of Lake Vermont Accommodation Village.
- Acquisition of land to enable expansion at Lake Vermont Accommodation Village.
- Change to level and type of community initiatives and programs.

The impacts of these social change processes are discussed below.

6.3.1 Change in resident and non-resident population levels

A key social change process invoked by the Project's workforce requirements is population change in Dysart. Mining towns, including Dysart, are historically susceptible to population change due to the cyclical nature of the mining industry.

As detailed in Section 5.2.1 of the baseline analysis, the population of Dysart has declined by 22.1 per cent over the nine-year period to 2019, with a loss of 662 people. This population loss has been attributed to closures and downsizing of mining projects, including the closure of the nearby Norwich Park Coal Mine. The downturn of the mining industry from 2021 has had more of a significant effect to Dysart's population, with population decline significantly greater than the rate recorded for Isaac LGA as a whole, with indirect negative impacts to community connectedness and cohesion and viability of local businesses.

A key benefit of the Project is **population retention or growth in Dysart leading to increase in social capital**, indirectly contributing to improved community cohesion and connectedness and enhanced community vitality. The Lake Vermont Mine has been operating since 2009 and as such, the Proponent is a key player in sustaining Dysart's sustainability. At January 2021, the Lake Vermont Mine employed 860 operational workers, of which 71 were resident in Dysart. As the Lake Vermont Mine will ramp down its operations by 2028, it is anticipated there will be a loss of 330 workers, some of whom would be Dysart residents. However, the Project will offset the population loss in Dysart through generation of new employment opportunities and encouraging new workers to relocate to Dysart through provision of live local incentives. As such, the Project would sustain Dysart's population if not enhance it.

SIA engagement identified that local stakeholders indicated a preference for people to remain living in Dysart and to encourage additional members of the workforce to move to Dysart.

The Proponent is committed to encouraging new Project workers to relocate to Dysart through provision of live local incentives. Assuming that the same proportion of the Project workforce choose to live locally as that of the Lake Vermont Project, the total number of Project workers that would reside in Dysart would be 34. However, and as outlined in Section 3.6.2, some of these workers would be existing Lake Vermont Mine employees who transition over to the Project. As such, the estimated change to workers who reside in Dysart is expected to be 6 workers. Assuming that workers bring their families to Dysart, the average household size in Dysart is applied to each worker, which was recorded as 2.1 people per household at the 2016 Census. As such, the Project has the potential to increase Dysart's population by 13 people from 2028, representing around 0.5 per cent of Dysart's total residential population at the 2016 Census.

As such, the Project is likely to benefit Dysart community through population retention or growth. To enhance this benefit, the Proponent has committed to retain existing Lake Vermont Mine employees who are current Dysart residents, through:

- Retaining their position within the existing Lake Vermont Mine or transitioning their position to the satellite open cut with the Project.
- Offering training for worker to retrain or upskill to transition their position to the underground mine with the Project.

The benefit would be further enhanced by maximising local employment through application of a recruitment hierarchy, including actions to:

- Target advertising of employment opportunities via local and regional channels (physical and online), such as the CQ Job Link.
- Establish a project information office at the lake Vermont Accommodation Village in Dysart during Years 1 to 3 to advertise and accept employment applications, and provide opportunity for interested residents to enquire about opportunities in person.
- Establish a dedicated website to provide key project information.
- Provide workforce transition incentives for new workers or existing workers on FIFO arrangements to relocate to Dysart, through provision of $130 per week allowance which is included in gross pay.
- No job opportunities will be advertised as FIFO only position to fully comply with the Anti-Discrimination Act 1991 provisions in the SSRC Act.

On the other hand, the Project has the potential to **decrease community cohesion in Dysart due to increase in non-resident population**, potentially in the order of 170 additional non-resident workers during operations, who will be accommodated at Lake Vermont Accommodation Village. As described in Section 5.4, some stakeholders and communities across the Bowen Basin has reported that the shift to the normalisation of 12-hour shifts and FIFO rosters has substantially impacted community connectedness, with fewer residents and non-residents participating in sporting and community groups. At June 2019, approximately 41.9 per cent of Dysart's FTE population were non-residents who typically stay at a WAV. As such, an increase in the non-resident population in Dysart may potentially decrease community cohesion for the permanent community. To minimise this negative impact, the Proponent has committed to:

- New workers will be provided with information sheets as part of their induction that details the services, facilities and businesses in Dysart to encourage interaction with the town. Lake Vermont Accommodation Village will also provide an information pack and directory detailing the services, facilities and businesses in Dysart
- Maintain initiatives which foster community interaction through delivery of events and initiatives within the community, such as, but not limited to:
  - Promote Project workforce attendance at Dysart Primary School and Dysart State High School events, including market days, award nights, book weeks, and other celebrations to maintain and enhance relationship building with the local schools and the broader community

A further negative impact associated with the potential increase in non-resident population is the potential to **contribute to community concerns about community safety or to amenity impacts** through perception that non-resident workers are likely to engage in anti-social behaviour.

As reported by the Dysart Police, there are relatively few call outs to worker accommodation villages. However in spite of this, there may be some sections of the community which feel as though the (highly valued) safety of the town may be compromised the presence of additional non-resident employees.

To minimise this negative impact, the Proponent has committed to:

- Implementation of a workforce code of conduct which describes positive behavioural outcomes and prohibits negative behaviours, with clear ramifications for non-conformance.
- Six-monthly meeting with Queensland Police Service, Lake Vermont Accommodation Village management and Jellinbah/Thiess to identify and address any anti-social or disruptive workforce behaviour in local communities.
- Promotion of community complaints procedures to encourage community members and stakeholders to submit complaints and feedback on workforce behaviour.
- Maintain monitoring of anti-social behaviour through operating CCTV surrounding the Lake Vermont Accommodation Camp.

6.3.2 Change in demand on levels of service of health, social infrastructure and community facilities

Social infrastructure, facilities and services play an important role in supporting the health and wellbeing of communities. They include education and childcare services, emergency services and health facilities and services. The Project has the potential to generate negative impacts on service provision of health, social infrastructure and community facilities in Dysart due to influx of non-resident and new resident workers associated with the Project.

The Project has the potential to **increase demand for emergency services to respond to increased risk of traffic accidents and workplace accidents** at Project site or Lake Vermont Accommodation Village. Services in

Dysart comprise an ambulance station which is staffed by one full-time paramedic and a police station which is staffed Monday to Thursday.

To minimise the negative impact associated with increased demand for emergency services, the Proponent has committed to:

- Provision of on-site first aid facilities and trained first aid officers to attend to minor workforce health issues, as well as providing first response services for emergency situations.
- Advance notice to emergency services in Dysart of workforce mobilisation and operational changes.

Due to an influx of new resident workers, the Project also has the potential to **increase demand for childcare places in Dysart**, indirectly placing pressure on providers and reducing access for other residents of Dysart. Dysart comprise of one childcare centre, the Lady Gowries Day Care Centre, which is open Monday to Friday from 7am to 5:45pm. It has a current capacity for 39 children aged 6 weeks to pre-school age.

A recurrent issue raised throughout SIA engagement was the current shortage of childcare places. With regard to the impact of the Project on childcare, during the construction phase, it is not likely that any of the 200 non-resident construction workforce would bring their family members to Dysart considering the construction period is relatively short (no more than two years). Accommodated at WAVs, the construction workforce would not result in any discernible increase in demand for childcare.

However, the Project's operation has the potential to result in 9 workers relocating to Dysart, some of whom will bring their families and require childcare.

As reported by numerous stakeholders, including the Lady Gowrie Dysart Childcare Centre, childcare services are currently struggling to meet demand and there is a need for expansion of capacity.

While the demand for childcare places generated by the Project is expected to be minor, the Proponent has committed to:

- Monitor workforce demands on childcare and education services and work with stakeholders to support solutions to cumulative demands on social services.
- Provision of financial contribution to enable existing childcare centre to increase capacity, including:
  - An upfront contribution of $50,000 towards building expansion of the childcare centre.
  - A contribution of $20,000 per annum to support employment of an additional diploma qualified childcare worker.

Further, the Project has the potential to **increase demand for hospital and health services** by the Project workforce, resulting in increased burden for service providers and reduced level-of-service for existing residents. Stakeholders engaged for the SIA indicated that access to GP services is an existing issue in Dysart, with only one GP available in the town.

To minimise the negative impact associated with potential increased demand for hospital and health services, the Proponent has committed to:

- Provision of on-site first aid facilities and trained first aid officers to attend to minor workforce health issues, as well as providing first response services for emergency situations.
- Collaborate with Queensland Health and other stakeholders to identify and support a solution to the need for additional medical practitioners.
- Support the provision of a free bus shuttle service for vulnerable residents in Dysart to access health and other allied services. Jellinbah will subsidise through reimbursing all expenses associated with provision of a service operating one day/week up to a cap $30,000 per annum.

6.3.3 Change to access and connectivity on local and regional road networks

The Project has the potential to **increase risk of road incidents along Saraji Road, Golden Mile Road, Fitzroy Developmental Road and Peak Downs Highway** due to increased volume of heavy vehicles and driver fatigue. This has the potential to negatively impact on road users and the Project workforce.

SIA engagement and fieldwork observation indicate that many Dysart residents and non-resident workers utilise Saraji Road to access goods and services in Moranbah, in addition to accessing Moranbah Airport. Since 2010, there has been nine road crashes on Saraji Road between Dysart and Moranbah, of which three required hospitalisation and the remainder required medical treatment (DTMR, 2019). An increase in vehicle traffic has the potential to increase the risk of road incidents. This impact is likely to be more significant during the construction phase due to the presence of heavy vehicles.

The Transport Impact Assessment concluded that peak workforce traffic demands for the Project are expected to occur in Project year 1 (2026), corresponding to the delivery of materials for construction, concrete and quarry

material to support the construction phase. However, based on the Road Safety Risk Assessment, all identified risks associated with the Project are expected to be within a medium level and that the Project does not pose any atypical safety risks or hazards.

To minimise the negative impact associated with potential increased risk of road incidents, the Proponent has committed to:

- Provision of shuttle buses to transport workers from Lake Vermont Accommodation Village to the Project site.

6.3.4 Change to amenity for nearby receptors

The Project has the potential to result in the **temporary increase in noise and dust due to activities associated with expansion of Lake Vermont Accommodation Village**, potentially affecting the learning environment at Dysart State High School.

The Lake Vermont Accommodation Village (owned by the Proponent and operated by Thiess Mining Services) is an existing WAV located at the north east entrance of Dysart on Queen Elizabeth Road. The Lake Vermont Accommodation Village provides accommodation for the Lake Vermont Mine workforce and will also be provided to operational workers for the Project. The Accommodation Village currently provides 637 rooms. However, as part of the Project, the Accommodation Village will undergo expansion to increase capacity up to 750 rooms.

Dysart State High School is located immediately south of Lake Vermont Accommodation Village and in 2018, comprised a student body of approximately 275 students. Construction activities associated with the expansion of the Lake Vermont Accommodation Village may generate noise and dust effects, which has the potential to affect the learning environment at Dysart State High School. Noise and dust from construction may also impact on nearby residents, particularly those located to the west of Lake Vermont Accommodation Village on Edgerley Street. Reduced amenity has the potential to negatively affect liveability values for the nearby residents.

To minimise the negative impact, the Proponent has committed to:

- Provision of advance notice to Dysart State High School and nearby residents on construction activities associated with the expansion of Lake Vermont Accommodation Village.

6.3.5 Acquisition of land

The Project will require the **partial acquisition of land to enable expansion of Lake Vermont Accommodation Village**. The land subject to acquisition is located on the traditional country of the Barada Barna People. As a result, relinquishment of Native Title is necessary.

To minimise the impact of land acquisition, the Proponent has committed to developing and upholding the Indigenous Land Use Agreement negotiated between Jellinbah and the Barada Barna Aboriginal Corporation.

6.3.6 Change to level and type of community initiatives and programs

The Project has the potential generate significant benefits to the Dysart community through **increasing overall socio-economic wellbeing Dysart and the broader region through provision of community investment initiatives**.

The Proponent has had a sustained presence in Dysart since 2009. The Proponent, and its principal contractor Thiess Mining Services, have an already established community investment program comprising of community initiatives across the education, health, social services and community support sectors. These community initiatives contribute to the sustainability of Dysart, including the maintenance of social services and the fostering of community cohesion. These factors are important to retain and attract new people to reside in Dysart.

The Project will maintain the implementation of established community investment initiatives, in addition to implementing new initiatives as appropriate. The Community Investment Program is not rigid, with initiatives reviewed on an annual basis and new initiatives developed in response to stakeholder suggestions or emerging social trends. The established partnerships with key stakeholders will afford opportunities for stakeholders to provide feedback and/or suggestions for future community investment initiatives, which will then be considered by the Proponent and Thiess.

To enhance the benefits, the Proponent has committed to:

- Support annual NAIDOC celebrations through providing a financial contribution of $1,500 per annum and encouraging employees to participate in NAIDOC events within Dysart

- Maintain partnership with RACQ CQ Rescue Helicopter through volunteering and in-kind support, such as regular fundraising, hosting site safety talks with CQ Rescue Staff, and attendance at the annual Gala ball and networking breakfasts
- Employee participation in delivery of the annual Hear to Learn program, which provides hearing screening at Dysart Primary School and Middlemount Community School
- Support the provision of a free bus shuttle service for vulnerable residents in Dysart to access health and other allied services. Jellinbah will subsidise through reimbursing all expenses associated with provision of a service operating one day/ week up to a cap of $30,000 per annum.
- Annual sponsorship of community events orientated towards children and their families, including alcohol-free events
- Provision of financial contribution of $300 per year to Dysart State High School and $240 per year to Dysart State School towards awards for academic and extra-curricular excellence to support local youth achievement

6.3.7 Impact evaluation

Table 6-3 summarises the identified impacts relating to health and community wellbeing and evaluates their significance by employing the approach detailed in Section 2.4.2.

Table 6-3 Health and community wellbeing impact, impact significance and management measure

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
Change in resident and non-resident population levels due to the Project requiring 250 construction workers and an incremental increase of 71 operational workers	Population retention or growth in Dysart, leading to increase in social capital, indirectly contributing to improved community cohesion and connectedness and enhance community vitality	Dysart community	Construction Operations	Positive	High (A1)	• Retain existing Lake Vermont Mine employees who are current Dysart residents, though: - Retaining their position within the existing Lake Vermont Open Cut or transitioning their position to the satellite open cut with the Project - Offering training for worker to retrain or upskill to transition their position to the underground mine with the Project • Maximise local employment through application of a recruitment hierarchy, including actions to: - Target advertising of employment opportunities via local and regional channels (physical and online), such as the CQ Job Link - Establish a project information office at the lake Vermont Accommodation Village in Dysart during Years 1 to 3 to advertise and accept employment applications, and provide opportunity for interested residents to enquire about opportunities in person - Establish a dedicated website to provide key project information - Provide workforce transition incentives for new workers or existing workers on FIFO arrangements to relocate to Dysart, through provision of $130 per week allowance which is included in gross pay - No job opportunities will be advertised as FIFO only position to fully comply with the Anti-Discrimination Act 1991 provisions in the SSRC Act	High (A1)
		Isaac Regional Council	Construction Operations	Positive	High (B1)		High (B1)
	Decrease in community cohesion in Dysart due to increase in non-resident population, potentially in the order of 170 additional non-resident workers during operations, who will be accommodated at Lake Vermont Accommodation Village	Dysart community	Operations	Negative	Medium (B3)	• New workers will be provided with information sheets as part of their induction that details the services, facilities and businesses in Dysart to encourage interaction with the town. Lake Vermont Accommodation Village will also provide an information pack and directory detailing the services, facilities and businesses in Dysart • Maintain initiatives which foster community interaction through delivery of events and initiatives within the community, such as, but not limited to: - Promote Project workforce attendance at Dysart Primary School and Dysart State High School events, including market days, award nights, book weeks, and other celebrations to maintain and enhance relationship building with the local schools and the broader community	Low (C3)
		Isaac Regional Council	Operations	Negative	Low (C3)		Negligible (C4)
	Increase in non-resident workers in Dysart may contribute to concerns about community safety or to amenity impacts through perception that non-resident workers are likely to engage in anti-social behaviour	Dysart community	Operations	Negative	Low (C3)	• Implementation of a workforce code of conduct which describes positive behavioural outcomes and prohibits negative behaviours, with clear ramifications for non-conformance • Six-monthly meeting with Queensland Police Service, Lake Vermont Accommodation Village management and Jellinbah/Thiess to identify and address any anti-social or disruptive workforce behaviour in local communities • Promotion of community complaints procedures to encourage community members and stakeholders to submit complaints and feedback on workforce behaviour • Maintain monitoring of anti-social behaviour through operating CCTV surrounding the Lake Vermont Accommodation Camp	Negligible (C4)
		Queensland Police Service	Operations	Negative	Low (C3)		Negligible (C4)
Change in demand on levels of service of health, social infrastructure and community facilities due to influx of non-resident and new resident workers associated with the Project	Increase in demand for emergency services to respond to increased risk of traffic accidents and workplace accidents at Project site or Lake Vermont Accommodation Village	Emergency services in Dysart, including QAS, QPS and QFES	Construction Operations	Negative	Medium (B3)	• Provision of on-site first aid facilities and trained first aid officers to attend to minor workforce health issues, as well as providing first response services for emergency situations and site accidents • Advance notice to emergency services in Dysart of workforce mobilisation and operational changes	Low (C3)
	Increase in demand for childcare places, indirectly placing pressure on providers and reducing access for other residents of Dysart	Childcare providers in Dysart	Operations	Negative	Medium (B3)	• Monitor workforce demands on childcare and education services and work with stakeholders to support solutions to cumulative demands on social services • Provision of financial contribution to enable existing childcare centre to increase capacity, including: - An upfront contribution of $50,000 towards building expansion of the childcare centre - A contribution of $20,000 per annum to support employment of an additional diploma qualified childcare worker	Low (C3)
		Dysart residents		Negative	Medium (B3)		Low (C3)
	Increase in demand for hospital and health services by the Project workforce, resulting in increased burden for service	Hospital and health services in Dysart	Construction Operations	Negative	Medium (B3)	• Provision of on-site first aid facilities and trained first aid officers to attend to minor workforce health issues, as well as providing first response services for emergency situations and site accidents	Low (C3)

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
	providers and reduced level-of-service for existing residents	Dysart community	Construction Operations	Negative	Medium (B3)	• Collaborate with Queensland Health and other stakeholders to identify and support a solution to the need for additional medical practitioners • Support the provision of a free bus shuttle service for vulnerable residents in Dysart to access health and other allied services. Jellinbah will subsidise through reimbursing all expenses associated with provision of a service operating one day/ week up to a cap of $30,000 per annum.	Low (C3)
Change to access and connectivity on local and regional road networks due to increase in vehicle volume as a result of the Project's construction activities (ie. heavy vehicles) and increase in non-resident and resident workers in Dysart	Increase in risk of road incidents along Saraji Road, Golden Mile Road, Fitzroy Developmental Road and Peak Downs Highway due to increased volume of heavy vehicles and driver fatigue	Road users	Construction Operations	Negative	Medium (C2)	• Provision of shuttle buses to transport workers from Lake Vermont Accommodation Villages to the Project site	Low (C3)
		Isaac Regional Council	Construction Operations	Negative	Low (C3)		Negligible (C4)
		Project construction workforce	Construction Operations	Negative	Medium (C2)		Low (C3)
Change to amenity for nearby receptors at Project site and expansion at Lake Vermont Accommodation Village	Temporary increase in noise and dust due to activities associated with expansion of Lake Vermont Accommodation Village, potentially affecting the learning environment at Dysart State High School	Dysart State High School	Construction	Negative	Medium (B2)	• Provision of advance notice to Dysart State High School and nearby residents on construction activities associated with the expansion of Lake Vermont Accommodation Village	Low (C3)
Acquisition of land to enable expansion at Lake Vermont Accommodation Village	Relinquishment of Native Title due to expansion of Lake Vermont Accommodation Village	Barada Barna Aboriginal Corporation	Pre-construction	Negative	High (B1)	• As per the terms of the Indigenous Land Use Agreement negotiated between Jellinbah and the Barada Barna Aboriginal Corporation	Medium (B2)
Change to level and type of community initiatives and programs	Increase in overall socio-economic wellbeing in Dysart and the broader region through provision of community investment initiatives	Dysart community	Operations	Positive	Medium (B2)	• Support annual NAIDOC celebrations through providing a financial contribution of $1,500 per annum and encouraging employees to participate in NAIDOC events within Dysart • Maintain partnership with RACQ CQ Rescue Helicopter through volunteering and in-kind support, such as regular fundraising, hosting site safety talks with CQ Rescue Staff, and attendance at the annual Gala ball and networking breakfasts	Medium (B2)
		Community groups and service providers in Dysart	Operations	Positive	Medium (B2)	• Employee participation in delivery of the annual Hear to Learn program, which provides hearing screening at Dysart Primary School and Middlemount Community School • Support the provision of a free bus shuttle service for vulnerable residents in Dysart to access health and other allied services. Jellinbah will subsidise through reimbursing all expenses associated with provision of a service operating one day/ week up to a cap of $30,000 per annum. • Annual sponsorship of community events orientated towards children and their families, including alcohol-free events • Provision of financial contribution of $300 per year to Dysart State High School and $240 per year to Dysart State School towards awards for academic and extra-curricular excellence to support local youth achievement	Medium (B2)
		Aboriginal and/or Torres Strait Islander communities	Operations	Positive	Medium (B2)		Medium (B2)

6.4 Local Business and Industry Procurement

This section assesses the potential impacts on local business and industry procurement. The identified social change processes which lead to impacts include:

- Change in availability of supply opportunities for businesses due to the Project requiring skills, services and materials during construction and operations.
- Change to supply and demand of labour for non-mining businesses, due to the Project providing new employment opportunities.
- Change in patronage levels for local business due to increase in incidental spending from a larger workforce.

The impacts of these social change processes are discussed below.

6.4.1 Change in availability of procurement and supply opportunities

The Project will generate additional opportunities for local and regional businesses to supply goods and services to the Project's construction and operation. This has the potential to **enhance economic benefit and productivity for local and regional businesses**, indirectly leading to potential generation of further employment opportunities and overall enhanced productivity in the region. This will positively impact mining and construction businesses in the Isaac and Mackay LGAs, Aboriginal and/or Torres Strait Islander managed or owned businesses, and local industry groups.

Isaac and Mackay LGAs are well-established with mining and construction businesses. Across both LGAs, there were 129 businesses registered in the mining industry in 2018 and 1,702 construction businesses. As the Proponent has been operating in the region since 2009, there are already supply arrangements with local and regional businesses established. In the year to June 2020, the total operating expenditure of the Lake Vermont Mine was over $450,000,000. In the year to June 2019, the Lake Vermont Mine spent $6,856,820 on local and regional suppliers within the Mackay, Clermont, Moranbah and Dysart Areas. Annual local and regional spend increased in the year to June 2020, to $6,930,503, of which over $2 million (30 per cent) was spent within the Dysart postcode.

The Project will increase local and regional spend throughout its construction and operation of the underground mine. This is a significant benefit to local and regional businesses which the Proponent will seek to enhance by implementing procurement policies that encourage local content and are consistent with the values of the *Queensland Resources and Energy Sector Code of Practice for Local Content 2013*.

To maximise supply and procurement opportunities for local and regional businesses where comparative bids are assessed as commercially and technically equivalent, the Proponent has committed to:

- Prepare and adopt a Local Content Policy and Strategy consistent with the values of the Queensland Resources and Energy Sector Code of Practice for Local Content and Australian Industry Participation Framework.
- Maintain relationships with existing local and regional suppliers and notify them of opportunities to tender for the Project.
- Collaborate with the Moranbah Traders Association, Dysart Business Group, Local Content Leaders Network, the ICN and the Isaac Chamber of Commerce when established in ensuring the local and regional supplier listing is tailored to the current context.
- Require the principal contractor to adopt the principles and objectives of the Local Content Strategy into contracts and contracting arrangements.
- Publish details of procurement opportunities and procurement approach on website and publicise links.
- Standard 30 day payment terms for local businesses with ability to reduce to 7 days to support small traders.

The generation of additional procurement and supply opportunities also has the potential to benefit Aboriginal and/or Torres Strait Islander managed or owned businesses. As detailed in Section 5.8.3 of the baseline analysis, there are eight businesses registered in the Isaac LGA that are owned by Aboriginal and/or Torres Strait Islander peoples. Of these businesses, two are located in Moranbah, with other businesses located in Clermont, Nebo and Capella. There are 18 businesses registered in Mackay LGA that are owned by Aboriginal and/or Torres Strait Islander peoples. To maximise supply and procurement opportunities for Aboriginal and/or Torres Strait Islander owner and/or managed businesses, the Proponent has committed to:

- Identify Indigenous businesses in Isaac and Mackay LGAs through development of an Indigenous business register and establish and maintain contact to share tendering opportunities.
- Assign higher preference weightings to local businesses, including Aboriginal and Torres Strait Islander businesses, in competitive bidding processes

- Support delivery of a tender readiness program for Indigenous businesses in collaboration with the Barada Barna Aboriginal Corporation, Department of Employment, Small Business and Training (DESBT) and Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP).
- Support for eligible Indigenous businesses to partner with business development specialists to build capacity.

On the other hand, the generation of new supply and procurement opportunities by the Project has the potential to result in **barriers for local, small and/or new businesses in tendering for Project procurement opportunities**. To minimise the negative effect associated with barriers for local, small and/or new businesses in tendering for Project procurement opportunities, the Proponent has committed to implementation of a Local Content Strategy which include the following:

- Advertise tender opportunities locally and through established networks.
- Breaking large contracts into smaller ones to create opportunities for smaller local suppliers.
- Capability development programs to assist local businesses increase their competitive position.
- Publicly report the number of contracts/purchase orders awarded in addition to the value of those contracts across geographical areas.
- Attend and maintain membership with industry bodies that help connect with the local business and wider mining community.
- Standard 30 day payment terms for local businesses with ability to reduce to 7 days to support small traders.

6.4.2 Change to supply and demand of labour in non-mining businesses

The Project has the potential to result in a **shortage of labour and skills for non-mining local and regional employers** due to workers taking up employment with the Lake Vermont Meadowbrook Complex, which may indirectly contribute to decreasing economic diversity in the region. Attracting and retaining a skilled labour force is a critical yet complex issue for rural and remote communities.

As detailed in Section 5.7.1 of the baseline analysis, Dysart has few secondary industries outside the mining sector, with the mining industry employing 48.5 per cent of Dysart's labour force. The following key industries of employment for Dysart residents are education and training, and accommodation and food services. The dominance of the mining industry in the labour force indicates that Dysart's economy lacks employment diversification, which contributes to the town's vulnerability to fluctuation of external demand for minerals and subsequent supply and demand of labour (Marais et al., 2018). As such, the relatively high wages offered by new mining projects, coupled with incentives for people who live locally, may result in a labour draw from other non-mining businesses in local and regional communities. As local and regional communities have a relatively small labour pool, the loss of such employees quickly translates to a localised shortage of skills.

However, due to the minor incremental increase in workforce associated with the Lake Vermont Meadowbrook Complex of up to 70 workers, the negative impact of a shortage of labour and skills for non-mining local and regional employers is expected to be of low significance.

6.4.3 Change in patronage levels for local business

The Project has the potential to **enhance business viability in Dysart due to increase in patronage**, indirectly maintaining or generating employment opportunities. In addition, the Project has the potential to **increase entrepreneurism due to an enhanced business environment**, contributing to development of new businesses in Dysart or revitalisation for formerly closed businesses.

The Dysart Garden Plaza host many of the town's retail businesses, including a bakery, newsagency and post office, and hairdresser. A major concern raised by all stakeholders during SIA engagement was the state of the Dysart Shopping Centre. The Dysart Shopping Centre was once viewed as the heart of Dysart. However, high rents and subsequent high turnover of tenants has resulted in much of the shopping centre now being empty. Dysart residents typically travel to Middlemount for their shopping, which is approximately a 45-minute drive from Dysart.

Stakeholders engaged during SIA engagement expressed that businesses in Dysart suffered during the downturn of the mining industry from 2021, with businesses closing such as the ANZ bank, the butcher and clothing stores. This was noted to also be exacerbated by the presence of the WAVs, which typically provide an on-site general store. Further, community groups have stated that the normalisation of the FIFO workforce and WAVs has negatively impacted local businesses in Dysart, with the only local business that profit being the service stations as workers buy fuel as they are leaving town.

An increase in both residential and non-residential populations in Dysart will contribute to positive economic activity for local businesses through increased workforce expenditure, such as at food and retail stores. Given

the minor increase in workforce size associated with the Lake Vermont Meadowbrook Project, it is not expected that the increased patronage at local businesses would negatively affect other residents of Dysart. As such, local businesses in Dysart, such as the IGA and the bakery, has capacity to benefit from increased patronage.

To enhance the benefits associated with increase in patronage and entrepreneurism for local businesses, the Proponent is committed to:

- Encourage non-resident and resident workers to engage with local businesses through provision of an information pack and community directory, which includes list of businesses and services available in Dysart, including detail on opening hours and services provided. The information pack and community directory will be provided to all new workers who relocate to Dysart, and distributed throughout the common areas of the Lake Vermont Accommodation Village.
- Maximise supply and procurement opportunities for local and regional businesses where competitive bids are assessed as commercially and technically equivalent, and Local Content Strategy to include initiatives to reduce barriers for local, small and/or new businesses and to enhance their capacity to tender for Project supply opportunities.

6.4.4 Impact evaluation

Table 6-4 summarises the identified impacts relating to local business and industry procurement and evaluates their significance by employing the approach detailed in Section 2.4.2.

Table 6-4 Local business and industry procurement impact, impact significance and management measure

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
Change in availability of supply opportunities for businesses due to the Project requiring skills, services and materials during construction and operations	Enhanced economic benefit and productivity for local and regional businesses, indirectly leading to potential generation of further employment opportunities and overall enhance productivity in regions	Mining and construction businesses in Isaac and Mackay LGAs	Pre-cons Construction Operations	Positive	Medium (B2)	• Maximise supply and procurement opportunities for local and regional businesses where comparative bids are assessed as commercially and technically equivalent, including actions to: - Prepare and adopt a Local Content Policy and Strategy consistent with the values of the Queensland Resources and Energy Sector Code of Practice for Local Content and Australian Industry Participation Framework - Maintain relationships with existing local and regional suppliers and notify them of opportunities to tender for the Project - Collaborate with the Moranbah Traders Association, Dysart Business Group, Local Content Leaders Network, the ICN and the Isaac Chamber of Commerce when established in ensuring the local and regional supplier listing is tailored to the current context - Require the principal contractor to adopt the principles and objectives of the Local Content Strategy into contracts and contracting arrangements - Publish details of procurement opportunities and procurement approach on website and publicise links - Standard 30 day payment terms for local businesses with ability to reduce to 7 days to support small traders • Maximise supply and procurement opportunities for Aboriginal and/or Torres Strait Islander owned and/or managed businesses, including actions to: - Identify Indigenous businesses in Isaac and Mackay LGAs through development of an Indigenous business register and establish and maintain contact to share tendering opportunities - Assign higher preference weightings to local businesses, including Aboriginal and Torres Strait Islander businesses, in competitive bidding processes - Support delivery of a tender readiness program for Indigenous businesses in collaboration with the Barada Barna Aboriginal Corporation, DESBT and DATSIP - Support for eligible Indigenous businesses to partner with business development specialists to build capacity	Medium (B2)
		Indigenous owned and/or managed businesses	Pre-cons Construction Operations	Positive	Medium (B2)		Medium (B2)
		Local industry groups	Pre-cons Construction Operations	Positive	Low (C2)		Low (C2)
	Barriers for local, small and/or new businesses in tendering for Project procurement opportunities due to potential monopolisation	Small or new businesses in Isaac LGA	Pre-cons Construction Operations	Negative	Medium (B2)	• Local Content Strategy to include initiatives to reduce barriers for local, small and/or new businesses and to enhance their capacity to tender for Project supply opportunities, including: - Advertise tender opportunities locally and through established networks - Breaking large contracts into smaller ones to create opportunities for smaller local suppliers - Capability development programs to assist local businesses increase their competitive position - Publicly report the number of contracts/purchase orders awarded in addition to the value of those contracts across geographical areas - Attend and maintain membership with industry bodies that help connect with the local business and wider mining community. - Standard 30 day payment terms for local businesses with ability to reduce to 7 days to support small traders • Engage a local and/or small business to operate the free bus shuttle service for vulnerable residents in Dysart to access health and other allied services. Jellinbah will subsidise through reimbursing expenses of providing a service operating one day/week up to a cap of $30,000 per annum • Target local and/or Aboriginal and/or Torres Strait Islander owned or managed businesses to undertake rehabilitation activities, such as tree planting, on decommissioned areas of the Lake Vermont open cut site	Low (C3)
Change to supply and demand of labour in non-mining businesses, due to Project providing employment opportunities	Shortage in labour and skills for non-mining local and regional employers due to workers taking up employment with the Project, indirectly decreasing employment and economic diversity in region	Non-mining business and industry in Dysart and Isaac LGA region	Construction Operations	Negative	Low (C3)	• *No management measure applicable*	Low (C3)
		Isaac Regional Council	Construction Operations	Negative	Low (C3)		Low (C3)

Social change process and project activity	Social impact	Stakeholder group affected	Phase	Nature	Prelim Sign.	Management Measure	Residual Sign.
Change in patronage levels for local business due to increase in incidental spending associated with influx of new non-resident and resident workers in Dysart	Enhanced business viability in Dysart due to increase in patronage, indirectly maintaining or generating employment opportunities	Businesses in Dysart		Positive	Medium (B2)	• Encourage non-resident and resident workers to engage with local businesses through provision of an information pack and community directory, which includes list of businesses and services available in Dysart, including detail on opening hours and services provided. The information pack and community directory will be provided to all new workers who relocate to Dysart, and distributed throughout the common areas of the Lake Vermont Accommodation Village	Medium (B2)
	Increase in entrepreneurism due to enhanced business environment, contributing to development of new businesses in Dysart, or revitalisation for formerly closed businesses	Community, new business, innovators	Construction Operations	Positive	Medium (C2)	• As above. • Maximise supply and procurement opportunities for local and regional businesses where competitive bids are assessed as commercially and technically equivalent, and Local Content Strategy to include initiatives to reduce barriers for local, small and/or new businesses and to enhance their capacity to tender for Project supply opportunities	Medium (C2)

6.5 Cumulative effects

A community may experience cumulative impacts when multiple projects occur in a similar timeframe. This has a tendency to particularly occur in the resources sector, as when demand reaches a particular threshold, multiple projects become commercially viable and subsequently are advanced to development. Simultaneous advancement of multiple projects exacerbates social and economic impacts and benefits. This section considers the potential cumulative impacts of proposed large resource projects which have completed or are undergoing an EIS process.

6.5.1 Projects contributing to cumulative effects in Isaac LGA

Communities throughout the Bowen Basin which are economically and socially tied to the coal industry have gone through boom and bust cycles throughout their history. These result in substantial population fluctuation and subsequent effects on housing, social infrastructure and community values, which can test the resilience of communities.

Projects identified as being relevant to cumulative impacts are those which would likely contribute to changed social conditions in the local study area and are currently engaged in, or have completed, an EIS process under the EP Act or SDPWO Act. This is specifically limited to Dysart and Moranbah. Dysart and Moranbah are communities which has historically been affected by boom and bust mining cycles and is therefore the focus of the assessment of cumulative impacts. Table 6-5 outlines the projects which may potentially contribute to cumulative social effects in Dysart and/or Moranbah.

Table 6-5 Summary of projects located within the Isaac LGA

Project	Proponent	Status	Peak workforce
Saraji East	BMA	EIS submitted (EP Act) Construction: 2022 Operations: 2024	Construction: 1,000 Operations: 500
Red Hill	BMA	EIS approved with conditions in 2015 (SDPWO Act) Construction: 2020 Operations: 2023	Construction: 2,000 Operations: 1,500
Olive Downs	Pembroke	EIS approved with conditions in 2019 (SDPWO Act) Construction: 2020 Operations: 2021	Construction: 500 Operations: 960
Winchester South	Whitehaven	Draft EIS currently under preparation (SDPWO Act) Construction: 2022 Operations: 2024	Construction 500 Operations: 450
Eagle Downs	South 32	EIS approved with conditions (EP Act) Construction: 2021 Operations: 2023	Construction: 360 Operations: 570
Moranbah South	Anglo Coal/ Exxaro	EIS approved with conditions (EP Act) Construction: 2021 Operations: 2024	Construction: 878 Operations: 1,314
Isaac Downs	Stanmore Coal	EIS approved with conditions (EP Act) Construction: 2021	Construction: 250 Operations: 80

Project	Proponent	Status	Peak workforce
		Operations: 2022	

Source: Department of Environment and Science, 2019; Office of the Coordinator-General, 2019.

Proposed projects in close proximity to Dysart include Saraji East, Olive Downs and Winchester South. However, Saraji East is considered the only proposed project likely to contribute to key cumulative effects on Dysart due to its proximity to Dysart

6.5.2 Cumulative effects during construction

The key cumulative effect during construction is with regard to demand for construction labour, which has the potential to generate significant competition for labour. The construction of projects outlined in Table 6-5 are proposed to occur between 2021 and 2023, which is the same construction timeframe for the Project. Demand for construction labour is expected to peak in 2022, with a demand for approximately 5,438 construction workers (Figure 6-1). In 2022, the Project is projected to represent approximately 3.7 per cent of the total demand for construction labour.

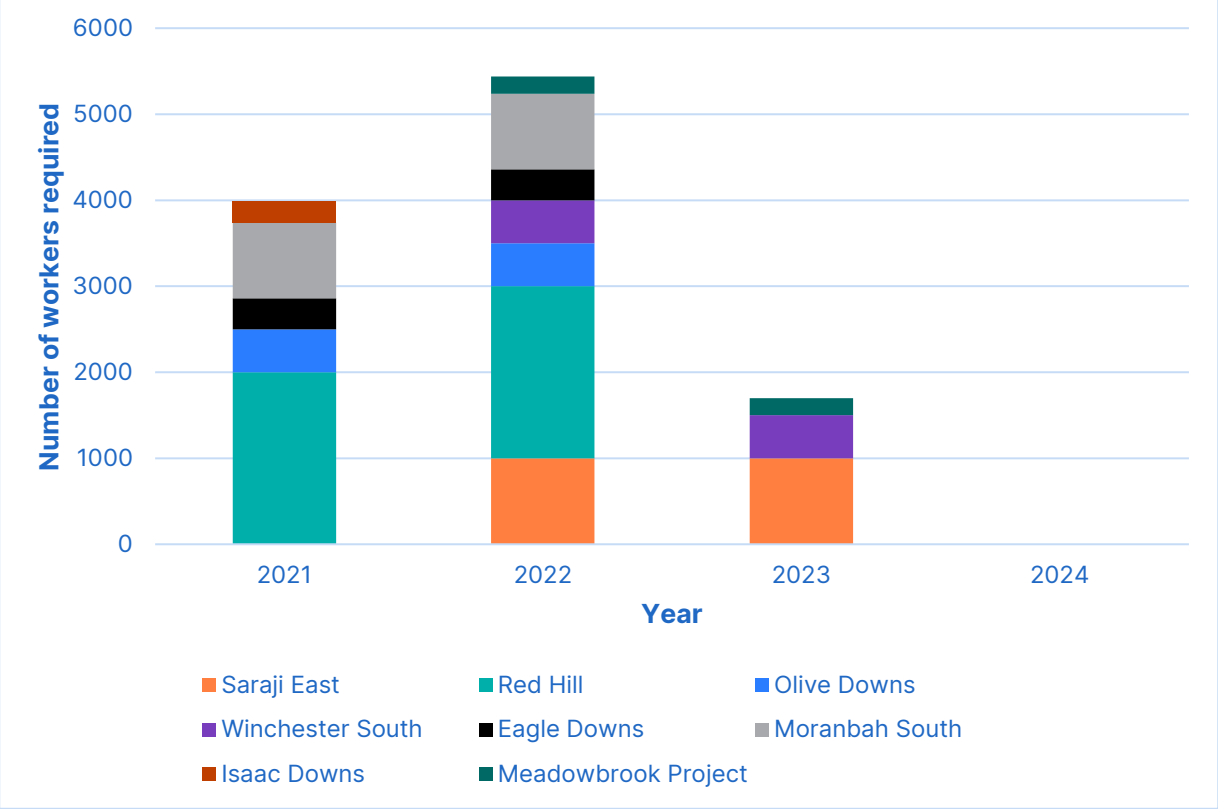

Figure 6-1 Cumulative demand for construction labour

With an unemployment rate of 1.4 per cent (166 unemployed people) in the Isaac LGA at September 2021, there is limited elasticity in the local employment market. Therefore, competition for construction labour within the Isaac LGA is considered a key cumulative impact during the Project's construction phase should the projects outlined in Table 6-5 also eventuate. However, overall the Project will contribute a small cumulative effect as construction of the Project only requires 250 workers.

Other potential cumulative effects during the Project's construction may include:

- Significant increase in non-residential worker population in the Isaac LGA, potentially exacerbating existing community concern about presence of non-local workers.
- Increase the traffic on local and state roads within the Isaac LGA, due to increased volume of private vehicles associated with construction workers travelling to and from their site of accommodation at the start and end of their shifts.
- Increase in demand on local health services, Queensland Police, Ambulance, and Fire and Emergency Service resources to cater for increase in non-resident and resident population, subsequently resulting in a demand for increased Government funding to ensure adequate capacity and service provision.
- Increase in demands on Council infrastructure such as water and waste water systems and municipal services, due to expansion of existing WAVs or the establishment of new WAVs.

- Labour draw from other businesses and industries who are dependent on construction labour and skills, potentially State-wide.
- Overall increase in patronage for retail, hospitality, fuel and food venues in Dysart, which would be experienced as a positive impact for local businesses.

6.5.3 Cumulative effects during operations

Assuming all identified projects commence operations within their currently scheduled timeframes, the cumulative demand for operations labour by year 2028 is 6,114 workers (Figure 6-2). The BMA projects of Saraji East and Red Hill contribute 32.7 per cent of cumulative demand for operational labour. The contribution of the Project to cumulative operations employment demand is estimated to be 6.5 per cent.

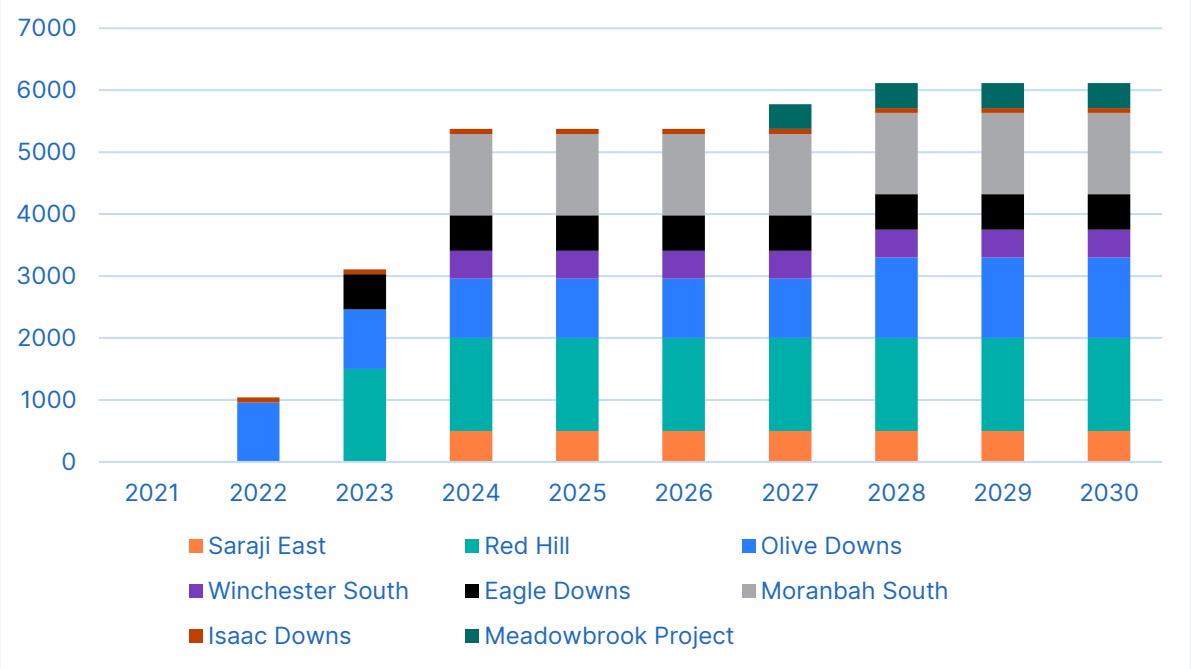

Figure 6-2 Cumulative demand for mining labour

However, due to the minor incremental decline in employment numbers at the Lake Vermont Meadowbrook Complex (in the order of up to 18 jobs), the operation of the Project is anticipated to generate a very minor contribution to cumulative effects. Nevertheless, the operation of the Project may contribute to the following positive and negative cumulative effects:

- Residential population growth in Dysart, subsequently supporting the future growth and prosperity of the town.
- Overall increase in the demand on social infrastructure, community services, emergency services and council facilities, subsequently resulting in a demand for increasing funding to ensure adequate capacity and service provision.
- Increase in employment rates, labour force participation and socio-economic wellbeing for communities in the Isaac LGA, positively contributing to community vitality and prosperity.

The assessment of cumulative effects during Project operations is based on an assessment of the worst-case scenario, which involves all identified projects commencing operating in the same time period. However, historical evidence clearly indicates that it is unlikely that all of the projects will commence operations as per their stated scheduled timeframes.

6.6 Impacts associated with Project not proceeding

The Project is an extension to the existing Lake Vermont Mine in order to maintain existing and approved production levels. Lake Vermont Mine has been operating since 2009 and has established strong linkages with the Dysart community, including supporting community events and assisting with the provision of important services, in addition to being a key employer for Dysart residents. Production output of Lake Vermont Mine is expected to decline by 2028, which will result in a loss of 418 jobs, including roles held by existing Dysart residents. However, the Project will offset the job losses through requiring 410 employees during its operational phase. As such, there are potential social impacts associated with the Project not proceeding. Table 6-6 details the potential social impacts of the Project not proceeding across the key SIA matters.

Table 6-6 Social impacts associated with Project not proceeding

Impact	Nature	Unmanaged impact significance
Workforce Management		
Decline in employment opportunities available for residents of Dysart and the Isaac LGA	Negative	Medium
Decline in worker wellbeing and mental health due to job losses	Negative	Medium
Decline in training and upskilling opportunities available for residents of Dysart, the Isaac LGA and the broader region	Negative	Medium
Housing and Accommodation		
Increased availability of dwellings in Dysart due to outmigration of former resident workers and subsequent dwellings coming to market	Positive	Low
Reduced investor confidence in local housing market due to reduced demand for dwellings	Negative	Medium
Decline in housing market stimulation due to reduced demand for dwellings	Negative	Low
Increased affordability of dwellings and rents due to reduced demand for dwellings	Positive	Low
Health and Community Wellbeing		
Reduced social capital and community cohesion in Dysart due to outmigration of former Lake Vermont Mine resident workers	Negative	Medium
Reduced overall socio-economic wellbeing in Dysart and the broader region through reduction in level of community initiatives and programs supported by the Proponent and the principal contractor	Negative	High
Increased amenity for adjacent and nearby landholders to project mine site due to reduction in mining activities	Positive	Low
Reduced risk of road and traffic incidents due to reduced volume of traffic on local and regional road networks	Positive	Low
Local Business and Industry Procurement		
Decline in supply and procurement opportunities for local and regional businesses	Negative	High
Reduced economic prosperity for local businesses due to outmigration of Dysart residents and non-residents accommodated at local WAVs	Negative	High
Loss of non-mining local employment and business opportunities due to reduced capacity at Lake Vermont Accommodation Village	Negative	Low
Community and Stakeholder Engagement		
Breakdown of partnerships with key stakeholders	Negative	Medium
Loss of trust between stakeholders and the Proponent due to established SIMP commitments not going ahead	Negative	High

7 Monitoring, review and update of SIA

The potential social impacts identified in this SIA reflect the existing social conditions and trends within the SIA study area at the time of assessment. The SIA recognises that the social context of the Bowen Basin is fluid and can radically change due to the cyclical nature of the mining industry.

It should also be noted that in the period of time which this SIA was developed, the global COVID-19 pandemic occurred. Major effects associated with the pandemic such as the closure of state borders and workplace and travel restrictions, have led to rapid changes to prevailing socio-economic conditions. As these changes are still emerging, there has been no attempt to update baseline socio-economic characteristics or resultant changes to identified impacts and how they are proposed to be managed. It is recognised that if the COVID-19 pandemic is to result in long term changes, the SIA will be reviewed and accordingly revised.

The SIA would be updated as per conditions set by the Coordinator-General as per Section 11 of the SSRC Act. To ensure that the Project's social management measure remain current and effective, the Proponent is required to monitor the implementation of the SIMP throughout the Project lifecycle. Consistent with the SIA principle of adaptive management, the SIMP includes a monitoring framework for each sub-plan which details the desired outcomes to be used to measure the effectiveness of the management measures of key impacts of the life of the Project.

8 Conclusion

This SIA has been conducted to evaluate the social impacts and benefits associated with the Project. The SIA was completed in compliance with applicable legislation and guidelines, including the SSRC Act, the SIA Guideline, and the Terms of Reference specific to the Project.

The Project will have various social impacts and benefits, primarily accruing in Dysart, but with employment opportunities and benefits for businesses extending to other regions including the Isaac LGA and Mackay LGA. As an existing mining operator, the Proponent has a proven record of maximising local employment and actively supports members of the workforce to live locally. Due to the minor incremental increase in workforce size, the Project is not expected to have a significant impact on housing and accommodation or on service provision.

Table 8-1 below summarises the identified and assessed impacts of the Project.

Table 8-1 Summary of Project social impacts

Social impact	Stakeholders affected	Nature	Managed significance
Workforce Management			
Increase in labour force participation and reduction in number of unemployed people, particularly for identified underrepresented groups in the labour force, indirectly enhancing socio-economic wellbeing of individuals and communities in the Isaac LGA region	Unemployed people and jobseekers in Dysart and Isaac LGA region	Positive	Medium
	Isaac Regional Council	Positive	Medium
	Identified underrepresented groups in the labour force, including women, Aboriginal and/or Torres Strait Islander peoples and young people (15 to 24 years)	Positive	High
Exacerbate shortage in construction and mining skills and labour in Isaac LGA region due to increase in competition for labour	Isaac Regional Council	Negative	Negligible
	Other nearby mining projects	Negative	Low
Retention of existing Dysart residents employed at Lake Vermont Mine	Lake Vermont resident workers	Positive	High
	Dysart community	Positive	Medium
Increase in opportunities for young people or those with no previous underground mining experience to gain skills relevant to the Project	Young people or people with no previous underground mining experience	Positive	Medium
Increase in risk to mental health, safety and wellbeing of workers, including work stress exacerbated by fatigue	Project workforce	Negative	Low
	Health and social services in Dysart	Negative	Low
	Emergency services in Dysart	Negative	Low
Increase in stress and/or anxiety for families of workers who are employed on a FIFO basis, indirectly contributing to family breakdown	Families of project workforce	Negative	Low
Housing and Accommodation			
Potential for temporary increases in rental prices due to perceived economic uplift in Dysart contributed to by the Project, which may place some pressure on low-income rental households	Low-income rental households in Dysart Project workforce	Negative	Low

Social impact	Stakeholders affected	Nature	Managed significance
Increased demand for quality houses sought after by families who relocate to Dysart to take up employment with the Project	Project workforce Dysart community	Negative	Low
Increase in financial returns for property owners in Dysart, with increase in demand for housing resulting unoccupied dwellings coming back on the market	Property owners and investors in Dysart	Positive	Medium
Reduced availability of dwellings for rent or purchase in Dysart may limit options for new resident operations workers	Project workforce	Negative	Low
Enhanced economic productivity for short-term accommodation providers due to increase in patronage, indirectly maintaining and/or increasing employment opportunities	Short-term accommodation providers in Dysart	Positive	Medium
Constrained access to short-term accommodation for tourists visiting Dysart, particularly self-drive tourists, indirectly reducing the number of tourists visiting Dysart	Tourists visiting Dysart	Negative	Negligible
	Isaac Regional Council	Negative	Negligible
Local Business and Industry Procurement			
Enhanced economic benefit and productivity for local and regional businesses, indirectly leading to potential generation of further employment opportunities and overall enhance productivity in regions	Mining and construction businesses in Isaac and Mackay LGAs	Positive	Medium
	Indigenous owned and/or managed businesses	Positive	Medium
	Local industry groups	Positive	Low
Barriers for local, small and/or new businesses in tendering for Project procurement opportunities due to potential monopolisation	Small or new businesses in Isaac LGA	Negative	Low
Shortage in labour and skills for non-mining local and regional employers due to workers taking up employment with the Project, indirectly decreasing employment and economic diversity in region	Non-mining business and industry in Dysart and Isaac LGA region	Negative	Low
	Isaac Regional Council	Negative	Low
Enhanced business viability in Dysart due to increase in patronage, indirectly maintaining or generating employment opportunities	Businesses in Dysart	Positive	Medium
Increase in entrepreneurism due to enhanced business environment, contributing to development of new businesses in Dysart, or revitalisation for formerly closed businesses	Community, new business, innovators	Positive	Medium
Health and Community Wellbeing			
Population retention or growth in Dysart, leading to increase in social capital, indirectly contributing to improved community cohesion and connectedness and enhance community vitality	Dysart community	Positive	High
	Isaac Regional Council	Positive	High
Decrease in community cohesion in Dysart due to increase in non-resident population, potentially in the order of 170 additional non-resident workers during operations, who will be accommodated at Lake Vermont Accommodation Village	Dysart community	Negative	Low
	Isaac Regional Council	Negative	Negligible
Increase in non-resident workers in Dysart may contribute to concerns about community safety or to amenity impacts through perception that non-resident workers are likely to engage in anti-social behaviour	Dysart community	Negative	Negligible
	Queensland Police Service	Negative	Negligible

Social impact	Stakeholders affected	Nature	Managed significance
Increase in demand for emergency services to respond to increased risk of traffic accidents and workplace accidents at Project site or Lake Vermont Accommodation Village	Emergency services in Dysart, including QAS, QPS and QFES	Negative	Low
Increase in demand for childcare places, indirectly placing pressure on providers and reducing access for other residents of Dysart	Childcare providers in Dysart	Negative	Low
	Dysart residents	Negative	Low
Increase in demand for hospital and health services by the Project workforce, resulting in increased burden for service providers and reduced level-of-service for existing residents	Hospital and health services in Dysart	Negative	Low
	Dysart community	Negative	Low
Increase in risk of road incidents along Saraji Road, Golden Mile Road, Fitzroy Developmental Road and Peak Downs Highway due to increased volume of heavy vehicles and driver fatigue	Road users	Negative	Low
	Isaac Regional Council	Negative	Negligible
	Project workforce	Negative	Low
Temporary increase in noise and dust due to activities associated with expansion of Lake Vermont Accommodation Village, potentially affecting the learning environment at Dysart State High School	Dysart State High School	Negative	Low
Relinquishment of Native Title due to expansion of Lake Vermont Accommodation Village	Barada Barna Aboriginal Corporation	Negative	Medium
Increase in overall socio-economic wellbeing in Dysart and the broader region through provision of community investment initiatives	Dysart community	Positive	Medium
	Community groups and service providers in Dysart	Positive	Medium
	Aboriginal and/or Torres Strait Islander communities	Positive	Medium

As the Project is to be an extension to the existing Lake Vermont Mine in order to maintain existing and approved production levels, there are impacts associated with the Project not proceeding. A key impact of the Project not proceeding is the loss of workers, with subsequent negative effects on Dysart through population loss and decreased community and social initiatives.

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Appendix A Capacity assessment of nearby regional communities

Overview

The Project's EIS terms of reference stipulates the requirement for the SIA to include an analysis of the capacity of relevant towns within 125 km radius of the Project's proposed main access to provide workers for the construction and operational phases of the Project.

The SSRC Act ensures that residents of communities near large resource projects (LRPs) benefit from the construction and operation of those projects. A nearby regional community (NRC) for a LRP means a town that is located within a 125 km radius of the main access to the project, and that has a population of more than 200 people.

The existing Lake Vermont Coal Mine was published as a LRP under the SSRC Act on 29 March 2019, with eight NRCs including Capella, Clermont, Dysart, Emerald, Middlemount, Moranbah, Nebo and Tieri. Seven of these NRCs apply to the Project, with Emerald being located outside the 125 km radius of the Project's main access, and the NRC of Glenden also apply to the Project.

Existing capacity of nearby regional communities

There are eight NRCs for the Project, all with varying distances from the Project's main access (Appendix A Table 1). Dysart is the only NRC within the safe commute distance of one-hour from the Project's main access.

Appendix A Table 1 Overview of Nearby Regional Communities

Local Government Area	NRC	Distance from Project's main access			NRC for other LRPs (as at Jan 2021)
		Straight-line distance	Driving distance	Driving time	
Isaac Regional Council	Dysart	24.5 km	30 km	21 min	31
	Moranbah	49.1 km	115 km	1h 15 min	26
	Middlemount	60.8 km	100 km	1h 4 min	28
	Nebo	81.3 km	172 km	1h 46 min	23
	Glenden	113.9 km	232 km	2 h 35 min	23
	Clermont	88.7 km	118 km	1h 20 min	24
Central Highlands Regional Council	Tieri	73.4 km	108 km	1h 12 min	27
	Capella	85.4 km	107 km	1h 17 min	25

The localities are NRCs for numerous other listed LRPs under the SSRC Act. Dysart is a declared NRC for 31 LRPs, accounting for 44.9 per cent of the total declared LRPs in Queensland at January 2021.

With the exception of Moranbah, all NRCs experienced population decline over the five years to 2019 (Appendix A Table 2). The greatest decline was recorded in Glenden, with a loss of nearly half of its population. However, this is attributable to the nearby Newlands Coal Mine project and its adoption of a 7-days on, 7-days off roster, which catalysed an outmigration of resident mine workers.

Appendix A Table 2 Population and labour force characteristics of Nearby Regional Communities

Local Government Area	NRC	Population			Labour force (2016)		Unemployment (2016)	
		2014	2019	Change 2014-19 (%)	No.	Participation rate (%)	No.	Rate (%)
Isaac Regional Council	Dysart	2,788	2,329	-16.5	1,094	45.0	73	6.1
	Moranbah	8,696	8,732	0.4	4,369	74.6	244	5.6
	Middlemount	2,099	1,699	-19.1	937	70.9	30	3.2
	Nebo	525	494	-5.9	239	59.0	12	5.0
	Glenden	1,007	544	-46.0	324	75.9	18	5.6
	Clermont	2,214	2,059	-7.0	951	62.2	50	5.3
Central Highlands Regional Council	Tieri	1,418	1,031	-27.3	519	67.7	23	4.4
	Capella	1,005	964	-4.1	494	62.5	28	5.7

At the 2016 Census, Coal Mining was the top industry of employment across all NRCs. Across the NRCs, Tieri recorded the highest proportion of its labour force working in the Coal Mining industry, with 62.5 per cent, while Capella recorded the lowest proportion with 19.2 per cent. The top occupation of employment across the NRCs were either Technicians and Trades Workers or Machinery Operators and Drivers.

Appendix A Table 3 Skills characteristics of Nearby Regional Communities, 2016

NRC	Key industries	Key occupations
Capella	1. Coal Mining (19.2%) 2. Beef Cattle Farming (5.3%) 3. Primary Education (5.3%)	1. Technicians and Trades Workers (20.0%) 2. Machinery Operators and Drivers (19.8%) 3. Labourers (14.4%)
Clermont	1. Coal Mining (28.2%) 2. Local Government Administration (6.8%) 3. Primary Education (4.8%)	1. Technicians and Trades Workers (21.3%) 2. Machinery Operators and Drivers (21.2%) 3. Professionals (12.7%)
Dysart	1. Coal Mining (50.7%) 2. Primary Education (4.0%) 3. Building and Other Industrial Cleaning Services (3.3%)	1. Machinery Operators and Drivers (30.9%) 2. Technicians and Trades Workers (22.3%) 3. Labourers (11.9%)
Glenden	1. Coal mining (55.9%) 2. Primary Education (6.0%) 3. Supermarket and Grocery Stores (5.0%)	1. Technicians and Trades Workers (24.4%) 2. Machinery Operators and Drivers (24.4%) 3. Professionals (15.3%)
Middlemount	1. Coal Mining (55.1%) 2. Combined Primary and Secondary Education (4.6%) 3. Building and Other Industrial Cleaning Services (3.5%)	1. Machinery Operators and Drivers (30.7%) 2. Technicians and Trades Workers (23.7%) 3. Professionals (11.5%)

NRC	Key industries	Key occupations
Moranbah	1. Coal Mining (39.1%) 2. Primary Education (3.4%) 3. Local Government Administration (3.3%)	1. Technicians and Trades Workers (24.3%) 2. Machinery Operators and Drivers (22.1%) 3. Professionals (13.3%)
Nebo	1. Coal Mining (31.7%) 2. Rail Freight Transport (12.1%) 3. Local Government Administration (11.6%)	1. Machinery Operators and Drivers (35.2%) 2. Technicians and Trades Workers (20.2%) 3. Labourers (11.6%)
Tieri	1. Coal Mining (62.5%) 2. Primary Education (3.8%) 3. Supermarket and Grocery Stores (2.3%)	1. Technicians and Trades Workers (28.9%) 2. Machinery Operators and Drivers (20.8%) 3. Professionals (12.0%)

All eight NRCs experienced losses of construction and mining industry workers between 2011 and 2016, which is largely attributed to the downturn of the mining industry from 2012 (Appendix A Table 4).

Appendix A Table 4 Construction and mining industry profile of Nearby Regional Communities

NRC	Construction industry					Mining industry				
	2011	2016	Change (no)	Change (%)	% of total industries 2016	2011	2016	Change 2011-2016	Change 2011-2016 (%)	% of total industries 2016
Capella	59	41	-18	-30.5	8.8	112	99	-13	-11.6	21.2
Clermont	72	44	-28	-38.9	4.9	338	248	-90	-26.6	27.6
Dysart	61	31	-30	-49.2	3.0	813	496	-317	-39.0	48.5
Glenden	27	3	-24	-88.9	1.0	377	154	-233	-59.2	49.8
Middlemount	39	14	-25	-64.1	1.5	581	509	-72	-12.4	56.1
Moranbah	284	132	-152	-53.5	3.2	2,127	1,732	-395	-18.6	41.9
Nebo	26	14	-12	-46.2	6.3	86	72	-14	-16.3	32.6
Tieri	14	5	-9	-64.3	1.0	397	297	-100	-25.2	59.6

Glenden experienced the largest outmigration of both construction and mining industry workers. Dysart also experienced a significant outmigration of construction and mining industry workers, with its resident mining workforce declining by 39 per cent. This is likely attributable to the decommissioning of the nearby Norwich Park Coal Mine.

Assessment of capacity of nearby regional communities

Assessment of capacity of NRCs to supply workers to the project was undertaken with consideration of the following elements:

- Driving distance of nearby regional community from the Project's main access.
- Population size of the nearby regional community.
- Unemployment and skills profile of the nearby regional community.
- Proximity of nearby regional community to other large resource projects.

Appendix A Table 6 provides a summary of the capacity assessment of the NRCs.

Appendix A Table 5 Capacity assessment of Nearby Regional Communities

NRC	Assessment of capacity to supply workers to the Project	Capacity
Capella	Capella is determined to have low capacity to supply workers to the Project due to being located outside of safe commuting distance from the Project, comprising a small population with its local economy diverse, and being in close proximity to several other large resource projects.	Low
Clermont	Clermont is determined to have low capacity to supply workers to the Project due to being located outside of safe commuting distance from the Project. Clermont is also in close proximity to large resource projects.	Low
Dysart	Dysart is determined to have high capacity to supply workers to the Project due to being located within a safe commuting distance. As such, workers who elect to commute daily to and from their shift (i.e. not reside at a WAV) are strongly likely to permanent reside in Dysart. Coal Mining is an existing key employer of Dysart residents, employing over half of the employed residents. Dysart is an existing nearby regional community for 44.9 per cent of large resource projects in Queensland.	High
Glenden	Glenden is determined to have low capacity to supply workers to the Project due to being located outside of safe commuting distance. Glenden also comprise a small and rapidly declining population. The community is in close proximity to the Newlands Mine, who is a key employer of residents.	Low
Middlemount	Middlemount is determined to have low capacity to supply workers to the Project as it is located outside of safe commuting distance. Coal mining is a key employer in the town, though most are associated with the nearby AngloAmerican mine projects.	Low
Moranbah	Moranbah is determined to have moderate capacity to supply workers to the Project. While Moranbah is located outside of safe commuting distance from the Project, it is the region's largest residential centre with nearly 9,000 residents. Workers residing in Dysart likely to interact with Moranbah due to its role as a key service centre in the region, providing higher order services and retail.	Moderate
Nebo	Nebo is determined to have low capacity to supply workers to the Project due to being located outside of safe commuting distance from the Project, comprising a small population with its local economy diverse, and being in close proximity to several other large resource projects.	Low
Tieri	Tieri is determined to have low capacity to supply workers to the Project due to being located outside of safe commuting distance from the Project. Tieri is also in close proximity to large resource projects.	Low

Therefore, the assessment has determined that Dysart has high capacity to provide workers to the Project, either as existing residents or workers to relocate to Dysart as new residents. Moranbah is assessed as having moderate capacity to supply workers to the Project due to its population size and comprising a larger pool of labour. As such, Dysart and Moranbah are included in the SIA study areas to report on the potential impacts of a resident workforce on housing and social infrastructure.

Appendix B **Stakeholder identification and analysis**

Appendix B Table 1 Stakeholder identification and analysis

Group	Stakeholder	Extent of impact	Influence of project on Stakeholder	Engagement level	Likely key issues / interests	SIA key matter			
						Workforce management	Housing and accommodation	Local business and industry procurement	Health and community well-being
State Agency	Office of the Coordinator-General	High	High	Collaborate	• Scope of SIA and stakeholder engagement process • Application of SSRC Act and SIA Guideline (2018) • Impact assessment findings and significance • Management planning	✓	✓	✓	✓
	Department of Natural Resources, Mines and Energy	Low	Low	Inform	• Worker health and safety	✓			
	Department of Transport and Main Roads	Low	High	Consult	• Changes to road infrastructure • Traffic management planning	✓			✓
	Department of Aboriginal and Torres Strait Islander Partnerships	Low	High	Consult	• Employment of ATSI peoples • Use of ATSI-owned/managed businesses in supply chain • Health of ATSI peoples	✓	✓	✓	✓

Group	Stakeholder	Extent of impact	Influence of project on Stakeholder	Engagement level	Likely key issues / interests	SIA key matter			
						Workforce management	Housing and accommodation	Local business and industry procurement	Health and community well-being
	Department of Housing and Public Works	Low	High	Consult	• Housing affordability • Any demand locally for social housing • Potential for cumulative impacts to cause rapid change to housing availability and affordability		✓		
	Department of Communities, Disability Services and Seniors	Low	High	Consult	• Social and health infrastructure capacity • Recruiting and retention to provide services in affected communities				✓
	Department of Employment, Small Business and Training	Low	High	Consult	• Retention and training of young people • Competition for skilled labour	✓			
	Queensland Treasury	Low	High	Consult	• Job creation • Royalties	✓		✓	
	Department of State Development, Manufacturing, Infrastructure and Planning	Low	High	Consult	• Regional economic development • Business development	✓		✓	
Local government	Isaac Regional Council	High	High	Collaborate	• Scope of SIA • Workforce recruitment, management and accommodation	✓	✓	✓	✓

Group	Stakeholder	Extent of impact	Influence of project on Stakeholder	Engagement level	Likely key issues / interests	SIA key matter			
						Workforce management	Housing and accommodation	Local business and industry procurement	Health and community well-being
					• Community values, trends and issues • Changes to housing market • Impacts on community facilities and service access • Local supply issues • Road safety • Management strategies				
	Mackay Regional Council	Low	Low	Inform	• Workforce recruitment and management • Regional supply opportunities • Road safety	✓		✓	
Social infrastructure providers	Queensland Ambulance Service - Dysart	High	Low	Involve	• Workforce management • Service capacity	✓			✓
	Queensland Police Service - Dysart	High	Low	Involve	• Workforce management • Service capacity	✓			✓
	Queensland Fire and Emergency Service - Dysart	High	Low	Involve	• Workforce management • Service capacity	✓			✓
	Dysart Medical Centre	High	Low	Involve	• Workforce management • Population change • Service capacity	✓			✓

Group	Stakeholder	Extent of impact	Influence of project on Stakeholder	Engagement level	Likely key issues / interests	SIA key matter			
						Workforce management	Housing and accommodation	Local business and industry procurement	Health and community well-being
	Dysart State High School	High	Low	Involve	• Population change • Service capacity				✓
	Dysart State School	High	Low	Involve	• Population change • Service capacity				✓
	Childcare centres in Dysart	High	Low	Involve	• Population change • Service capacity				✓
	Hinterland Community Care – regional office	High	Low	Involve	• Service capacity • Increase in demand for services				✓
	Dysart Community Support Group	High	Low	Involve	• Service capacity • Increase in demand for services				✓
Business and industry	Moranbah Traders Association	High	Low	Involve	• Supply and procurement opportunities			✓	
	Local retail businesses	High	Low	Involve	• Trade from workers • Supply opportunities			✓	✓
	Regional businesses	Low	Low	Inform	• Supply and procurement opportunities			✓	
	Unions	Low	Low	Inform	• Workforce management	✓			

Group	Stakeholder	Extent of impact	Influence of project on Stakeholder	Engagement level	Likely key issues / interests	SIA key matter			
						Workforce management	Housing and accommodation	Local business and industry procurement	Health and community well-being
	Employment and training providers	Low	Low	Inform	• Workforce management • Skill shortages and labour competition	✓			
Housing and accommodation	Isaac Affordable Housing Trust	High	Low	Involve	• Change to housing market • Service capacity and constraints		✓		✓
	WAVs	High	Low	Involve	• Increase in demand for beds	✓			
	Real estate agencies	High	Low	Involve	• Changes to supply and demand in housing		✓		
Other	Tourists	Low	Low	Inform	• Changes to road conditions and connectivity • Constraints in access to short-term accommodation			✓	
	Barada Barna Aboriginal Corporation	High	High	Collaborate	• Recruitment and supply opportunities • Native title exists around Lake Vermont WAV in Dysart	✓	✓	✓	✓

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