



Jellinbah Group



LAKE VERMONT MEADOWBROOK PROJECT ENVIRONMENTAL IMPACT STATEMENT

CHAPTER 1 INTRODUCTION



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1 Introduction

Bowen Basin Coal Pty Ltd (Bowen Basin Coal) proposes to extend the existing Lake Vermont Mine by developing the Lake Vermont Meadowbrook Project (the Project). The Project proposes underground longwall mining and an open-cut satellite pit, to mine coal seams to the immediate north of the existing Lake Vermont Mine. The Project is located approximately 25 km north of Dysart and 160 km south-west of Mackay, in the Bowen Basin region of central Queensland (Figure 1.1).

This Environmental Impact Statement (EIS) has been prepared for the Project in accordance with the *Environmental Protection Act 1994* (EP Act). The objective of this EIS is to identify and assess the environmental, social, economic and cumulative impacts of the proposed Project and to identify strategies to avoid, minimise or mitigate, and where necessary offset, potential impacts.

The Project was determined to be a controlled action (EPBC Referral 2019/8485) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 22 November 2019. The controlling provisions are sections 18 and 18A (listed threatened species and communities), sections 20 and 20A (listed migratory species), and sections 24D and 24E (a water resource, in relation to coal seam gas development and large coal mMining development). This EIS will be assessed under the bilateral assessment agreement (between the State of Queensland and the Commonwealth of Australia). The bilateral assessment agreement provides accreditation of the Queensland processes for assessment of proposed actions that would otherwise be assessed by the Commonwealth Government, for approval under the EPBC Act.

This EIS is structured to address the requirements of the Project Terms of Reference (TOR) and is comprised of a main report, supported by appendices and attachments. The main report includes the following chapters:

Chapter	Title	Chapter	Title
	Executive Summary	13	Air Quality
	Table of Contents	14	Noise and Vibration
1	Introduction	15	Waste Management
2	Consultation Process	16	Hazards and Safety
3	Project Description	17	Cultural Heritage
4	Climate	18	Social
5	Land Resources	19	Economics
6	Rehabilitation	20	Transport
7	Groundwater	21	Matters of National Environmental Significance
8	Surface Water	22	Proposed Environmental Management and Monitoring Commitments
9	Flooding and Regulated Structures	23	Proposed Environmental Authority Conditions
10	Terrestrial Ecology	24	References
11	Aquatic Ecology	25	Abbreviations, Acronyms and Glossary
12	Biosecurity		

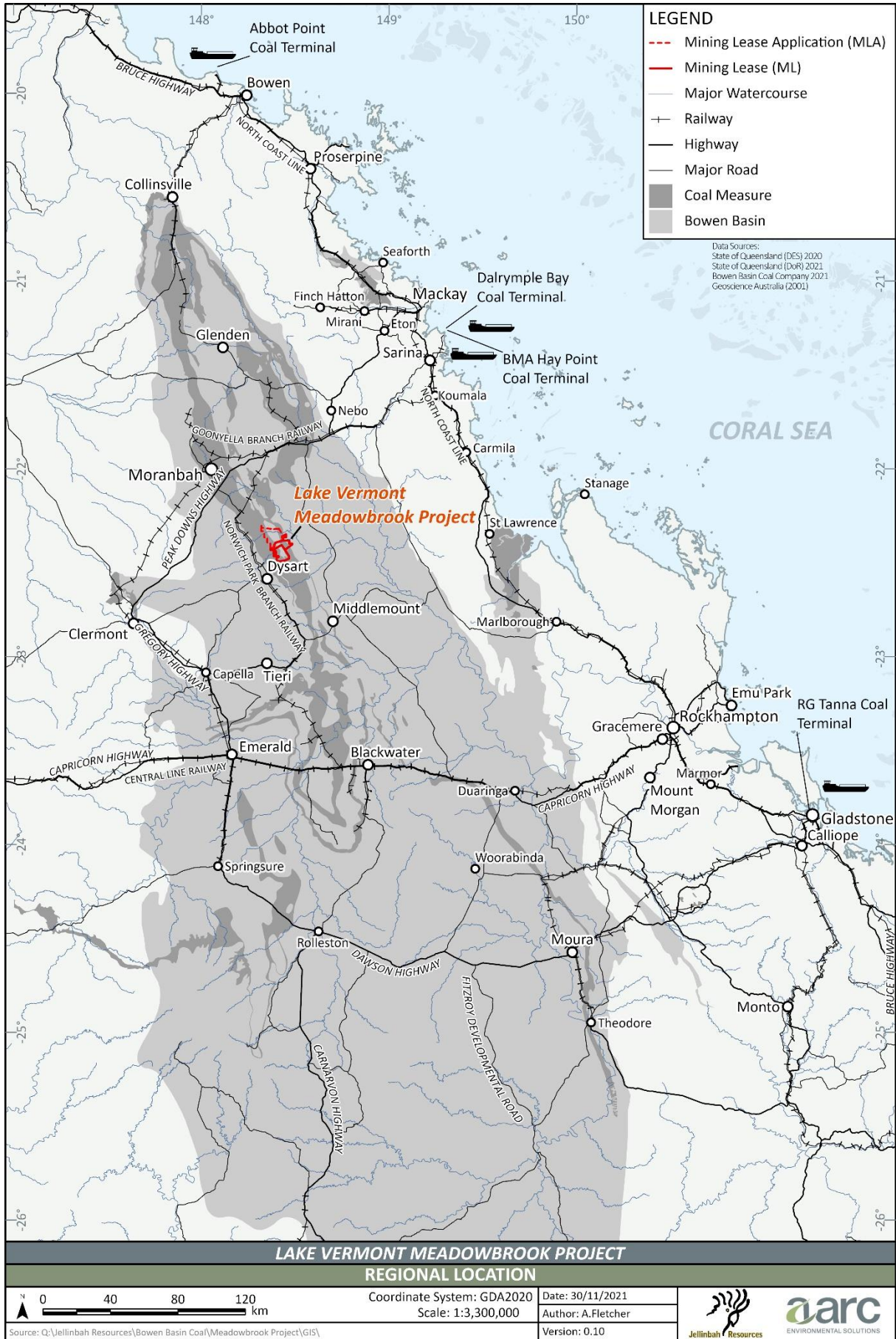


Figure 1.1: Regional Location



Appendices to the main EIS report provide the following technical specialist reports:

Appendix	Title	Appendix	Title
A	Subsidence Assessment	N	Hazards & Safety Risk Assessment
B	Progressive Rehabilitation and Closure Plan	O	Non-Indigenous Cultural Heritage Assessment
C	Soils and Land Suitability Assessment	P	Social Impact Assessment
D	Geochemical Assessment	Q	Economic Impact Assessment
E	Groundwater Impact Assessment	R	Transport Impact Assessment
F	Surface Water Assessment	S	Land-Based Effluent Disposal Assessment
G	Terrestrial Ecology Assessment	T	Social Impact Management Plan
H	Aquatic Ecology Assessment	U	Offset Area Management Plan
I	Groundwater Dependent Ecosystem Assessment	V	Climate Change Assessment
J	Stygofauna Assessment	W	Geomorphological Assessment Report
K	MNES Biodiversity Offsets Strategy	X	Rehabilitated Landform Water Balance Report
L	Air Quality and Greenhouse Gas Assessment	Y	Site Water Balance and Water Management System Report
M	Noise and Vibration Assessment	Z	Flood Modelling Assessment Report

Attachments to the main EIS report include:

Attachment	Title
Attachment 1	Terms of Reference
Attachment 2	Terms of Reference Reconciliation Table
Attachment 3	Independent Expert Scientific Committee Guidelines Reconciliation Table
Attachment 4	Matters of National Environmental Significance Reconciliation Table
Attachment 5	Peer Review - Subsidence
Attachment 6	Peer Review – Groundwater Modelling and Assessment
Attachment 7	Peer Review – Surface Water (Geomorphology)
Attachment 8	Peer Review – Surface Water (Water Balance)



1.1 Project proponent

The proponent for the Project is Bowen Basin Coal Pty Ltd (Bowen Basin Coal) (ABN: 22 065 321 440). The registered address and postal address for Bowen Basin Coal is:

*Level 7
12 Creek Street
Brisbane City, Queensland, 4000*

Bowen Basin Coal is a private company established in 1994 and owned by the Lake Vermont Joint Venture, an unincorporated Australian joint venture operating in Queensland. The Lake Vermont Joint Venture is comprised of QCMM (Lake Vermont Holdings Pty Ltd) (70%), Marubeni Resources Development Pty Ltd (10%), CHR Vermont Pty Ltd (10%) and Coranar (Australia) Pty Ltd (10%). QCMM is 100% owned by Jellinbah Group Pty Ltd. Lake Vermont Resources Pty Ltd manages the Lake Vermont Joint Venture operations, including the existing Lake Vermont Mine located on Mining Lease (ML) 70331, ML 70477 and ML 70528, on behalf of the joint venture participants. Mining at Lake Vermont Mine is undertaken under contract, by Thiess Mining Services (Thiess).

Bowen Basin Coal supplies high quality coking coal, pulverised coal injection (PCI) coal, and industrial coal products to international customers and is committed to the communities in which it operates. The company's operations provide significant benefits to the local community, as well as to the broader central Queensland region and the Queensland economy as a whole. Bowen Basin Coal is committed to regularly reviewing environmental performance and publicly reporting on progress.

Bowen Basin Coal is listed on the Suitable Operator Register (Suitable Operator Reference: 340700) in accordance with the requirements of the EP Act.

1.1.1 Environmental record

Bowen Basin Coal has adhered to its regulatory responsibilities in association with its exploration and mining operations. Bowen Basin Coal has not been the subject of any environmental legal proceedings that have resulted in fines or prosecution.

1.1.2 Environmental, health, safety and community policies

Resultant of the contract mining operation of Bowen Basin Coal, the Lake Vermont Mine operates under both Jellinbah and Thiess environmental policies.

Jellinbah Group believes responsible environmental management is fundamental to the company's position as an effective and successful company in the Australian Coal Mining Industry. The company manages its operations with commitment to ecologically sustainable development and continual improvement to minimising the impact of its activities on the environment, achieved through environmental best practices and ongoing planning, education, training and rehabilitation. Jellinbah Group's Environmental Policy is provided as Figure 1.2.

Thiess' global Environmental Policy demonstrates Thiess' commitment to always respect the environment in which they live and work. Thiess implements an ISO14001 certified Environmental Management System (EMS) to ensure consistency in how they plan, implement and review activities to achieve agreed environmental objectives. All projects are required to implement a site-specific Environmental Management Plan (EMP) to ensure E compliance and continuous improvement of environmental performance. The Thiess Global Environmental Policy is provided as Figure 1.3.



Environmental Policy

Jellinbah Group Pty Ltd believes responsible environmental management is fundamental to the company's position as an effective and successful company in the Australian Coal Mining Industry. The company manages its operations with commitment to ecologically sustainable development and continual improvement to minimising the impact of its activities on the environment, achieved through environmental best practices and ongoing planning, education, training and rehabilitation.

The key strategies of Jellinbah Resources Pty Ltd Environmental Policy are to:

- *Comply with all relevant; legislation, regulation and policies relating to environmental issues.*
- *Monitor and review environmental performance in accordance with environmental management plans.*
- *Establish and evaluate environmental objectives and targets aimed at continual improvement.*
- *Identify, report, investigate and resolve all environmental incidents and non-conformances.*
- *Design and perform all company operations with minimal impact on the environment by enacting all practicable steps to:*
 - *minimise land clearance and prevent waste generation,*
 - *effectively manage waste rock and tailings storage facilities,*
 - *conduct ongoing rehabilitation; and*
 - *efficiently use energy and water.*
- *Maintain an effective environmental management system through regular environmental monitoring, reporting, reviewing and auditing to ensure operations minimise any adverse impacts on the environment.*
- *Ensure all our staff, contractors and persons working on behalf of the company are communicated and educated in this policy to the extent that they understand and are equipped with the skills to support and maintain our environmental management system acting in a manner consistent with this policy.*
- *Educate and communicate employees, their families, local communities and regulatory bodies about our systems and practices in an accurate, transparent and timely manner.*
- *Engage with stakeholders on concerns and values regarding the company's projects and developments.*

It is a requirement of the company that all those who provide services or products to Jellinbah Resources Pty Ltd ensure their compliance with the relevant environmental procedures and practices as dictated by this policy.



Greg Chalmers
Chief Executive Officer

Figure 1.2: Jellinbah Group Environmental Policy



ENVIRONMENTAL POLICY

This Policy sets out the minimum requirements for Environmental Matters across CIMIC Group Limited and entities it controls (**the Group**).

This Policy applies to all employees of the Group, third parties engaged by the Group, and all alliances and joint ventures in all jurisdictions.

Any employee of the Group found to have breached this Policy may be subject to disciplinary action.

The **objectives** of this Policy are to prevent and minimise environmental damage from the Group’s activities, complying with all environmental obligations and promoting sustainable resource use in its operations (**Environmental Matters**).

Requirements

Each Operating Company will comply with all applicable environmental legal, regulatory and contractual requirements, and deliver all contract works under an environmental management system certified to regulation standards.

The Operating Companies are responsible for managing the Environmental Matters associated with their operations and displaying continuous improvement in their environmental performance.

Each Operating Company is to provide reports to the CIMIC CEO for presentation to the CIMIC Board Ethics Compliance & Sustainability Committee commenting on Environmental Matters, as required.

CIMIC is required to ensure compliance with those obligations that cannot be delegated to its Operating Companies.

Policy Information

Owner:	Chief Human Resources Officer, CIMIC
Approved by:	Chief Executive Officer, CIMIC
Effective date:	23 September 2016

Note: CIMIC Group policies may be amended from time to time.

Figure 1.3: *Thiess Global Environmental Policy*



1.2 Lake Vermont Mine

The existing Lake Vermont Mine is an open-cut coal mining operation that primarily produces hard coking coal and PCI coal, exported for use in steel production.

The mine is located on Mining Lease (ML) 70331, ML 70477 and ML 70528 (Figure 3.2) and operates under Environmental Authority (EA) EPML00659513. Figure 3.2 in Chapter 3, Project Description shows the indicative Lake Vermont Mine footprint. Target coal seams at the Lake Vermont Mine include the Vermont Seam and Leichhardt Seam; contained within the Rangal coal measures.

Bowen Basin Coal was granted EA approval for the Lake Vermont Mine for 5 Million tonnes per annum (Mtpa) run of mine (ROM) coal. ML 70331 was granted in October 2005 and construction commenced in 2007. A rail spur and balloon loop was constructed for the mine from the Goonyella System Railway for the transport of product coal for export. Coal production at the Lake Vermont Mine commenced in January 2009. In November 2012 Bowen Basin Coal was granted approval to expand production at the Lake Vermont Mine to a maximum of 12 Mtpa ROM coal, with an estimated product output of approximately 9 Mtpa. Bowen Basin Coal was granted approval for additional supporting infrastructure to the Lake Vermont Mine (referred to as the Western Infrastructure Extension) within ML 70477 in December 2014.

In 2015, Bowen Basin Coal was granted approval to extend mining activities at the Lake Vermont Mine into new resource areas located directly to the north (referred to as the Lake Vermont Northern Extension). ML 70528 was granted for the northern extension in March 2016. EPBC Act approval (EPBC 2016/7701) was granted for the northern extension by the Department of the Environment and Energy (now Department of Climate Change, Energy, the Environment and Water [DCCEEW]), with conditions, on 29 June 2018. The mine also holds an approval for the diversion of Phillips Creek (within the existing Lake Vermont Mine EA). The diversion will be constructed in advance of mining approaching Phillips Creek (Figure 3.2, Chapter 3, Project Description).

The Lake Vermont Mine and Coal Handling and Preparation Plant (CHPP) are operated under contract by Thies Mining, on behalf of Bowen Basin Coal. Overburden is primarily removed by truck and shovel and dozer push. The overburden is used to backfill the void behind the advancing operations or placed in out-of-pit waste rock emplacements.

Coal is mined using traditional truck and excavator methods and the ROM coal is hauled by truck and deposited in the two ROM coal hoppers (i.e. feed bins) located adjacent to the two CHPP modules. The ROM coal hoppers feed the primary crusher, and the ROM coal is then conveyed, blended (i.e. coal from the Vermont Seam and Leichhardt Seam) and washed in the CHPP.

Lake Vermont Mine is a metalliferous coal operation targeting both hard coking coal and PCI product streams, for the export market. The coal preparation plant consists of two identical modules, both of which can produce the two product streams. In 2016 analysis of the plant reject stream identified that a scalping reprocess of the rejects could yield additional volumes of a higher ash industrial coal, thereby reducing the volume of reject material and maximising overall resource recovery and value. As such, in 2017 a third plant module was retrofitted to the existing plant, which has enabled a third product stream of industrial coal to be scalped. The additional industrial coal retrieved, equates to approximately 10 to 15% of the total product coal produced. Prior to the introduction of the third module, this industrial coal resource was lost as processing waste.

The CHPP comprises a range of components including crushers, screens, dense medium cyclones, flotation cells, separators, filters and thickeners to process the coal and separate coal reject materials. The CHPP has a washing capacity of approximately 800 tph of ROM coal. The CHPP can process a ROM coal feed of up to 11.2 Mtpa producing approximately 9 Mtpa of product coal.

A co-disposal system (i.e. the simultaneous disposal of coarse and fine reject material from the coal preparation process) is used to manage rejects. Coarse rejects from the CHPP are directed to the reject crusher where they are crushed to a certain size.

The CHPP rejects are then mixed with process water and pumped as a slurry to an active co-disposal facility where it is sub-aerially deposited. The process water is separated as decant which is returned to the CHPP, leaving the rejects to desiccate in a solid, non-flowable consistency. Rejects and the process water used to



create the reject slurry is routinely treated by the addition of flocculants which clarifies the water and accelerates the decanting process. The co-disposal process results in a single homogenous mixture that, once dewatered, forms a stable solid mass that can be readily rehabilitated.

Once washed in the CHPP, product coal is conveyed to the product coal stockpiles located to the west of the CHPP and adjacent to the train load out facility (Figure 3.2, Chapter 3, Project Description). From the product stockpiles, coal is conveyed to the train load out bin. The train load out facility comprises a four valve reclaim tunnel and reclaim conveyor capable of dispatching coal from site at 4,250 tph.

Product coal is railed along the Lake Vermont spur line that connects to the Goonyella Rail System to the RG Tanna Coal Terminal in Gladstone or Abbot Point Coal Terminal in Bowen for export (Figure 1.1). The mine also has the capability of railing coal to the Dalrymple Bay Coal Terminal in Mackay when opportunities permit (Figure 1.1).

After mining, reshaping and rehabilitation of the waste rock emplacements is conducted in accordance with the mine's Rehabilitation Plan. Bowen Basin Coal is currently in the process of developing its Progressive Rehabilitation and Closure Plan (PRC Plan) for the existing Lake Vermont Mine.

Key existing Lake Vermont Mine infrastructure includes:

- CHPP;
- raw and product stockpile areas and associated infrastructure;
- rejects disposal and containment areas;
- clean water, mine water storage dams and pipelines;
- sediment dams and associated water management infrastructure;
- on-site electrical substation and electricity transmission lines;
- rail balloon loop and train load out facility;
- administration buildings;
- workshops, warehouse and laydown areas;
- explosives magazine;
- Lake Vermont Mine access road and internal roads; and
- other associated mining infrastructure.

The Lake Vermont Mine has a network of clean water and mine water dams on-site to manage water and to minimise the demand of raw water from Sunwater's Eungella Water Pipeline (Southern Extension Water Pipeline) (Figure 3.2, Chapter 3, Project Description). Bowen Basin Coal has a contract with Sunwater to supply up to 1,500 megalitres (ML) per year of raw water to the Lake Vermont Mine. Bowen Basin Coal also has an on-supply contract with Peabody to transfer Peabody's 1,000 ML per year water allocation to the Lake Vermont Mine.

The existing water management system at the Lake Vermont Mine is based on the following key principles:

- all water storage structures and facilities are designed, constructed and managed in accordance with *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams – Version 3.1* (DEHP, 2013d);
- water collected in water storages is captured and retained for use on-site and/or controlled off-site discharge;
- water for mine operating purposes is sourced from dedicated on-site mine water storages; water in these storages is from on-site runoff and from the pit;



- surface runoff from rehabilitated waste rock emplacements is directed to dedicated sediment dams;
- mine water dams used to manage dirty water are designed and operated to achieve zero uncontrolled discharge; and
- discharge of excess water-off site is in accordance with 'Final Model Water Conditions for Coal Mines in the Fitzroy Basin' (DEHP, 2013c).

Electricity to the Lake Vermont Mine is supplied by the Powerlink Dysart 132/66/22 kilovolt (kV) substation via Ergon Energy's 66 kV electricity transmission line (ETL) (Figure 3.2, Chapter 3, Project Description). The Ergon Energy Vermont substation is located proximate to the train load out facility and CHPP. The peak permanent power demand during the Project operational period is estimated to be approximately 27 MW. The Dysart substation has sufficient capacity to supply this requirement.

A telecommunications tower located at the existing Lake Vermont Mine provides for the existing communications systems.

The Lake Vermont Mine is accessed from Golden Mile Road via the Lake Vermont Mine Access Road (Figure 3.1). Approximately 880 people are currently employed at the Lake Vermont Mine. The mine operates 24 hours per day, seven days per week. The workforce is primarily employed on a seven-day roster. Approximately 10% of the workforce resides locally in surrounding townships (e.g. Dysart, Clermont). The Lake Vermont Accommodation Village in Dysart accommodates workers who choose to drive-in drive-out (DIDO) to work at the mine. A small number of workers who reside locally also choose to stay in the Lake Vermont Accommodation Village while on roster. Further information on the Lake Vermont Accommodation Village is provided in Chapter 3, Project Description.

1.3 Project overview

The Lake Vermont Meadowbrook Project represents an extension of mining activities at the existing Lake Vermont Mine, involving underground longwall mining and open-cut mining activities and supporting infrastructure.

The key components of the Project include:

- underground longwall mining of the Leichhardt Lower Seam and Vermont Lower Seam; noting that 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 Leichhardt Lower Seam, Vermont Seam and Vermont Lower Seam (in one area where the depth of the coal resource does not facilitate underground mining);
- development of a surface Mine Infrastructure Area (MIA);
- development of a new infrastructure corridor linking the MIA to existing infrastructure at the Lake Vermont Mine;
- extensions of existing infrastructure supplying electricity and water supplies;
- construction of drifts and portal 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 reduction in coal output that will occur at the Lake Vermont Mine, by combining output from the existing open-cut operations and the Project extension. This will enable total coal production to be maintained at the currently approved output for



an additional period of up to 20 years, over a total mine life of approximately 53 years (including final rehabilitation).

The Project maximises the use of Bowen Basin Coal owned land and infrastructure at the Lake Vermont Mine to minimise environmental and social impacts from additional infrastructure and provide Project efficiencies.

The Lake Vermont Accommodation Village in Dysart is proposed to be refurbished and upgraded to support the Project's construction and operational stages. A detailed description of the Project is provided in Chapter 3, Project Description.

1.4 Environmental impact assessment process

In July 2019 Bowen Basin Coal applied to the Department of Environment and Science (DES) under sections 70 and 71 of the EP Act for approval to voluntarily prepare an EIS. This application was supported by the preparation of an Initial Advice Statement, outlining the resource, operations and infrastructure of the proposed Project. Under section 72 of the EP Act, DES approved the application on 26 August 2019.

On 22 November 2019, the then Commonwealth Department of Agriculture, Water and the Environment (DAWE) determined the Project (EPBC Referral 2019/8485) to be a controlled action under the EPBC Act, with the controlling provisions being sections 18 and 18A (listed threatened species and communities), sections 20 and 20A (listed migratory species) and sections 24D and 24E (a water resource, in relation to coal seam development and large coal mining development). At this time, the DAWE also established that the Project assessment could proceed under the bilateral agreement assessment process. To support this, the DAWE provided specific requirements which were included within the final TOR established by the DES.

In addition, Bowen Basin Coal will apply to the Department of Resources (DoR) for a Mining Lease (ML) over the Project area.

1.4.1 Terms of reference

The TOR for the Project were finalised on 30 April 2019. A 3 month extension to the submission period for the EIS was granted on 14 April 2022, prior to the expiry of the initial two year EIS submission period.. The EIS was submitted on 22 July 2022 with a subsequent request from the DES for modifications to ensure that the EIS adequately addressed the Project TOR. An extension to the EIS decision timeframe was agreed between BBC and the DES, through to 31 March 2023. The EIS is now being resubmitted with a number of updates to address the DES comments.

The TOR is provided in full in Attachment 1. A detailed reconciliation table indicating where the TOR are addressed in the EIS is provided in Attachment 2.

1.4.2 EIS preparation

This EIS has been prepared to ensure that sufficient information is provided to the DES (and the DCCEE) to identify and assess any potential adverse and beneficial environmental, economic and social impacts of the Project. This EIS also provides a detailed description of the actions undertaken by the proponent to avoid, mitigate and minimise adverse impacts.

Technical assessments have been undertaken across a range of impact areas, consistent with the requirements of the TOR. While the key outcome of the EIS process is to obtain an EA for the Project, the information provided throughout these assessments will be utilised to support secondary approvals, such as water licences.

An indicative flowchart of the EIS process (and linkages to the parallel ML application process) is provided in Figure 1.4. A further understanding of the EIS process is available through the DES website, or by contacting the DES directly.

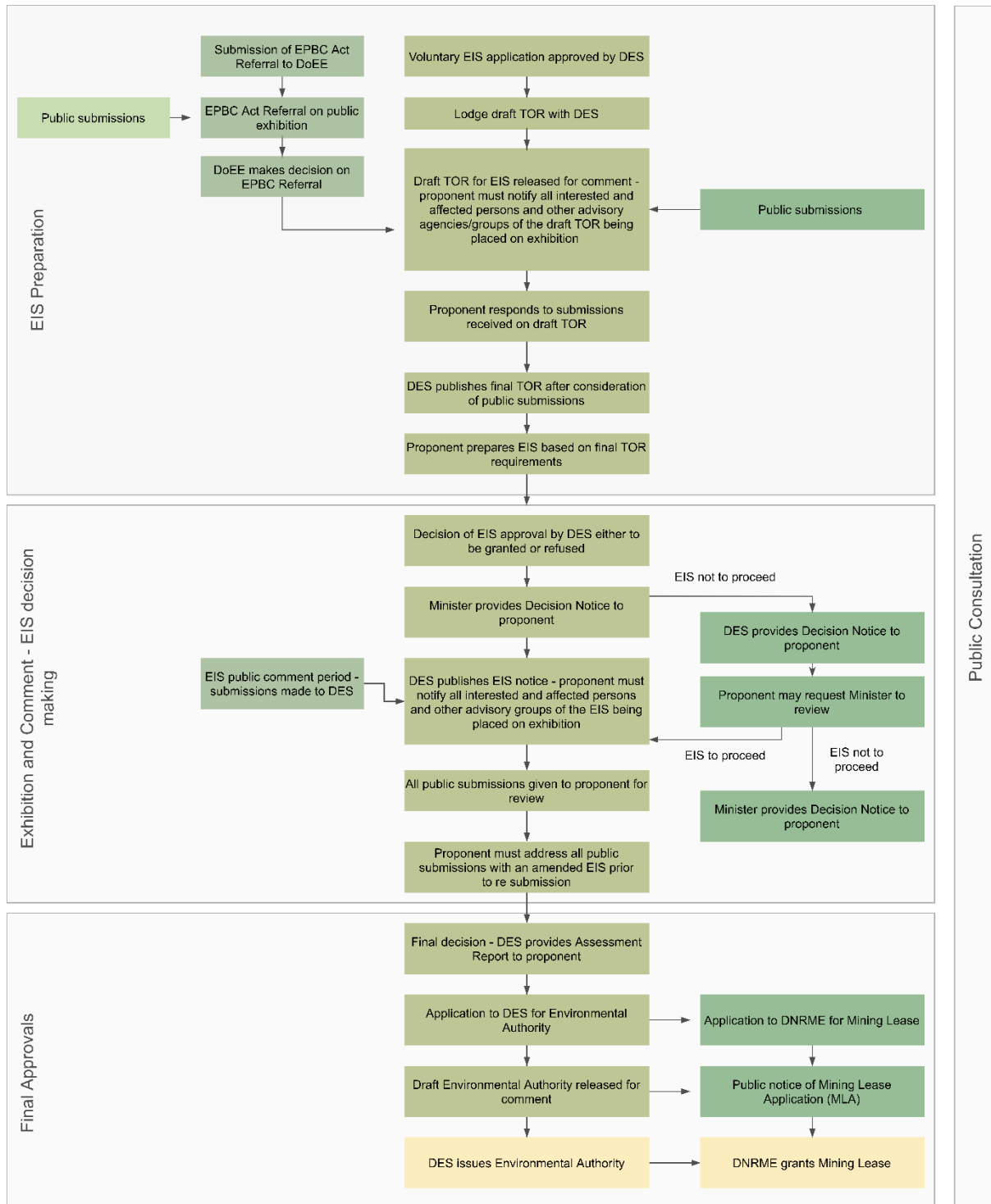


Figure 1.4: Indicative EIS Process Flowchart

1.4.3 Public submissions

In accordance with section 52 of the EP Act, the proponent will issue a public EIS notice for the Project, which will:

- 1) provide a description of the Project and operational land;



- 2) state where the submitted EIS may be inspected and where copies or extracts can be obtained;
- 3) state that anyone may make a submission to the chief executive of the DES regarding the EIS;
- 4) clearly define the time period in which submissions may be made;
- 5) state how to make a properly made submission;
- 6) state the Project's title, location and the name of the proponent; and
- 7) state any protected matter for the Project.

Under section 51 of the EP Act, this EIS notice must be:

- provided to each affected person for the Project, each interested party for the Project, and any other person decided by the chief executive prior the notice being published;
- published in at least one newspaper circulating the local region; and
- made available online through a website.

Any party may elect to make a submission on the EIS prepared for the Project. A properly made submission is one that:

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

Written submissions should be addressed to:

The Chief Executive
Attention: The EIS Coordinator—Lake Vermont Meadowbrook Project
Department of Environment and Science
GPO Box 2454
Brisbane QLD 4001

Online submissions can be made to the EIS Coordinator: eis@des.qld.gov.au.

All submissions (including names and addresses) received by the DES during the public notification period will be provided to the proponent, as required under sections 56 of the EP Act. The submissions will be considered by the proponent, with a response to be provided to the DES.

All matters identified by the public will be given careful consideration. Where relevant, further assessment may be undertaken, or further information may be provided, which may result in amendment(s) to the EIS documentation or changes to proposed plans, mitigation strategies, or proposed management actions. If required, a supplementary EIS will be submitted to the DES. An Assessment Report will ultimately be prepared by the DES on the finalised EIS which under section 58 of the EP Act must consider the following:

- a) the final terms of reference for the EIS;
- b) the submitted EIS;
- c) all properly made submissions and any other submissions accepted by the chief executive;



- d) the standard criteria; and
- e) another matter prescribed under a regulation.

Under section 59 of the EP Act, the EIS assessment report must:

- a) address the adequacy of the EIS in addressing the final terms of reference; and
- b) address the adequacy of any environmental management plan for the project; and
- c) make recommendations about the suitability of the project;
- d) recommend any conditions on which any approval required for the project may be given; and
- e) contain another matter prescribed under a regulation.

For further information about the EIS process for this proposal, the EIS Coordinator can be contacted on 13QGOV (137468) or by email at eis@des.qld.gov.au.

1.5 Project approvals

The approval of the Project is subject to a number of Commonwealth, State and Local Government legislative requirements.

The primary approvals required for the Project include:

- an amendment to the existing Lake Vermont Mine EA, as an outcome of the EIS, which adds the new mining lease tenure to the EA and identifies the applicable 'Environmentally Relevant Activities' (ERAs) that will be authorised to be conducted on-site under the EP Act;
- approval of the Project as a 'controlled action' under the EPBC Act;
- the granting of the required ML for the Project under the *Mineral Resources Act 1989* (MR Act); and
- development approval from the Isaac Regional Council (IRC) to authorise the proposed refurbishment and upgrade of the existing Lake Vermont Accommodation Village.

The EA amendment is issued by the DES and is required before operations may commence, ensuring that the proponent has taken measures to avoid, minimise and/or mitigate potential environmental impacts. The EA will regulate construction, operation and closure requirements, which must be adhered to throughout the conduct of the approved activities. The Progressive Rehabilitation and Closure Plan (PRCP) will regulate the progressive rehabilitation of the mine to leave an area that is safe, stable, does not cause environmental harm, and is able to sustain the approved post-mining land use.

A ML is also required to authorise the Project. This approval is issued by the DoR under the MR Act and the Mineral Resources Regulation 2013 (Qld). The granting of a ML entitles the holder to carry out mining activities for specified minerals and carry out activities associated with, or promoting, mining activities. The ML application process is linked to the EA application process, as shown in Figure 1.4.

Beyond these key statutory approvals, there is also a broad network of legislation and regulation which govern the Project's development and operation. Relevant legislation identified for the Project at the time of EIS preparation is provided in Table 1.1 and discussed in further detail in the following sections.

A summary of approvals required for the construction and operation of the Project is provided in section 1.5.8.



Table 1.1: Relevant Commonwealth and State government legislation and policies

Relevant area	Administering authority	Legislation relevant to the Project
Commonwealth legislation		
Matters of national environmental significance (MNES)	DCCEEW	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
Emissions reporting	DCCEEW	<i>National Greenhouse and Energy Reporting Act 2007</i>
Cultural heritage	NNTT	<i>Native Title Act 1993</i>
Queensland legalisation and associated subordinate legislation		
Environmental values	DAF	<i>Biosecurity Act 2014</i>
	DES	<i>Environmental Offsets Act 2014</i> Environmental Offsets Regulation 2014 Queensland Environmental Offsets Policy Significant Residual Impact Guidelines
	DES	<i>Environmental Protection Act 1994</i> Environmental Protection Regulation 2019 Environmental Protection (Air) Policy 2019 Environmental Protection (Noise) Policy 2019 Environmental Protection (Water and Wetland Biodiversity) Policy 2019
	DAF	<i>Fisheries Act 1994</i>
	DES	<i>Nature Conservation Act 1992</i> Nature Conservation (Protected Areas) Regulation 1994 Nature Conservation (Animals) Regulation 2020 Nature Conservation (Plants) Regulation 2020
	DoR	<i>Soil Conservation Act 1986</i>
	DoR	<i>Vegetation Management Act 1999</i>
	DRDMW	<i>Water Act 2000</i> Water Plan (Fitzroy Basin) 2011 Fitzroy Basin Resource Operations Plan 2011 Fitzroy Basin Water Management Protocol June 2018
	Cultural heritage	DES
DSDSATSIP		<i>Aboriginal Cultural Heritage Act 2003</i>
Development and planning	DEPW, IRC	<i>Building Act 1975</i>
	DEPW	<i>Electricity Act 1994</i>
	DSDILGP, IRC	<i>Planning Act 2016</i>
	DEPW	<i>Plumbing and Drainage Act 2018</i>



Relevant area	Administering authority	Legislation relevant to the Project
	DSDILGP	<i>Regional Planning Interests Act 2014</i>
	Coordinator-General/DSDILGP	<i>State Development and Public Works Organisation Act 1971</i>
	DSDILGP	<i>Strong and Sustainable Resource Communities Act 2017</i>
	DTMR	<i>Transport Infrastructure Act 1994</i>
	DTMR	<i>Transport Operations (Road Use Management) Act 1995</i> <i>Transport Operations (Road Use Management—Dangerous Goods) Regulation 2018</i>
	DES	<i>Waste Reduction and Recycling Act 2011</i>
Natural resources	Resources Safety and Health Queensland	<i>Explosives Act 1999</i> <i>Explosives Regulation 2017</i>
	DAF/DES	<i>Forestry Act 1959</i>
	DoR	<i>Mineral and Energy Resources (Common Provisions) Act 2014</i>
		<i>Mineral Resources Act 1989</i> <i>Mineral Resources Regulation 2013</i>
Queensland Treasury	<i>Mineral and Energy Resources (Financial Provisioning) Act 2018</i> <i>Mineral and Energy Resources (Financial Provisioning) Regulation 2019</i>	
Human health and wellbeing	Resources Safety and Health Queensland	<i>Coal Mining Safety and Health Act 1999</i> <i>Coal Mining Safety and Health Regulation 2017</i>
	Department of Education	<i>Electrical Safety Act 2002</i>
	QFES	<i>Fire and Emergency Service Act 1990</i>
	Department of Education	<i>Work Health and Safety Act 2011</i>
Land and government	DoR	<i>Land Act 1994</i>
	DoR	<i>Land Title Act 1994</i>
	DSDILGP/Isaac Regional Council	<i>Local Government Act 2009</i>
Native title	DoR	<i>Native Title Queensland Act 1993</i>
Human rights	Queensland Human Rights Commission	<i>Human Rights Act 2019</i>

DAF	Queensland Department of Agriculture and Fisheries
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DEPW	Queensland Department of Energy and Public Works
DES	Queensland Department of Environment and Science
DoR	Queensland Department of Resources
DRDMW	Queensland Department of Regional Development, Manufacturing and Water
DSDILGP	Queensland Department of State Development, Infrastructure, Local Government and Planning
DTMR	Queensland Department of Transport and Main Roads
NNTT	National Native Title Tribunal
QFES	Queensland Fire and Emergency Services
DSDSATSIP	Queensland Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships



1.5.1 Commonwealth legislation

1.5.1.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act identifies and provides for the protection of Matters of National Environmental Significance (MNES). The EPBC Act protects Australian biodiversity values and integrates management of important natural and cultural places.

Any action which may have a significant impact on a MNES must be referred to the Commonwealth Minister to decide whether or not the action is a 'controlled action' requiring approval under the EPBC Act.

MNES are:

- 2) world heritage properties;
- 3) national heritage places;
- 4) wetlands of international importance (Ramsar wetlands);
- 5) listed threatened species and communities;
- 6) migratory species protected under international agreements;
- 7) nuclear actions (including uranium mining);
- 8) the Great Barrier Reef Marine Park;
- 9) Commonwealth Marine Areas; and
- 10) a water resource, in relation to coal seam gas development and large coal mining development.

The Project was referred to the Commonwealth under the EPBC Act in 2019 (EPBC Referral 2019/8485) and was subsequently declared a 'controlled action'. The relevant controlling provisions for the Project under this Act are:

- listed threatened species and communities (sections 18 and 18A);
- listed migratory species (sections 20 and 20A); and
- a water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E).

The EIS for the Project will be jointly assessed under the EPBC Act and the EP Act using the EIS process under the EP Act in accordance with the bilateral agreement between the Australian Government and the State of Queensland (per section 45 of the EPBC Act).

1.5.1.2 National Greenhouse and Energy Reporting Act 2007

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) introduced a single national framework for reporting and disseminating company information about greenhouse gas (GHG) emissions, energy consumption and energy production. The NGER Act also aims to ensure that the net covered GHG emissions from the operation of a designated large facility do not exceed the baseline applicable to the facility. The existing Lake Vermont Mine is covered by the Safeguard Mechanism, and will continue to be in conjunction with the Project, if approved. The Project will be required to consider the threshold for GHG emissions, energy production and consumption according to section 13(1) of the NGER Act, as listed in Table 1.2, to determine reporting obligations.

The NGER Act requires the proponent to assess whether it triggers a reporting obligation, and if it does, to register under the NGER Scheme and report through the Emissions and Energy Reporting System.



The Project triggers the NGER Act reporting threshold and the proponent will report its greenhouse gas emissions and energy production and consumption for the Project. Details of GHG emissions related to the Project are provided in Chapter 13, Air Quality and GHG.

Table 1.2: Threshold values

	Threshold values		
	GHG emissions	Energy production	Energy consumption
Controlling corporations	50 kilotonnes per year of CO ₂ -e	200 terajoules per year	200 terajoules per year
Single facility	25 kilotonnes per year of CO ₂ -e	100 terajoules per year	100 terajoules per year

Note: CO₂-e = Carbon dioxide equivalent

1.5.1.3 Native Title Act 1993

The *Native Title Act 1993* recognises the rights and interests of Aboriginal and Torres Strait Islander people over particular land and waters and provides for:

- determination of native title claims;
- treatment of future acts which may impact on native title rights;
- validation of past acts and ‘intermediate period’ acts which affected native title rights; and
- the requirement for consultation and/or notification to relevant native title claimants, where future acts are involved.

The Project is located within the Barada Barna People (QC2012/007) Native Title application area, but not within the Barada Barna People’s Native Title Determination. The Barada Barna People are the native title holders for the general Project region. Native title has been extinguished over all land within the MLA area and does not form part of the Barada Barna People’s Native Title Determination.

The existing Lake Vermont Mine has developed and implemented a CHMP with the Barada Barna People to manage the risk of harm to Aboriginal cultural heritage. This existing CHMP extends to include the Project area, however, Bowen Basin Coal has also recently commenced discussions with the Barada Barna People, with a view to reviewing and updating the existing CHMP.

1.5.2 Queensland legislation: environmental values

1.5.2.1 Biosecurity Act 2014

The *Biosecurity Act 2014* (Biosecurity Act [Qld]) provides comprehensive biosecurity measures to safeguard Queensland’s economy, agricultural and tourism industries, environment and way of life, from pests, diseases, and contaminants.

Under the Biosecurity Act (Qld) a person who deals with a biosecurity matter has a general obligation to:

- take all reasonable and practical measures to prevent or minimise the biosecurity risk;
- prevent or minimise adverse effects on a biosecurity consideration of the person’s dealing with the biosecurity matter or carrier or carrying out the activity;
- minimise the likelihood of causing a biosecurity event, or to limit the consequences of a biosecurity event caused, by dealing with the biosecurity matter or carrier or carrying out the activity; and



- not do or omit to do something if the person knows or ought reasonably to know that doing or omitting to do the thing may exacerbate the adverse effects, or potential adverse effects, of the biosecurity matter, carrier or activity on a biosecurity consideration.

Relevantly, invasive plants and animals are classified as either 'Prohibited' or 'Restricted' matters. In this regard, a 'Prohibited' matter (outlined in Schedule 1 of the Biosecurity Act) is a biosecurity matter not found in Queensland but if entered, would have a significant adverse impact on our health, way of life, the economy or the environment. A 'Restricted' matter (outlined in Schedule 2 of the Biosecurity Act) is a biosecurity matter found in Queensland with a significant impact on human health, social amenity, the economy or the environment.

Across the Project area there have been seven flora species identified which are listed as 'declared species' under the Biosecurity Act (Qld). This includes five species listed as 'Weeds of National Significance' (WoNS) by the Australian Government. Nine introduced pest fauna species listed under the Biosecurity Act (Qld) have also been recorded in the terrestrial and aquatic ecology study areas. A more detailed description is provided in Chapter 12, Biosecurity. All biosecurity matters relevant to the Project will be managed appropriately and in compliance with the Biosecurity Act (Qld).

1.5.2.2 Environmental Offsets Act 2014

The Queensland environmental offsets framework consists of the *Environmental Offsets Act 2014* (EO Act), the Environmental Offsets Regulation 2014 (EO Regulation) and the 'Queensland Environmental Offsets Policy (Version 1.9)'. The 'Significant Residual Impact Guideline' is also relevant to determining when an impact will be a significant residual impact for the purposes of the EO Act.

The main purpose of the EO Act is to counterbalance the significant residual impacts of particular activities on prescribed environmental matters through the use of environmental offsets. This purpose is mainly achieved by establishing a framework for environmental offsets and recognising the level of protection given to prescribed environmental matters under other legislation.

Section 18 of the EO Act provides that an environmental offset may be delivered in any of the following forms:

- a proponent-driven offset (i.e. a land-based offset or a Direct Benefit Action Plan);
- a financial settlement offset; or
- a combination of both.

Prescribed environmental matters under section 10 of the EO Act include:

- Matters of National Environmental Significance (MNES);
- Matters of State Environmental Significance (MSES); and
- Matters of Local Environmental Significance (MLES).

These prescribed environmental matters are outlined in the EO Regulation.

In Queensland the environmental offsets framework will govern any offsets imposed as a condition of the EA for the Project.

Environmental Offsets Regulation 2014

Schedule 1 of the EO Regulation sets out the prescribed activities regulated under existing legislation and the prescribed environmental matters to which the EO Act applies and relevantly includes a resource activity carried out under an EA for a site-specific application that was made under the EP Act.

MNES are matters that are protected and regulated under the EPBC Act, which are listed in section 5 of the EO Regulation. MSES are matters protected and regulated under Queensland legislation and are listed in Schedule 2 of the EO Regulation. A MLES cannot replicate a MNES or MSES and is a matter that is prescribed under a local planning instrument as a prescribed environmental matter.



Queensland Environmental Offsets Policy

The 'Queensland Environmental Offsets Policy (Version 1.12)' provides a single, consistent, whole-of-government policy to enable administering agencies to assess offset proposals and satisfy offset conditions in accordance with the EO Act. The Offsets Policy requires that all environmental offsets must meet the following set of principles:

- offsets will not replace or undermine existing environmental standards or regulatory requirements, or be used to allow development in areas otherwise prohibited through legislation or policy;
- impacts must first be avoided, then mitigated, before considering the use of offsets for any remaining impact;
- offsets must achieve a conservation outcome that counterbalances the significant residual impact for which the offset was required;
- offsets must provide environmental values as similar as possible to those being lost;
- offset provision must minimise the time lag between the impact and delivery of the offset;
- offsets must provide additional protection to environmental values at risk, or additional management actions to improve environmental values; and
- where legal security is required, offsets must be legally secured for the duration of the impact on the prescribed environmental matter.

Significant Residual Impact Guideline

The 'Significant Residual Impact Guideline' is used to assist in the determination of whether or not a prescribed activity (under the EO Regulation) is likely to have a significant residual impact on a MSES, for approvals under the EP Act and *Nature Conservation Act 1992* (NC Act).

Section 8 of the EO Act provides that generally, a significant residual impact is an adverse impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- remains, or will or is likely to remain, (whether temporarily or permanent) despite on-site mitigation measures for the prescribed activity; and
- is, or will or is likely to be, significant.

The proponent will comply with its obligations to identify and assess MNES, MSES and MLES which could potentially be affected by the Project, while also complying with the Queensland environmental offsets framework for the delivery of environmental offsets. Biodiversity offset matters are considered in detail within Chapter 10, Terrestrial Ecology, Chapter 11, Aquatic Ecology and Chapter 21, Matters of National Environmental Significance.

1.5.2.3 Environmental Protection Act 1994

The objective of the EP Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. This is commonly referred to as ecologically sustainable development (ESD). Section 4 of the EP Act states that this objective is to be achieved through an integrated management program that is consistent with ESD. The EP Act addresses the following areas that are relevant to the Project:

- notifiable activities, that are listed in Schedule 3 of the EP Act;
- environmental protection policies (EPPs) for water and wetland biodiversity, noise and air which are intended to enhance or protect Queensland's environment and list relevant environmental outcomes and performance criteria;
- resource activity ERAs in Schedule 3, and prescribed ERAs as listed in Schedule 2 of the Environmental Protection Regulation 2019 (EP Regulation);



- EAs which are required to carry out an ERA including a resource activity, and which will include conditions that will regulate the Project activities; and
- duties of care associated with environmental harm.

The EP Act also prescribes the EIS process which is managed by the DES, which will decide the future EA amendment application for the Project, once made. As previously identified, the EIS for the Project is prepared for assessment pursuant to the bilateral agreement between the Commonwealth and Queensland Government. Following any grant of an EA, the DES would subsequently monitor and regulate the Project's mining activities, in accordance with the EA conditions, throughout the life of the Project.

The proponent will lodge an application for an EA for the Project. The EA, once amended, would authorise the resource activity ERAs, and note the ancillary ERAs (listed under the EP Regulation) relevant to the Project.

Environmental Protection Regulation 2019

The EP Regulation provides for specific matters relevant to the EIS process and matters relating to ERAs.

Any ancillary activities (section 19A of the EP Act) carried out on-site will be considered 'resource activities' for the purposes of the EA. They will be considered prescribed ERAs and will be assessed by the DES and conditioned by the EA for the Project. Defined ERAs will also enable the calculation of applicable fees in response to the EA.

The prescribed ERAs, resource activities and notifiable activities listed in Table 1.3 and Table 1.4 are applicable to the existing Lake Vermont Mine, and are already authorised under the current EA. No additional ERAs or notifiable activities to those listed in Table 1.3 and Table 1.4 will be carried out for the Project.

Environmental Protection Policies

EPPs provide the framework for assessment, administration and enforcement, to meet the objectives of the EP Act. EPPs are established for a number of key environmental values (air, noise and water). The DES must consider the requirements of each EPP when deciding an application for an EA, amendment of a licence or approval of a draft environmental management plan.

The purpose of the EPPs is achieved by identifying environmental values to be enhanced or protected, stating indicators and objectives for enhancing or protecting the environmental values, and providing a framework for making consistent, equitable and informed decisions about the environment.

The Project is anticipated to impact the existing air, noise and water quality values within or surrounding the Project area, whether significant or insignificant.

Table 1.3: ERAs of the Project

ERA	ERA description
Schedule 2 of the EP Regulation	
8 (3) (1)(c) Chemical Storage	Chemical storage (the relevant activity) consists of storing more than 500 cubic metres (m ³) of class C1 or C2 combustible liquids under AS1940 or dangerous goods class 3.
16 (2)(a) Extraction and Screening	Extracting, other than by dredging, in a year, the following quantity of material (a) 5,000 t to 100, 000 t.
31 (2) 2(b) Mineral Processing	Processing, in a year, a quantity of more than 100,000 t of mineral products, other than coke.
33 (1) Crushing, milling, grinding or screening	Crushing, milling, grinding or screening (the relevant activity) consists of crushing, grinding, milling or screening more than 5,000 t of material in a year.
38(1)(b) Surface coating	Surface coating, using more than 100 t of surface coating materials for coating or painting or powder coating in a year.



60 (1)(a) Waste Disposal	Operating a facility for disposing of less than 50,000 t of waste in a year.
56 Regulated Waste Storage	Receiving and storing regulated waste (this is noted as being an ERA in the existing Lake Vermont Mine EA, albeit no longer an ERA used under Schedule 2 of the EP Reg).
63(1)(b-i) Sewage Treatment	Operating a sewage treatment works at a site that has a total daily peak design capacity of more than 100 but not more than 1500 equivalent persons, if treated effluent is discharged to an infiltration trench or through an irrigation scheme.
Schedule 3 of the EP Regulation	
13 Mining Black Coal	Mining black coal.

Environmental Protection (Air) Policy 2019

Section 6 of the ‘Environmental Protection (Air) Policy 2019’ (EPP [Air]) states that the environmental values to be enhanced or protected under this policy are:

- the qualities of the air environment that are conducive to protecting the health and biodiversity of ecosystems;
- the qualities of the air environment that are conducive to human health and wellbeing;
- the qualities of the air environment that are conducive to protecting the aesthetics of the environment, including the appearance of buildings, structures and other property; and
- the qualities of the air environment that are conducive to protecting agricultural use of the environment.

The Project will generate GHG emissions and other air pollutants which have the potential to impact on the air quality in the vicinity of the Project. Potential impacts and the proposed management process are discussed in Chapter 13, Air Quality & GHG.

Environmental Protection (Noise) Policy 2019

Section 6 of the ‘Environmental Protection (Noise) Policy 2019’ (EPP [Noise]) states that the environmental values to be enhanced or protected under this policy are:

- the qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems; and
- the qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment to do any of the following:
 - sleep;
 - study or learn;
 - be involved in recreation, including relaxation and conversation; and
- the qualities of the acoustic environment that are conducive to protecting the amenity of the community.

The Project will generate noise and contribute to the acoustic values in the surrounding area. Potential impacts from the Project and management of those impacts are described in Chapter 14, Noise and Vibration.

Table 1.4: Notifiable activities applicable to the Project

Notifiable activity	Notifiable activity description
Schedule 3 of the EP Act	
1 Abrasive Blasting	Carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material.



Notifiable activity	Notifiable activity description
7 Chemical Storage	Storing more than 10 t of chemicals (other than compressed or liquefied gases) that are dangerous goods under the dangerous goods code.
15 Explosives production or storage	Operating an explosives factory under the <i>Explosives Act 1999</i> .
24 Mine Wastes	<ol style="list-style-type: none"> 1) Storing hazardous mine or exploration wastes, including, for example, tailing dams, overburden or waste rock dumps containing hazardous contaminants; or 2) Exploring for, or mining or processing, minerals in a way that exposes faces, or releases groundwater, containing hazardous contaminants.
29 Petroleum Product or Oil Storage	<p>Storing petroleum products or oil:</p> <ol style="list-style-type: none"> 3) In underground tanks with more than 200 L capacity; or 4) In above ground tanks: <ol style="list-style-type: none"> a) for petroleum products or oil in class 3 in packaging groups 1 and 2 of the dangerous goods code – more than 2,500 L capacity; or b) for petroleum products or oil in class 3 in packaging groups 3 of the dangerous goods code – more than 5,000 L capacity; or c) for petroleum products that are combustible liquids in class C1 or C2 in Australian Standard AS 1940, ‘The storage and handling of flammable and combustible liquids’ published by Standards Australia – more than 25,000 L capacity.
37 Waste Storage, treatment of disposal	Storing, treating, reprocessing or disposing of waste prescribed under a regulation to be regulated waste for this item (other than at the place it is generated), including operating a nightsoil disposal site or sewage treatment plant where the site or plant has a design capacity that is more than the equivalent of 50,000 persons having sludge drying beds or on-site disposal facilities.

Environmental Protection (Water and Wetland Biodiversity) Policy 2019

Section 6 of the ‘Environmental Protection (Water and Wetland Biodiversity) Policy 2019’ (EPP [Water and Wetland Biodiversity]) states environmental values for waters to be enhanced or protected relevantly are:

- for high ecological value waters—the biological integrity of an aquatic ecosystem that is effectively unmodified or highly valued;
 - Example of a highly valued aquatic ecosystem*—an aquatic ecosystem used for drinking water.
- for slightly disturbed waters—the biological integrity of an aquatic ecosystem that has effectively unmodified biological indicators, but slightly modified physical, chemical or other indicators;
- for moderately disturbed waters—the biological integrity of an aquatic ecosystem that is adversely affected by human activity to a relatively small but measurable degree;
- for highly disturbed waters—the biological integrity of an aquatic ecosystem that is measurably degraded and of lower ecological value than waters mentioned in the above bullet points;
- for waters from which aquatic foods intended for human consumption are taken—the suitability of the water for producing the foods for human consumption;
- for waters that may be used for aquaculture—the suitability of the water for aquacultural use;
- for waters that may be used for agricultural purposes—the suitability of the water for agricultural purposes;
- for waters that may be used for recreation or aesthetic purposes—the suitability of the water for:
 - primary recreational use;



- secondary recreational use; or
- visual recreational use;
- for waters that may be used for drinking water—the suitability of the water for supply as drinking water having regard to the level of treatment of the water;
- for waters that may be used for industrial purposes—the suitability of the water for industrial use; or
- the cultural and spiritual values of the water.

The Project has the potential to impact on the surrounding wetlands and water quality. The Project's water values, as well as the potential impacts to these values, are described in Chapter 7, Groundwater and Chapter 8, Surface Water.

1.5.2.4 Fisheries Act 1994

The main purpose of the *Fisheries Act 1994* is to provide for the use, conservation and enhancement of the community's fisheries resources and fish habitats in a way that seeks to apply and balance and the principles of ESD and promote ESD. The *Fisheries Act 1994* provides for:

- the management and protection of fish habitats;
- the management of commercial, recreational and Indigenous fishing; and
- the management of aquaculture.

Several fish species of special interest are listed as 'no take' species under the *Fisheries Act 1994*, including the Australian lungfish.

Fisheries resources, including declared fish habitat areas which are MSES, contribute to the environmental values of waterways and wetlands.

The Project has the potential to impact on fisheries resources and habitats. A number of ephemeral watercourses including Boomerang Creek, One Mile Creek and Phillips Creek flow in an easterly direction to the Isaac River. All of the waterway works associated with the Project will be undertaken within a mining lease under the conditions of the EA. The Project's potential impacts on fishery resources and habitats are described in Chapter 11, Aquatic Ecology.

1.5.2.5 Nature Conservation Act 1992

The NC Act aims to conserve nature while allowing for the involvement of Indigenous people in the management of protected areas in which they have an interest under Aboriginal tradition or Island custom. The NC Act aims to achieve nature conservation by an integrated and comprehensive conservation strategy for Queensland that involves:

- gathering of information and community education etc.;
- dedication, declaration and management of protected areas;
- protection of native wildlife and its habitat;
- ecologically sustainable use of protected wildlife and areas;
- recognition of interest of Aborigines and Torres Strait Islanders in nature and their cooperative involvement in its conservation; and
- cooperative involvement of landholders.

Part 4 and Part 5 of the NC Act address environmental matters regarding protected areas and wildlife and habitat conservation, which are relevant to the Project. These environmental matters are guided by legislation subordinate to the NC Act, including the:

- Nature Conservation (Protected Areas) Regulation 1994;



- Nature Conservation (Animals) Regulation 2020; and
- Nature Conservation (Plants) Regulation 2020.

Nature Conservation (Protected Areas) Regulation 1994

The NC Act declares protected areas for the conservation of natural and cultural heritage within national parks, conservation parks or resource reserves. Management principles are set out in the Nature Conservation (Protected Areas) Regulation 1994 for each class of protected area. Under the NC Act, it is an offence to take, use, keep, or interfere with a cultural or natural resource in a protected area, except in accordance with an interim or declared management intent, or under a permit.

Nature Conservation (Animals) Regulation 2020

The Nature Conservation (Animals) Regulation 2020 prescribes the following classes of protected wildlife¹:

- Extinct;
- Extinct in the wild;
- Critically Endangered;
- Endangered;
- Vulnerable;
- Near Threatened; and
- Least Concern.

The Nature Conservation (Animals) Regulation 2020 prescribes Least Concern wildlife as a Special Least Concern wildlife for the following species:

- Short-beaked Echidna (*Tachyglossus aculeatus*).
- Platypus (*Ornithorhynchus anatinus*).
- A Least Concern bird to which any of the following agreements apply: China-Australia Migratory Bird Agreement, Japan-Australia Migratory Bird Agreement, Republic of Korea-Australia Migratory Bird Agreement or the Convention on the Conservation of Migratory Species of Wild Animals.

The Project's potential impacts on fauna are described in Chapter 10, Terrestrial Ecology, Chapter 11 Aquatic Ecology and Chapter 21, Matters of National Environmental Significance.

Nature Conservation (Plants) Regulation 2020

The Nature Conservation (Plants) Regulation 2020 prescribes the following classes of protected wildlife¹:

- Extinct;
- Extinct in the wild;
- Critically Endangered;
- Endangered;
- Vulnerable;
- Near Threatened; and
- Least Concern.

Under the NC Act, a Regulation may prescribe a Least Concern plant as a Special Least Concern plant if the taking or use of the plant is at risk of not being ecologically sustainable.

Permits and licences can be required to authorise impacts to, or the handling of native flora. For example, clearing activities within areas known to contain threatened plant species or within an area mapped as 'high

¹ Under the NC Act the term wildlife refers to any native taxon or species of an animal, plant, protista, prokaryote or virus.



risk' in the Protected Plants Trigger Map would require a Protected Plants Survey as per the requirements of the Nature Conservation (Plants) Regulation 2020. Despite targeted surveys, no threatened flora species have been recorded within the terrestrial ecology or aquatic ecology study areas. The Protected Plants Trigger Map also identified that no trigger areas were present across the Project site. The Project's potential impacts on native flora are described in Chapter 10, Terrestrial Ecology, Chapter 11, Aquatic Ecology and Chapter 21, Matters of National Environmental Significance.

1.5.2.6 Soil Conservation Act 1986

The main objective of the *Soil Conservation Act 1986* is to facilitate the implementation of soil conservation measures by landholders and mitigate the degree of soil erosion. The *Soil Conservation Act 1986* allows for the approval of soil conservation property plans to ensure the coordination of runoff to control erosion.

The Project has the potential to impact on soils. These impacts will be managed by reviewing (and updating where necessary) the existing Lake Vermont Mine Topsoil Management Plan and Water Management Plan (which incorporates erosion and sediment controls). A PRCP has also been developed and will be implemented for the Project (Appendix B, Progressive Rehabilitation and Closure Plan). Chapter 5, Land Resources, details the extent of potential impacts on soils during the development and the rehabilitation stages of the Project. The PRCP for the Project is introduced through Chapter 6, Rehabilitation.

1.5.2.7 Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) is part of the framework for the management of native vegetation across Queensland.

The purpose of the VM Act is to regulate the clearing of vegetation in a way that:

- conserves remnant vegetation that is an endangered, of concern, or least concern regional ecosystem (RE);
- conserves vegetation in declared areas;
- ensures the clearing does not cause land degradation;
- prevents the loss of biodiversity;
- maintains ecological processes;
- manages the environmental effects of the clearing to achieve the matters mentioned in the above bullet points;
- reduces greenhouse gas emissions; and
- allows for sustainable land use.

The means by which the purpose of the VM Act is achieved is addressed in section 3 of the Act. The Vegetation Management Regulation 2012 prescribes the status of each RE identified within Queensland and are categorised as either Endangered, Of concern, or Least concern.

Clearing native vegetation within the area of a ML is exempt from requiring a clearing permit. However, any clearing of native vegetation outside of a ML may require development approval under the *Planning Act 2016*. Although the VM Act does not apply to clearing vegetation within the ML, the scientific basis for biodiversity conservation under the VM Act is still valid and used to assess the conservation significance of the vegetation communities on the Project site. This includes the conservation status categories of each RE under the VM Act.



Each RE is also assigned a biodiversity status. This biodiversity status is utilised for a range of planning and management applications; Biodiversity Planning Assessments and to determine Environmentally Sensitive Areas.

Chapter 10, Terrestrial Ecology provides details of the RE's identified within the Project area and surrounds.

1.5.2.8 Water Act 2000

The *Water Act 2000* (Water Act) provides the framework for the sustainable management of Queensland's water resources and quarry material, through establishing a system for the planning, allocation and use of water; and the allocation of quarry material and riverine protection. The Water Act also has the purpose of securing water supply and demand management for the south-east Queensland region and other designated regions and the management of impacts on underground water caused by the exercise of underground water rights by the resource sector.

Under the Water Act, a person must not take or interfere with water unless authorised under the Water Act, or another Act. Boomerang Creek, Hughes Creek, One Mile Creek, Ripstone Creek, Phillips Creek and the Isaac River are defined watercourses under the Water Act. Potential impacts of the Project on watercourses are discussed in Chapter 8, Surface Water.

For the Project, groundwater ingress to the open-cut pit is considered a take (or interference) of water (associated water). However, section 334ZP of the MR Act confers underground water rights to the holder of a Mineral Development Licence (MDL) or ML to take or interfere with underground water where this occurs during the course of, or as a result of, carrying out an authorised activity for the licence or lease. In such circumstances, section 334ZP (5) of the MR Act also requires the holder to measure and report the volume of associated water taken, as well as imparting certain notification requirements.

Under the Water Act, a riverine protection permit may also be required to enable disturbance of riparian vegetation; the placement of any fill; or the undertaking of any excavation within a watercourse. An exemption from a riverine protection permit is available to the Project however, as disturbance for watercourse crossings will be less than 0.5 ha; excavation will not exceed a volume of 500 cubic metres; and placement of fill will not exceed 150 cubic metres. The defined minimum requirements for exempt works will nonetheless be applied (DNRME 2019).

The Project will also involve the construction of water storages, sediment dams and drains to support the efficient management of water resources. These considerations are discussed in detail in Chapter 8, Surface Water.

Section 1250U of the Water Act also provides that the holder of the mining tenure must enter into an agreement with the owner of a water bore if that bore is affected (or likely to be affected) by the proposed mining activities. The potential for the Project to affect registered bores is discussed in Chapter 7, Groundwater.

Water Plan (Fitzroy Basin) 2011

The purpose of the Water Plan (Fitzroy Basin) 2011 is to define the availability of water in the Fitzroy Basin area, while providing a framework for the sustainable management of this resource. The Water Plan (Fitzroy Basin) 2011 regulates the taking of water, establishes water allocations, and provides the framework for the reversal of historical degradation where practicable.

The Water Plan (Fitzroy Basin) 2011 also contributes to regulation of the taking of overland flow water and groundwater within the region. Under this Water Plan (Fitzroy Basin) 2011, the proponent is required to take into consideration the groundwater and surface water available for extraction and usage by the Project, as well as ensuring any works/drainage features (that capture overland flow) meet the requirements of the plan. This is discussed in more detail in Chapter 7, Groundwater and Chapter 8, Surface Water.

1.5.3 Queensland legislation: cultural heritage



1.5.3.1 Queensland Heritage Act 1992

The primary purpose of the *Queensland Heritage Act 1992* (Heritage Act) is to provide for the conservation of Queensland's cultural heritage places for the benefit of the community and future generations.

The aims of the Heritage Act are primarily achieved by:

- establishing the Queensland Heritage Council;
- keeping the Queensland heritage register;
- keeping local heritage registers;
- requiring that archaeological and underwater cultural heritage artefact discoveries be reported;
- regulating, in conjunction with other legislation, development affecting the cultural heritage significance of Queensland heritage places;
- providing for heritage agreements to encourage appropriate management of Queensland Heritage Places; and
- providing for appropriate enforcement powers to help protect Queensland's cultural heritage.

Part 9 of the Heritage Act requires the assessment and reporting of discoveries of all archaeological and underwater cultural heritage artefacts. Archaeological artefacts include any relic or remains that relate to past human behaviour that is evidence of an aspect of Queensland's history, whether it is located in, on or below the surface of land. They can be found above, on, or below the land surface, or in State waters. Archaeological artefacts are valuable because they provide evidence about Queensland's history, often complementing and supplementing written historical records.

The Heritage Act also requires local government authorities to establish and maintain a register of places of local cultural heritage significance and include policies for the protection of such places in their local planning schemes.

There are no Queensland heritage register places located within the Project area or surrounds. Eight non-Indigenous cultural heritage sites were identified by Converge Heritage + Community (Appendix O, Non-Indigenous Cultural Heritage Assessment, Section 3). None of the sites met the threshold for local heritage significance or State heritage listing. The outcomes of the non-Indigenous cultural heritage survey are described in Chapter 17, Cultural Heritage.

The *Aboriginal Cultural Heritage Act 2003* (ACH Act) provides a system to recognise, protect, preserve and manage Aboriginal cultural heritage areas and objects.

Section 23 of the ACH Act prescribes duty of care provisions. A person who carries out an activity must take all reasonable and practicable measures to ensure that the activity does not harm Aboriginal cultural heritage (the cultural heritage duty of care).

There are a number of ways that a person can meet their duty of care under the ACH Act, including:

- at a minimum, acting in compliance with the cultural heritage duty of care guidelines published by the Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships (DSDSATSIP);
- acting under an approved CHMP; or
- acting under a native title agreement or another agreement with an Aboriginal party that deals with cultural heritage (such as a voluntary cultural heritage management agreement).

The ACH Act requires a CHMP or another approved agreement to be prepared for a Project undertaking an EIS. Relevant to section 86 and 87 of the ACH Act, it is acknowledged that Bowen Basin Coal entered into a CHMP with the 'Barada Barna Kabalbara and Yetimarla People' on 05 March 2007. This CHMP establishes how land use activities will be managed by Bowen Basin Coal, to avoid or minimise harm to Aboriginal or Torres Strait Islander cultural heritage. This CHMP was established for the 'life of the Vermont Coal Project' and remains valid with the updated 'Barada Barna People' entity (which replaced the prior 'Barada Barna Kabalbara and



Yetimarla People' entity, circa 2016). The CHMP extends across all Bowen Basin Coal tenements relevant to the Lake Vermont Mine (inclusive of the Project site).

1.5.4 Queensland legislation: development and planning

1.5.4.1 Building Act 1975

The purpose of the *Building Act 1975* is to regulate building development approvals, building works, building classification and building certificates. Construction of any associated building or other structure (e.g. mine infrastructure) must comply with the provisions of the *Building Act 1975*. Further to this, the proponent must also comply with the relevant provisions of the 'Building Code of Australia' and/or the 'Queensland Development Code' when undertaking building works for the Project.

1.5.4.2 Electricity Act 1994

The *Electricity Act 1994* regulates the electricity industry and electricity use and sets a framework for all electricity industry participants that promotes efficient, economical and environmentally sound electricity supply and use. The *Electricity Act 1994* also aims to establish a competitive electricity market in line with the national electricity industry reform process, ensuring that the interests of customers are protected, taking into consideration the national competition policy requirements.

The DEPW issues authorities (licences) for generation, transmission and distribution activities for Queensland's electricity industry under the *Electricity Act 1994*.

Under section 99 of the Act, the proponent must give 14 days written notice of the proposed work if, in performing the work:

- plant, if not properly controlled, is likely to come into contact with an overhead electric line; or
- soil or other material supporting or covering the entity's works may be disturbed.

There are proposed new power connections from the existing electricity infrastructure network to the Project site. Further details of electricity infrastructure requirements for the Project are outlined in Chapter 3, Project Description. The proponent will comply with the relevant provisions of the *Electricity Act 1994* during construction of the Project.

1.5.4.3 Planning Act 2016

The purpose of the *Planning Act 2016* is to establish an efficient, effective, transparent, integrated, coordinated and accountable system of land use planning, development assessment and related matters that facilitate the achievement of ecological sustainability. The system to facilitate the achievement of ESD includes:

- state planning policies;
- regional plans;
- planning schemes;
- temporary local planning instruments;
- planning scheme policies; and
- a development system, including the State Assessment and Referral Agency, for implementing planning policies and requirements about development.

Activities and development conducted under a ML are exempt from the requirement to obtain development permits under the *Planning Act 2016* and the Planning Regulation 2017. Project activities that are located outside of the ML area will be subject to the *Planning Act 2016*. For the Project, this includes the proposed upgrade / extension of the Lake Vermont Accommodation Village, located in Dysart.



1.5.4.4 Plumbing and Drainage Act 2018

The *Plumbing and Drainage Act 2018* regulates the carrying out of plumbing or drainage work in a way that reduces risks to the public health and safety and the environment. This is achieved by:

- establishing a licensing scheme for all regulated plumbing and drainage work;
- requiring plumbing and drainage work to be carried out in compliance with the code requirements for the work; and
- establishing a framework for approving particular plumbing or drainage work and particular treatment plants.

A sewage treatment plant (TOR) will be required for the Project and is a prescribed ERA under the EP Act (refer section 1.5.2.3). Final inspection certificates or inspection certificates are also required for plumbing and drainage work including permanent toilet facilities, showers, and site office facilities. The proponent will comply with the relevant provisions of the *Plumbing and Drainage Act 2018* for the construction and operation of the Project. Management of waste, including sewage, is addressed through Chapter 15, Waste Management.

1.5.4.5 Regional Planning Interests Act 2014

The purpose of the *Regional Planning Interests Act 2014* (RPI Act) is to identify areas of Queensland that are of regional interest, because they contribute to, or are likely to contribute to, Queensland's economic, social and environmental prosperity. The RPI Act also aims to give effect to the policies about matters of State interest, as stated in regional plans and effectively manages the impact of resource activities and other regulated activities on areas of regional interest and manage the co-existence of resource activities with highly productive agricultural activities.

Areas of regional interest that the RPI Act protects include:

- High quality agricultural areas from dislocation (Priority Agricultural Area);
- existing settled areas of a city, town or other community including areas for future growth and buffer areas between resource activities (Priority Living Area);
- land that is highly suitable for cropping (Strategic Cropping Areas); and
- regionally important environmental areas (Strategic Environmental Areas).

The Project is located outside of zones mapped as Priority Living Areas, Priority Agricultural Areas, Priority Development Areas and Strategic Environmental Areas under the RPI Act. A small area mapped as potential Strategic Cropping Land (SCL) (SCL trigger area) under the RPI Act occurs within the proposed Project infrastructure corridor disturbance area. This area has been assessed as part of the Soils and Land Suitability Assessment for the Project, to determine whether it meets the SCL criteria (Appendix C Soils, and Land Suitability Assessment, Section 7). This assessment is provided in Chapter 5, Land Resources.

1.5.4.6 Strong and Sustainable Resource Communities Act 2017

The purpose of the *Strong and Sustainable Resource Communities Act 2017* (SSRC Act) is to provide for matters that will benefit residents of communities in the vicinity of large resource projects during their operation. The Project meets the definition of a large resource project under the SSRC Act. There are three key requirements that must be met by the proponent under the SSRC Act:

- 1) prepare a social impact assessment for the Project;
- 2) employ people from nearby regional communities (i.e. prohibition on 100% fly-in fly-out [MDL] workforce); and
- 3) no discrimination against residents from nearby regional communities when hiring employees.



The Project will comply with the requirements of the SSRC Act. Further details of compliance with the requirements of the SSRC Act are described in Chapter 18, Social.

1.5.4.7 Survey and Mapping Infrastructure 2003

It is an offence under the *Survey and Mapping Infrastructure Act 2003* to interfere with any permanent survey mark, of which the person knows or ought reasonably to know is a survey mark. In the case where a survey mark must be removed or disturbed, an application must be made to the DoR under section 43 of the Act. If a survey mark is identified, the DoR must be contacted to determine the type and significance of the survey mark. The *Survey and Mapping Infrastructure Act 2003* is relevant to the protection of non-Indigenous historical survey marks that may occur within the Project region.

The proponent will comply with the requirements of the *Survey and Mapping Infrastructure Act 2003* for the construction and operation of the Project.

1.5.4.8 Transport Infrastructure Act 1994

Consistent with the objectives of the *Transport Planning and Coordination Act 1994*, the purpose of the *Transport Infrastructure Act 1994* is to provide a regime that allows for and encourages effective integrated planning and efficient management of a system of transport infrastructure. The existing transport infrastructure has been selected to ensure transport efficiency and minimise impacts on land uses and the community. All Project related transport will be managed to comply with the associated principles and requirements of the *Transport Infrastructure Act 1994*. Transport requirements for the Project are described in Chapter 20, Transport.

1.5.4.9 Transport Operations (Road Use Management) Act 1995

The *Transport Operations (Road Use Management) Act 1995* provides for the effective and efficient management of road use in the State, and provides a scheme for managing the use of the State's roads that will:

- promote the effective and efficient movement of people, goods and services;
- contribute to the strategic management of road infrastructure in ways consistent with the *Transport Infrastructure Act 1994*;
- improve road safety and the environmental impact of road use in ways that contribute to overall transport effectiveness and efficiency;
- support a reasonable level of community access and mobility in support of government social justice objectives; and
- provide for the effective and efficient management of vehicle use in a public place.

Provisions that regulate oversize vehicles operating, which is likely to occur during construction stages, and potentially during operations, are relevant to the Project. In addition, the oversize vehicle standards and safety requirements required by the *Transport Operations (Road Use Management) Act 1995* will be maintained during all phases of the Project.

The Transport Operations (Road Use Management – Dangerous Goods) Regulation 2008 has been developed to prescribe the obligations of persons transporting dangerous goods by road, to reduce (where practical) the risks associated with the transportation of dangerous goods. The Regulation also gives effect to the standard requirements and procedures of the 'Australian Dangerous Goods (ADG) Code', and promotes consistency between the associated standards, requirements and procedures. The vehicle standards and requirements for transporting dangerous goods contained in the Regulation will be complied with during all phases of the Project. Transport requirements for the Project are described in Chapter 20, Transport.



1.5.4.10 Waste Reduction and Recycling Act 2011

The object of the *Waste Reduction and Recycling Act 2011* is to:

- promote waste avoidance and reduction, and resource recovery and efficiency actions;
- reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste;
- minimise the overall impact of waste generation and disposal;
- ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery; and
- support and implement national frameworks, objectives and priorities for waste management and resource recovery.

Project construction and operation will involve the generation and storage of wastes at each phase of the Project. The proponent will comply with the requirements of the Act.

Waste management for the Project is described in Chapter 15, Waste Management.

1.5.5 Queensland legislation: natural resources

1.5.5.1 Explosives Act 1999

In Queensland, explosives are controlled under the *Explosives Act 1999*. Licences and/or permits are required for the use, storage, transportation, manufacture, sale, importation and exportation of explosives under the *Explosives Act 1999*. The Explosives Regulation 2017 defines the substances to be declared authorised or prohibited explosives and sets out further details of the requirements for the manufacture, transport, handling and storage, of explosives under the *Explosives Act 1999*.

Under section 32 of the Explosives Regulation 2017, a licence to use explosives permits the use, possession, purchase of explosives in the manner stated in the licence and the storage and transportation of explosives is required under parts 8 and 9 of the Explosives Regulation 2017. The proponent intends to retain its existing licence to use and store explosives, at all relevant times for the Project.

The proponent will comply with the requirements of the *Explosives Act 1999*, including by obtaining any necessary authorities to possess, store and use explosives.

1.5.5.2 Forestry Act 1959

The *Forestry Act 1959* provides for forest reservations, the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry material, the property of the Crown on State forests, timber reserves and on other lands. All forest products and quarry materials on certain State land and some freehold land are considered the property of the Crown under the *Forestry Act 1959*.

The Project area is not subject to any areas of State forest, timber reserves or forest entitlement areas.

1.5.5.3 Mineral and Energy Resources (Common Provisions) Act 2014

The *Mineral and Energy Resources (Common Provisions) Act 2014* (MERC Act) intends to support the creation of a simplified common framework that will apply to all resource authorities, in order to optimise development and use of Queensland's mineral and energy resources and to manage overlapping coal and petroleum resource authorities for coal seam gas. The main purpose of the MERC Act is to consolidate particular provisions common to each of the resources Acts and provide for particular common processes that apply to the resource authorities. The MERC Act also sets out to manage overlapping coal and petroleum resource authorities for coal seam gas and to assist in achieving the purposes of each of the resources Acts. The



purposes are achieved by providing for the following matters mainly in this Act, rather than in each of the Resources Acts:

- dealings, caveats and associated agreements;
- land access;
- the new framework for overlapping coal and petroleum resource authorities for coal seam gas;
- the resources authority register; and
- other miscellaneous matters.

The proponent will comply with the requirements of the MERC Act to obtain the ML for the Project.

1.5.5.4 Mineral and Energy Resources (Financial Provisioning) Act 2018

The purpose of the *Mineral and Energy Resources (Financial Provisioning) Act 2018* (MERFP Act) is to:

- provide for holders of environmental authorities to pay a contribution to the scheme fund, or give a surety, for their authorities;
- provide a way to manage the risk to the State of incurring costs and expenses if the holder of an authority or small-scale mining tenure does not comply with the holder's obligations under the authority or tenure;
- provide a source of funds to the State for costs and expenses relating to preventing or minimising environmental harm, or rehabilitating or restoring the environment, or securing compliance with an authority or small-scale mining tenure; and
- provide a source of funds to the State for:
 - rehabilitation activities at land on which an abandoned mine exists;
 - remediation activities in relation to an abandoned operating plant; and
 - research that may contribute to the rehabilitation of land on which resource activities have been carried out.

The proponent will continue to meet all requirements of the MERFP Act, either by contributing to the scheme fund or providing the required financial surety as a cash security.

1.5.5.5 Mineral Resources Act 1989

The principal objectives of the MR Act are to:

- encourage and facilitate prospecting and exploring for and mining of minerals;
- enhance knowledge of the mineral resources of the State;
- minimise land use conflict with respect to prospecting, exploring and mining;
- encourage environmental responsibility in prospecting, exploring and mining; and
- ensure an appropriate financial return to the State from mining.

The MR Act sets royalty payments, rents, landholder compensation and notification requirements. The following authorities are obtainable under the MR Act (section 6D):

- Prospecting Permits;
- Mining Claims;
- Exploration Permits;
- MDLs; and
- MLs.



The proponent currently holds MDL 303, MDL 429 and MDL 3001 which authorises the following activities leading to the evaluation and economic development of an ore body under the MR Act:

- geological, geophysical and geochemical programs and other works as are reasonably necessary to evaluate the potential for development of any mineral occurrence of possible economic potential occurring in or on the area of the MDL;
- mining feasibility studies;
- metallurgical testing;
- environmental studies;
- marketing studies; and
- engineering and design studies.

Under the MR Act, a ML holder may conduct large scale mining operations, which allows for mining of specified minerals and conduct other activities associated with mining or promoting the activity of mining.

The holder of a MDL or a ML has a right under the MR Act to take or interfere with underground water if the taking or interfering occurs with or results from the holders authorised activities, providing that:

- the holder of the MDL or ML, in accordance with any requirements prescribed by regulation:
 - measures the volume of associated water taken, or if the taking is the result of evaporation, estimates the volume of water taken; and
 - reports the volume or estimated volume of associated water taken to the chief executive; and
- the holder of the MDL or ML advises the chief executive of the exercise of the holder's underground water rights immediately after the holder starts exercising the rights.

Mineral Resources Regulation 2013

The Mineral Resources Regulation 2013 supports the operation of the MR Act by:

- prescribing conditions, restrictions, exemptions and prohibitions for tenures, areas for particular land, reporting requirements, a small-scale mining code, additional information and lodgement requirements, prescribed hours of business and rent payable for mining tenements;
- prescribing the rates and methods of calculating royalties, the way in which royalties are assessed and payable, and the basis for collection and enforcement of royalty liabilities; and
- prescribing the requirements for measuring the taking of associated water under section 334ZP(5)(b) of the MR Act.

A ML application process over MDL 303 and MDL 429 is currently in progress for the Project, and the proponent will comply with all relevant provisions of the MR Act for the ML application and the construction, operation and closure of the Project.

1.5.6 Queensland legislation: human health and wellbeing

1.5.6.1 Coal Mining Safety and Health Act 1999

The objective of the *Coal Mining Safety and Health Act 1999* (CMSH Act) is:

- to protect the safety and health of persons at coal mines and persons who may be affected by coal mining operations;
- to require that the risk of injury or illness to any person resulting from coal mining operations be at an acceptable level; and



- to provide a way of monitoring the effectiveness and administration of provisions relating to safety and health under this Act and other mining legislation.

These objectives are to be achieved through the 12 provisions provided in section 7 of the CSMH Act, key provisions of which include imposing safety and health obligations on persons who operate coal mines (or who may affect the safety or health of others at coal mines), and providing a safety and health management system(s) at all coal mines, to manage risk effectively.

The Coal Mining Safety and Health Regulation 2017 forms part of the framework established to prescribe the ways of achieving acceptable levels of risk. The proponent will adopt effective safety management practices and comply with the requirements prescribed by the CSMH Act during all phases of the Project.

The proponent will comply with the requirements of this Act and its subordinate legislation in the undertaking of the Project.

1.5.6.2 Electrical Safety Act 2002

The *Electrical Safety Act 2002* is directed at eliminating the human cost to individuals, families and the community of death, injury and destruction that can be caused by electricity. Accordingly, the purpose of the *Electrical Safety Act 2002* is to establish a legislative framework for preventing persons from being killed or injured by electricity and property from being destroyed or damaged by electricity. The Electrical Safety Regulation 2013 prescribes the requirements for licensing for electrical work, registration of suppliers and equipment, certification of equipment, and safety procedures to achieve the purposes of the *Electrical Safety Act 2002*.

The Project will involve the installation and utilisation of electricity. All requirements of the *Electrical Safety Act 2002* will be implemented by work personnel for the Project to avoid injuries and property damage.

1.5.6.3 Fire and Emergency Services Act 1990

The objects of the *Fire and Emergency Services Act 1990* are to:

- provide for the prevention of, and responses to, fires and other emergency incidents;
- provide for rescue services and operations; and
- establish a framework for the management of:
 - the Queensland Fire and Emergency Service;
 - the State Emergency Service;
 - emergency service units established for an emergency service area; and
 - the conduct of authorised rescue officers.

The proponent will comply with all relevant provisions of the *Fire and Emergency Services Act 1990* for all phases of the Project to prepare for potential emergencies, with the aim of protecting the workforce should such situations arise.

1.5.6.4 Work Health and Safety Act 2011

The *Work Health and Safety Act 2011* (WHS Act) provides a framework to protect the health, safety and welfare of all workers at work. Schedule 1, Part 2, section 2(a) of the WHS Act provides that the WHS Act does not apply to coal mines regulated under the CSMH Act. Consequently, the provisions of the WHS Act applies to the construction and operational activities and other means of work outside of MLA but relevant to the Project (e.g. works at the Lake Vermont Accommodation Village), and will be complied with.



1.5.6.5 Human Rights Act 2019

The *Human Rights Act 2019* makes it unlawful for public entities to take actions or make decisions that are not compatible with the human rights or that fail to give the human rights sufficient consideration.

The Act requires decision makers to identify which of the human rights may be affected by the decision and to then consider whether the decision will be compatible with those rights. In designing the Project, the proponent has considered human rights and designed the Project to be compatible with human rights.

Human rights considered in the delivery and operation of the Project are listed in Table 1.5

Table 1.5: *Human rights considerations*

Human rights	Proponent considerations under the <i>Human Rights Act 2019</i>
Rights related to industrial relations and safety, including the right to life, freedom from forced work and freedom of expression	The proponent has designed the Project to provide a place of employment that respects and upholds every person's rights, is an environment free from discrimination and is safe for its workers.
Rights related to impacts on the environment and climate change, including the right to life and right of every child to protection	The proponent seeks to appropriately mitigate environmental impacts of the Project. The proponent has considered the impact of greenhouse gas emissions. The proponent has designed the Project with consideration to minimising greenhouse gas emissions to the greatest extent possible.
Rights related to property and land use, including the right not to be arbitrarily deprived of property and right not to have a person's privacy, family, home or correspondence unlawfully or arbitrarily interfered with	The proponent has sought to understand the scope of social impacts that might occur during construction and operation of the Project. The proponent has conducted a social impact assessment to better understand the potential adverse effects the Project could have on local and nearby regional communities. The proponent has considered these effects and prepared a Social Impact Management Plan (SIMP) to minimise adverse impacts of the Project.
Cultural rights, including the right of Aboriginal people not to be denied the right to enjoy, control and protect their cultural heritage, maintain their connection with the land and conserve the environment and productive capacity of their land	<p>The construction and operation of the Project aims to ensure that the nature and scale of the Project does not compromise the cultural heritage significance of a heritage place or heritage area. The Barada Barna People are the native title holders for the general Project region.</p> <p>Bowen Basin Coal has developed a CHMP with the Barada Barna People to manage the risk of harm to Aboriginal cultural heritage by activities associated with the Project. Compliance with the terms of the CHMP will achieve compliance with the duty of care under the ACH Act for the construction and operation of the Project.</p>

1.5.7 Queensland legislation: land and government

1.5.7.1 Land Act 1994

The *Land Act 1994* (Land Act) provides a framework relating to the administration and management of non-freehold land and deeds of grant in trust and the creation of freehold land. In the administration of this Act, land to which the Land Act applies must be managed for the benefit of the people of Queensland by having regard to seven principles listed in section 4 of the Act:

- Sustainability—sustainable resource use and development to ensure existing needs are met and the State's resources are conserved for the benefit of future generations;
- Evaluation—land evaluation based on the appraisal of land capability and the consideration and balancing of the different economic, environmental, cultural and social opportunities and values of the land;



- Development—allocating land for development in the context of the State’s planning framework and applying contemporary best practice in design and land management. When land is made available, allocation to persons who will facilitate its most appropriate use, that supports the economic, social and physical wellbeing of the people of Queensland;
- Community purpose—if land is needed for community purposes, the retention of the land for the community in a way that protects and facilitates the community purpose;
- Protection—protection of environmentally and culturally valuable and sensitive areas and features;
- Consultation—consultation with community groups, industry associations and authorities are an important part of the decision-making process;
- Administration—consistent and impartial dealings, efficient, open and accountable administration, and a market approach in land dealings, adjusted when appropriate for community benefits arising from the dealing;
- Under section 177 of the Land Act, the chief executive may issue a permit to occupy a reserve, road or unallocated State land. This permit entitles the holder to non-exclusive use of that land; and
- Section 98 of the Land Act provides that an application can be made to the DoR to permanently or temporarily close a road, if required. If an application to temporarily close a road is approved, a road licence will be issued to make structural improvements, that grants exclusive occupation of that road for a defined period.

1.5.7.2 Local Government Act 2009

The purpose of the *Local Government Act 2009* is to provide the way in which a local government is constituted and the nature and extent of its responsibilities and powers, and to create a system of local government in Queensland that is accountable, effective, efficient and sustainable. Section 8 of the *Local Government Act 2009* defines ‘local government’ as an elected body that is responsible for the good rule and local government of a part of Queensland, which is known as a Local Government Area (LGA).

Any actions taken under the *Local Government Act 2009* must align with local government principles, which are prescribed by section 4 of the Act as:

- transparent and effective processes, and decision-making in the public interest;
- sustainable development and management of assets and infrastructure, and delivery of effective services;
- democratic representation, social inclusion and meaningful community engagement;
- good governance of, and by, local government; and
- ethical and legal behaviour of councillors and local government employees.

The Project is located within the Isaac Regional LGA, with the Isaac Regional Council having been identified and engaged as a key stakeholder for the Project. This is discussed further in Chapter 2, Consultation Process and Chapter 18, Social.

1.5.8 Legislative requirements summary

A summary of all legislative requirements applicable to the Project is provided through Table 1.6



Table 1.6: Summary of legislative considerations

Legislation	Administering Authority	Approval to be Sought Following Completion of the EIS Process
Commonwealth Legislation		
EPBC Act	DCCEEW	Approvals under section 133 of the EPBC Act for the Project components (EPBC 2019/8485). An Offset Management Strategy and Offset Area Management Plan have been prepared for the Project and will require approval by DCCEEW, prior to any Project commencement.
NGER Act	DCCEEW	No approval required - the proponent will register under section 12 of the NGER Act and report all greenhouse gas emissions and energy production and consumptions from its activities.
<i>Native Title Act 1993</i>	NNTT	No approval required – native title has been extinguished over all the land within the MLA.
State Legislation and associated subordinate legislation		
Biosecurity Act (Qld)	DAF	No approval required - a Weed and Pest Management Plan will be developed and implemented for the Project that describes the measures to manage weeds and feral animals.
EO Act Environmental Offsets Regulation 2014 Queensland Environmental Offsets Policy Significant Residual Impact Guideline	DES	Approval of Notice of Election. Approval of an Offset Delivery Plan prior to Project commencement.
EP Act EP Regulation Environmental Protection (Air) Policy 2019 Environmental Protection (Noise) Policy 2019 Environmental Protection (Water and Wetland Biodiversity) Policy 2019	DES	The proponent will need to obtain an amendment to the existing Lake Vermont Mine EA EPML00659513 to authorise the proposed Project.
<i>Fisheries Act 1994</i>	DAF	Works associated with the Project will be assessed and conditioned through the EIS process, with no separate, stand-alone approval required under the Fisheries Act.



Legislation	Administering Authority	Approval to be Sought Following Completion of the EIS Process
NC Act Nature Conservation (Protected Areas) Regulation 1994 Nature Conservation (Animals) Regulation 2020 Nature Conservation (Plants) Regulation 2020	DES	No approval required – a Species Management Program will be developed and implemented during construction and operation.
<i>Soil Conversation Act 1986</i>		No approval required.
VM Act	DoR	No approval is required to clear native vegetation within the ML. Clearing will be undertaken in accordance with the 'Permit to Disturb' process.
Water Act 2000 Water Plan (Fitzroy Basin) 2011 Fitzroy Basin Resource Operations Plan 2011 Fitzroy Basin Water Management Protocol June 2018	DRDMW	Mining Lease and associated EA.
Heritage Act	DES	No approvals required – an Incidental Finds Procedure will be implemented in the event that a potential site of non-Indigenous cultural heritage significance is identified within the Project area that has not previously been recorded.
ACH Act	DSDSATSIP	A Cultural Heritage Management Plan is in place with the Barada Barna People (the Aboriginal party for the Project), which was approved as a CHMP under Part 7 of ACH Act in 2007.
<i>Building Act 1975</i>	DEPW	Development approvals for buildings works may be required under the <i>Planning Act 2016</i> for components of the Project.
<i>Electricity Act 1994</i>	DEPW	No approval required by the proponent. The proponent will comply with the relevant provisions of the <i>Electricity Act 1994</i> during construction of the Project.



Legislation	Administering Authority	Approval to be Sought Following Completion of the EIS Process
<i>Planning Act 2016</i>	Queensland Treasury, DHPW, Isaac Regional Council	Development Approval for the proposed upgrade / extension of the existing Lake Vermont Accommodation Village in Dysart is required. The consent authority for this DA is the IRC.
<i>Plumbing and Drainage Act 2018</i>	DEPW	The proponent will need to obtain approvals for plumbing and drainage work for permanent toilet facilities, showers and site office facilities as required.
RPI Act	DSDILGP	No approval required.
SSRC Act	DSDILGP	A Social Impact Management Plan (SIMP) has been prepared for the Project and will be implemented following any Project approval.
<i>Transport Infrastructure Act 1994</i>	DTMR	No approval required.
<i>Transport Operations (Road Use Management) Act 1995</i> Transport Operations (Road Use Management – Dangerous Goods) Regulation 2018	DTMR	No approval required.
<i>Waste Reduction and Recycling Act 2011</i>	DES	Excavated waste will be disposed of within the approved ML. Coal rejects will be disposed of within the existing Lake Vermont Mine co-disposal facilities and/or within an existing mine void.
<i>Explosives Act 1999</i> Explosives Regulation 2017	Resources Safety and Health Queensland	As the Project would involve the use of explosives, authority to possess (section 34), store (section 44), and use (section 53) explosives in accordance with the <i>Explosives Act 1999</i> will be required to be maintained.
<i>Forestry Act 1959</i>	DAF	If any material required for the Project (e.g. quarry materials) is owned by the Crown, approval will be required. A sales permit may also be required for the use and/or interference of quarry material which is vested with the Crown. This is not currently anticipated for the Project.
MERCP Act	DoR	No approval required.



Legislation	Administering Authority	Approval to be Sought Following Completion of the EIS Process
MR Act Mineral Resources Regulation 2013	DoR	Mining lease. An ML application has been submitted over MDL 303 and MDL 429.
MERFP Act Mineral and Energy Resources (Financial Provisioning) Regulation 2019	DES, Queensland Treasury	No approval required. The requirement for a new Estimated Rehabilitation Cost decision and PRC Plan and Schedule will be triggered following the grant of any amended EA.
CMSH Act Coal Mining Safety and Health Regulation 2017	Resources Safety and Health Queensland	No approvals required.
<i>Electrical Safety Act 2002</i>	Electrical Safety Office	No approval required.
<i>Fire and Emergency Services Act 1990</i>	QFES	No approvals required.
<i>Work Health and Safety Act 2011</i>	Office of Industrial Relations, WorkSafe	No approvals required.
<i>Human Rights Act 2019</i>	Queensland Human Rights Commission	No approval required – compatibility with human rights under this Act is assessed by public entities, in its administrative decision-making process. This would be carried out by the DES, prior to the release of the Evaluation Report.
Land Act	DoR	No approval required.
<i>Local Government Act 2009</i> (Local Laws)	Isaac Regional Council	Development Approval for the proposed upgrade / extension of the existing Lake Vermont Accommodation Village in Dysart is required. The consent authority for this DA is the IRC.
<i>Native Title Act 1993</i>	NNTT	No approval required – native title has been extinguished over all the land within the Project area.