Central Queensland Coal Project

Chapter 1 – Introduction

Supplementary Environmental Impact Statement

CDM Smith

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Central Queensland Coal Project

Chapter 1 – Introduction

20 December 2018

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1 Introduction

Central Queensland Coal Proprietary Limited (Central Queensland Coal) and Fairway Coal Proprietary Limited (Fairway Coal) (the joint Proponents), propose to develop the Central Queensland Coal Project (the Project). As Central Queensland Coal is the senior proponent, Central Queensland Coal is referred to throughout this Supplementary Environmental Impact Statement (SEIS). The Project comprises the Central Queensland Coal mine where mining and processing activities will occur along with a train loadout facility (TLF).

The Project will involve mining a maximum combined tonnage of 10 million tonnes per annum (Mtpa) of semi-soft coking coal (SSCC) and high grade thermal coal (HGTC). The Project consists of two open cut operations. The run-of-mine (ROM) coal will ramp up to approximately 2 Mtpa during Stage 1 (2019 - 2022), where coal will be crushed, screened and washed to SSCC grade with an estimate 80% yield. Stage 2 of the Project (2023 - 2037) will include further processing of up to an additional 8 Mtpa ROM coal within another coal handling and preparation plant (CHPP) to SSCC and a HGTC plant with an estimated 95% yield . At full production, two CHPPs, one servicing Open Cut 1 and the other servicing Open Cut 2, will be in operation, with rehabilitation and mine closure activities occuring between 2036 and 2038.

Production from the Project is expected to commence in 2019 and extend for approximately 19 years until the depletion of the current reserve. The Project will be located within Mining Lease (ML) 80187 and ML 700022 which are adjacent to Mineral Development Lincence (MDL) 468 and Exploration Permit for Coal (EPC) 1029, both of which are held by the Proponent. It is intended that all aspects of the Project will be authorised by a site specific environmental authority (EA).

The Project is located in the Styx Basin, approximately 130 kilometres (km) northwest of Rockhampton in Central Queensland (Figure 1-1). Access to the Project will be via the Bruce Highway. The Project will employ a peak workforce of approximately 275 people during construction and between 100 (2019) and 500 (2030) during operation, with the workforce reducing to approximately 20 during decommissioning. Central Queensland Coal will manage the Project construction and ongoing operations with the assistance of contractors.

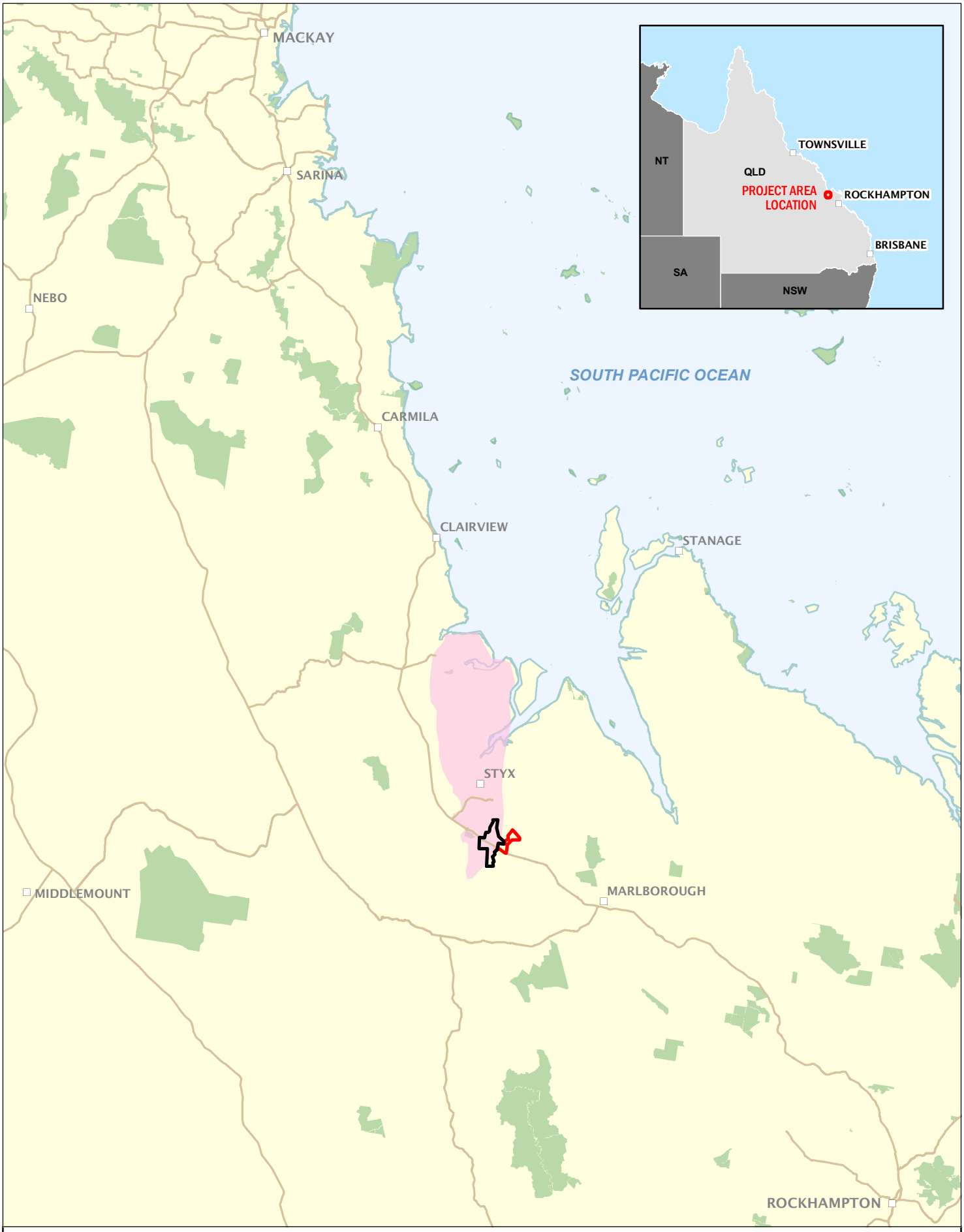

Figure 1-1
Project location

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Drawn: Gayle B.

DATA SOURCE
QLD Spatial Catalogue (QSpatial), 2017
Geoscience Australia, 2017

CDM Smith

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1.1 Purpose of the Environmental Impact Statement

This EIS addresses the requirements of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the Queensland *Environmental Protection Act 1994* (EP Act) and in particular the final Terms of Reference (ToR) for the Project EIS that was issued by the then Department of Environment and Heritage Protection (EHP) (now the Department of Environment and Science (DES)) on 4 August 2017.

This SEIS will also be used to support the grant of the Project's Environmental Authority (EA) and ML. As such, the scope of information considered by the Environmental Impact Statement (EIS) includes the requirements of section 125 of the EP Act as well as DES' technical guidelines for EA applications in addition to that required by the final ToR. As per section 125 of the EP Act, the EIS:

- Describes the environmental values (EVs) likely to be affected by the Project and each relevant activity;
- Details the emissions and releases likely to be generated by each relevant activity;
- Describes the risk and likely magnitude of impacts on the EVs;
- Details the management practices proposed to be implemented to prevent or minimise adverse impacts; and
- Details how the land will be rehabilitated after the Project ceases.

This chapter has been updated to reflect the progression of the Project through the EIS process, including responses to submissions and additional discussion in respect of relevant State legislation.

1.2 The Proponent

The Project will be developed and operated by Central Queensland Coal and Fairway Coal. Both companies are associates of Waratah Coal Pty Ltd (Waratah Coal), which has over 25 years' experience developing, funding and managing a range of major resource projects.

Waratah Coal is an Australian coal exploration and coal development company. Waratah Coal holds extensive mining concessions within the rich mineral basins of Laura, Bowen, Galilee, Surat, Moreton, Maryborough, Nymboida and the Northern Territory, in addition to the Styx Basin. Waratah Coal has been operating for over 10 years and has formed major international alliances in China and domestically during this time. From 2005 to 2009, Waratah Coal was dual-listed on the Toronto Stock Exchange and Australian Stock Exchange. In 2009, Waratah Coal was privatised and incorporated into Mineralogy Pty Ltd. Waratah Coal is committed to the economic development of regional growth in Queensland through the growth of mineral wealth while operating with an excellent record in the area. Waratah Coal aims to be a valued member of the local community and to openly engage and build trust and respect in Queensland over time.

Central Queensland Coal and Fairway Coal jointly own mineral development licence (MDL) 468 which will form the Project. Both Fairway Coal and Central Queensland Coal are registered as suitable operators with DES (#701901 and #686364, respectively), meaning the company is registered as being suitable to carry out industrial activities requiring an EA.

Central Queensland Coal has established Health and Safety and Environmental Management policies.

Further information regarding the overarching company, Waratah Coal, can be obtained from the following website: http://waratahcoal.com/.

1.3 Project Summary

The Project is located 130 km northwest of Rockhampton in the Styx Coal Basin in Central Queensland (see Figure 1-1). The Project is located within the Livingstone Shire Council (LSC) Local Government Area (LGA). The Project is generally located on the "Mamelon" property, described as real property Lot 11 on MC23, Lot 10 on MC493 and Lot 9 on MC496. The TLF is located on the "Strathmuir" property, described as real property Lot 9 on MC230. A small section of the haul road to the TLF is located on the "Brussels" property described as real property Lot 85 on SP164785.

The Project will involve mining a maximum combined tonnage of up to 10 Mtpa of SSCC and HGTC. The Project will be located within ML 80187 and ML 700022, which are adjacent to MDL 468 and Exploration Permit for Coal (EPC) 1029, both of which are held by the Proponent. It is intended that all aspects of the Project will be authorised by a site specific EA. Development of the Project is expected to commence in 2019 with initial early construction works and extend operationally for approximately 19 years until the depletion of the current reserve, and rehabilitation and mine closure activities are successfully completed.

The Project consists of two open cut operations that will be mined using a truck and shovel methodology. The ROM coal will ramp up to approximately 2 Mtpa during Stage 1 (2019 – 2022), where coal will be crushed, screened and washed to SSCC grade with an estimate 80% yield. Stage 2 of the Project (2023 - 2037) will include further processing of up to an additional 4 Mtpa ROM coal within another CHPP to SSCC and up to 4 Mtpa of HGTC with an estimated 95% yield. At full production two CHPPs, one servicing Open Cut 1 and the other servicing Open Cut 2, will be in operation. Rehabilitation works will occur progressively through mine operation, with final rehabilitation and mine closure activities occurring between 2036 to 2038.

A new TLF will be developed to connect into the existing Queensland Rail North Coast Rail Line. This connection will allow the product coal to be transported to the established coal loading infrastructure at the Dalrymple Bay Coal Terminal (DBCT).

Access to the Project will be via the Bruce Highway. The Project will employ a peak workforce of approximately 275 people during construction and between 100 (2019) to 500 (2030) during operation, with the workforce reducing to approximately 20 during decommissioning. Central Queensland Coal will manage the Project construction and ongoing operations with the assistance of contractors.

This SEIS supports the original EIS by responding to the submissions that were made during the public notification period regarding the EIS and identifies the material changes to the Project.

This chapter provides a brief description of the elements of the Project and the major associated infrastructure requirements. A detailed description of the Project is provided in Chapter 3 – Description of the Project. Approval is sought for the construction, operation and decommissioning of the Project including mining, transport and TLF activities.

1.3.1 Key Features within the Central Queensland Mine Area

This section summarises the key features of the Project (see Figure 1-2). The following features are assessed as part of this EIS for which Central Queensland Coal is seeking approval:

- Two open cut pits (Open Cut 1 and Open Cut 2);
- Two CHPP and product coal stockpiles;

- Two ROM coal stockpile areas and ROM dump stations (comprising dump hopper, product conveyor, crushers and surge bin);
- ROM coal haul roads and waste rock haul roads and conveyor;
- Three out of pit waste rock stockpiles (1a, 1b and 2);
- Internal water distribution pipelines and management facilities, including raw water supply, storage and a water treatment plant to treat water to potable quality;
- Mine affected water dams, sediment affected water dams and clean water dams;
- Light and heavy vehicle internal roads;
- Main gate and security building;
- Internal energy distribution network; and
- Explosives storage facility.

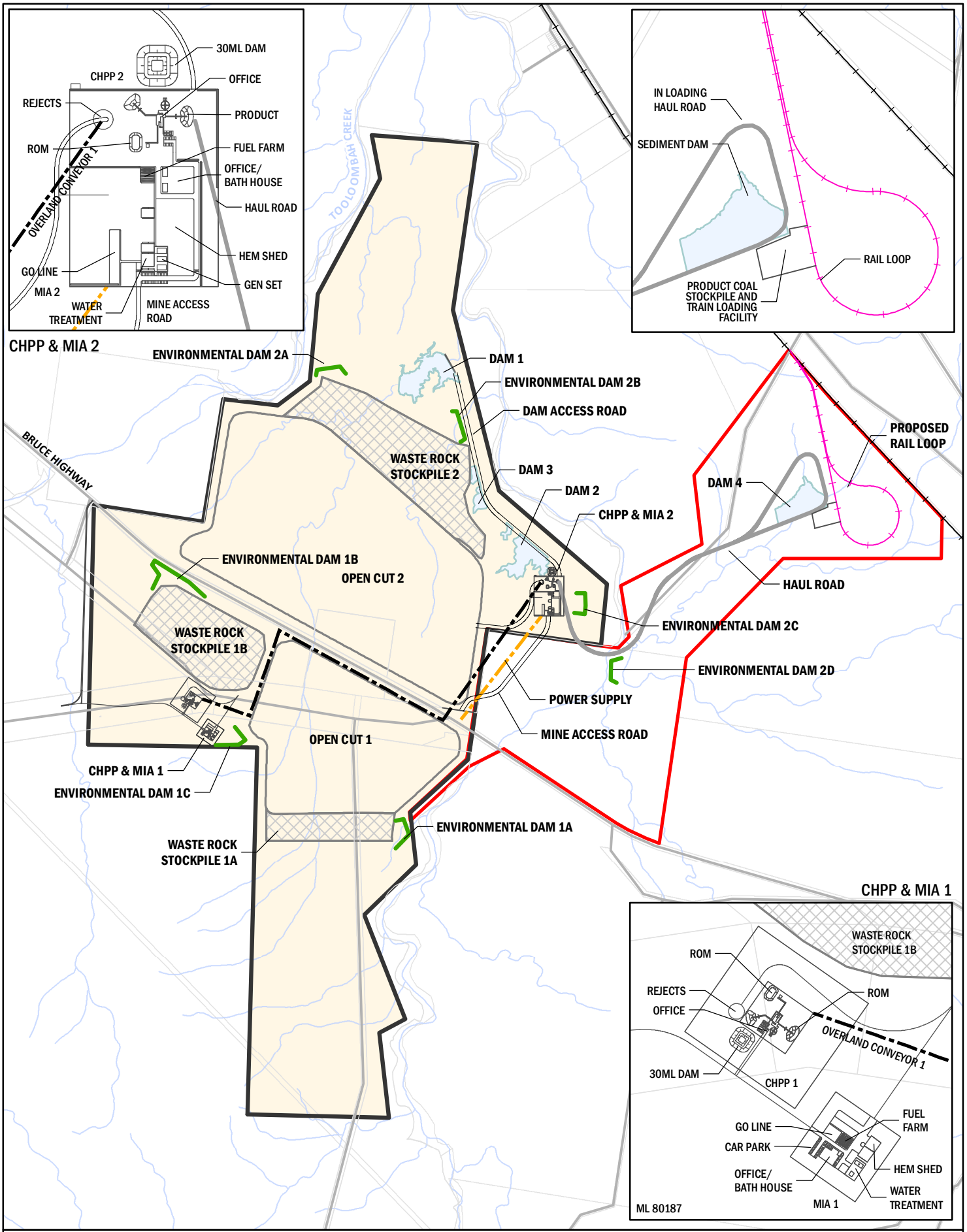
1.3.2 Key Features within the Haul Road Corridor

- An approximate 5.48 km long haul road and loop from the product stockpiles to the TLF;
- Access roads;
- Cross-drainage structures; and
- Fencing.

Design drawings of the haul roads are provided in Appendix A16 – Construction Design Drawings.

1.3.3 Key Features within the Train Loadout Facility

- Product coal stockpile;
- Rail line approximately 4.85 km in length connecting to the North Coast Rail Line and balloon loop;
- Power, water and telecommunication services;
- Hard stand area to receive haul trucks from the transport corridor;
- Environmental dam; and
- Access roads.



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Date: 11/10/18
Drawn: Gayle B.

Legend

- Haul Road
- Infrastructure
- Overland Conveyor
- Power
- Rail Balloon Loop
- Mine Access Road
- ML 80187
- ML 700022
- Cadastral boundary
- Open-cut Mine Pit
- Waste Rock Area
- Environmental Dams
- Main Road
- North Coast Rail Line
- Watercourse
- Dam

Figure 1-2
General arrangement

DATA SOURCE
Waratah Coal, 2018
QLD Open Source Data, 2018

CDM Smith

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1.4 Project Milestones

Since the release of the EIS, the Project schedule has been updated. The current Project schedule anticipates approval of the MLs and EA, and commencement of early construction works in Q3 2019. First Coal exports are anticipated to commence in Q2 2020.

Indicative key Project milestones are shown in Table 1-1.

Table 1-1 Key development milestones

Milestones	Anticipated completion dates
DES EIS approval	Q2 - 2019
DotEE EIS approval	Q2 - 2019
EA/ML approval	Q2 - 2019
Start construction	Q3 – 2019
First coal exports	Q2 – 2020

Note: Current as of November 2018

1.5 Interrelated Projects

There are no interrelated operational projects within the vicinity of the Project. As such, cumulative impacts have not been assessed in this EIS.

Central Queensland Coal is no longer considering the establishment of an accommodation camp on the Mamelon property as overflow accommodation for construction and operational workers. The Marlborough Caravan Park is currently working with the LSC to add additional accommodation facilities to the Caravan Park. The Caravan Park will be used for overflow accommodation as needed.

Central Queensland Coal has had initial discussions with the Department of Transport and Main Roads and the LSC in regard to realigning the Mt Bison Road. The realignment will include the closure and establishment of a new intersection with the Bruce Highway and a small section of road to connect to the existing Mt Bison Road. As no accommodation camp is being considered by the Project and noting the development of Open Cut 1 will not commence for at least 10 years the realignment has been put on hold. Any future approvals required for the realignment will be sought outside of this EIS process.

Additional road reserves are located to the west of the Bruce Highway (Tooloombah Road and unnamed road reserves) which will be impacted by Project activities. Prior to the commencement of the Project in these areas, Central Queensland Coal will secure all appropriate tenure and gain all necessary approvals and/or consents from all parties holding a lawful interest in the lands. These approvals will be sought outside of this EIS process.

1.6 Project Formulation

There are three types of tenures and one property forming the Project. The tenure types which cover the Project include EPC 1029, MDL 468, ML 80187 and ML 700022.

EPC 1029 was granted on 20 April 2006, expiring 19 April 2021. Currently there remains 71 sub blocks with a combined area of 225 km^2 owned by Fairway Coal (100%). EPC 1029 carries with it EA EPSX00763213, allowing for coal exploration and development activities. A renewal application for EPC 1029 was submitted to the Department of Natural Resources, Mines and Energy (DNRME) and renewed on the 22/11/2016.

MDL 468 was granted on 22 January 2014, the expiry date being 31 January 2019. MDL 468 covers an area of 135 km^2 owned by Central Queensland Coal (99%) and Fairway Coal (1%). The EA covering activities on MDL 468 is MIC204611013, allowing for exploration activities.

ML 80187 was lodged with DNRME on 15 June 2012. ML 80187 covers an area of 2,267 ha. ML 700022 was lodged with DNRME on 23 May 2017. ML 700022 covers an area of 745.28 ha. Both ML's are owned by Central Queensland Coal (99%) and Fairway Coal (1%). The boundaries for EPC 1029, MDL 468, ML 80187 and ML 700022 are shown at Figure 1-3.

'Mamelon' property described as real property Lot 9 on CP MC496, Lot 10 on CP MC493, Lot 11 on CP MC23 and leasehold interest RL 35/3001 over Lot 1 on CP RL3001, is currently owned by QNI Metals Pty Ltd. The total area of Mamelon is 60.5 km^2. The TLF is located on the "Strathmuir" property, described as real property Lot 9 on MC230. A small section of the haul road to the TLF is located on the "Brussels" property described as real property Lot 85 on SP164785.

Central Queensland Coal and Fairway Coal have undertaken an extensive exploration drilling program in EPC 1029 from late 2010, focusing on the Mamelon property area in 2011 and 2014, and extending the exploration area to the north of the Mamelon property in 2012. A total of 137 holes have been drilled including 68 chip holes and 69 fully cored HQ sized holes. All holes were geophysically logged and surveyed in line with industry standards.

In addition to the exploration drilling, six large diameter cores have been completed on two sites for coal washability and handleability tests. Drill hole spacing varies across the deposit, but generally ranges between 100 m and 1,000 m. All coal core has been sampled and analysed for proximate analysis, specific energy, total sulphur and relative density. A number of bore holes have had further ash analysis and analysis for ash fusion temperatures. Float sink coal quality analysis has also been undertaken on all coal samples at three densities, F1.40, F1.50 and F1.60 on recent drilling (post 2010) and at F1.50 on drilling pre 2010. Crucible Swelling Number (CSN) analysis was also performed on each density cut point to further investigate the coking properties of the coal found in the Project area.

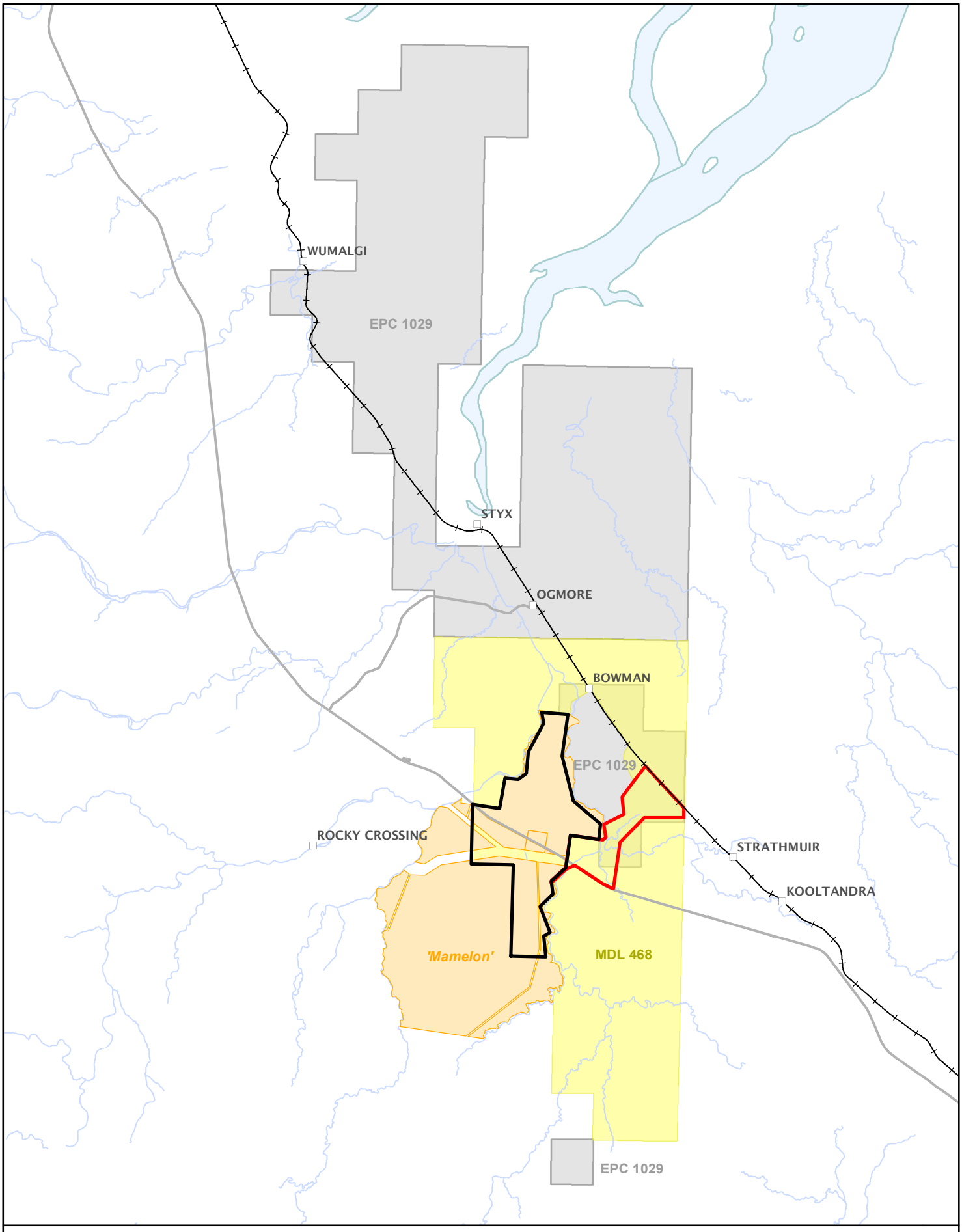
Historical data from the Geological Survey of Queensland, 1955 (27 drill holes), Earth Resources Australia, 1981 (7 drill holes) and New Hope Collieries, 1994 (9 drill holes) are available for the Project area. Data from these drill programs were included in initial modelling to aid the understanding of the deposit and plan exploration drilling.

Central Queensland Coal have created a geological and raw coal quality model for the Project area using the MapInfo 'Discover' and Ventyx 'Minescape' software packages. Exploration drill hole data, raw coal quality and washed coal quality data were correlated and audited by Central Queensland Coal and Xenith. The model was finalised in February 2015.

A total of 137 drill holes have been used to develop the structural model (Central Queensland Coal and Fairway Coal holes). The holes are a mixture of cored holes and chip holes, all with geophysical logs. A total of 69 drill holes have coal quality data available and were used as a JORC Points of Observation where seams were cored and had suitable raw coal quality and geophysical data. The location of the drill holes used in the geological model are shown at Figure 1-4.

The coal sequence comprises eight main coal seams which occur over a total interval of approximately 120 m. The coal seams attain a maximum cumulative coal thickness of approximately 15 m in the centre of the Project area where all seams are present, and local seam thickening is evident.

The assessments estimated a total of 203.2 Million tonnes (Mt) of coal resource which was economically viable for development of the Project. This estimation comprises 34.3 Mt indicated and 169 Mt inferred resources.



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Legend

- ML 80187
- ML 700022
- North Coast Rail Line
- Main road
- Watercourse
- Mamelon Property
- Mineral Development Licence (MDL)
- Exploration Permit for Coal (EPC)

Figure 1-3
EPC1029, MDL468, ML80187 and Mamelon Property

DATA SOURCE
Waratah Coal, 2018
QLD Open Source Data, 2018

CDM Smith

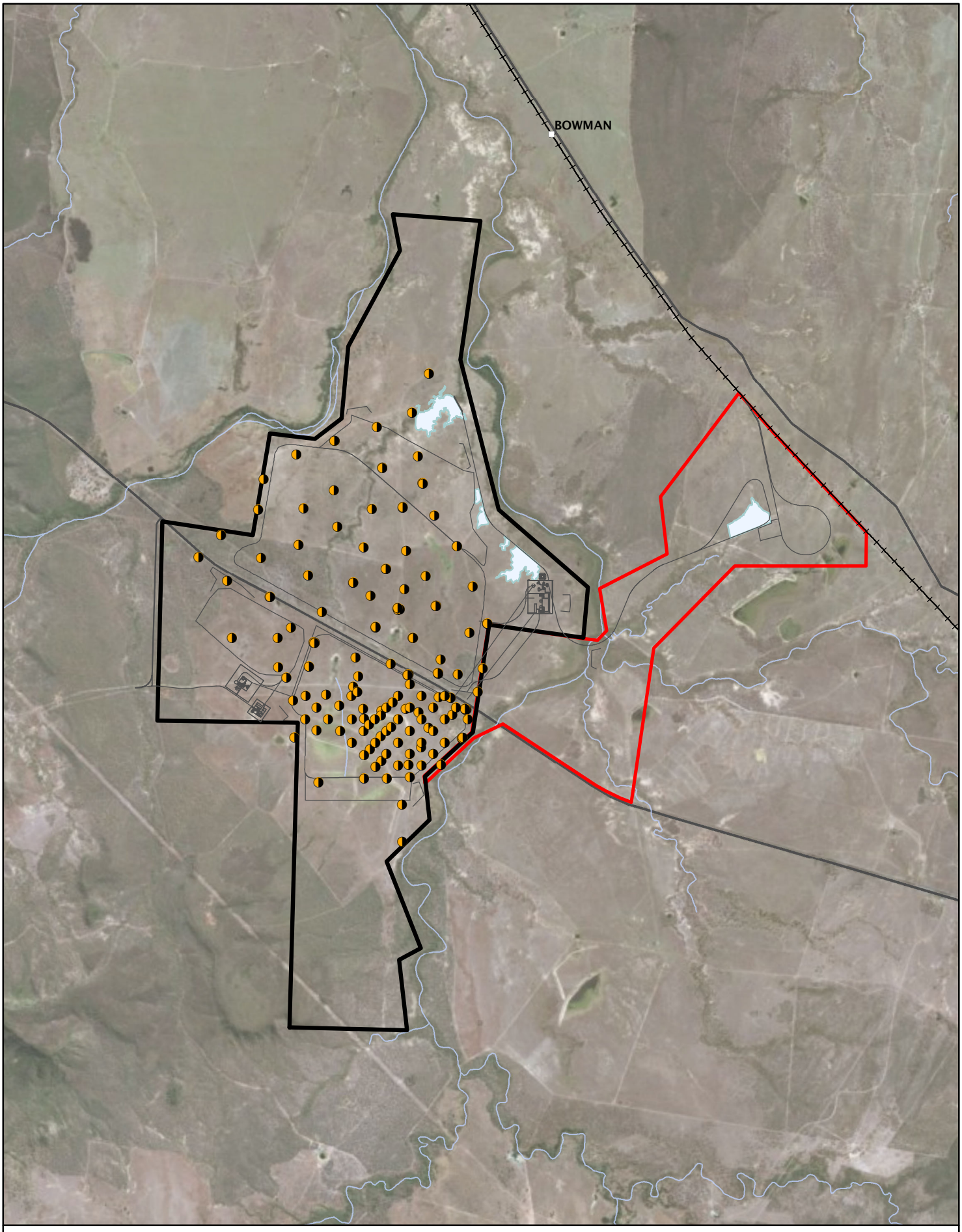

Figure 1-4
Location of exploration drillholes

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Date: 19/10/18
Drawn: Gayle B.

Legend

- Exploration drillholes
- ML 80187
- ML 700022
- Mine infrastructure
- Main Road
- North Coast Rail Line
- Watercourse
- Dam

DATA SOURCE
Waratah Coal, 2018
QLD Open Source Data, 2018

CDM Smith

1.7 The EIS Process

On 16 December 2016, Fairway Coal submitted to DES an application to undertake a voluntary EIS under the EP Act which was subsequently approved on 27 January 2017. The Project was identified as having the potential to impact on Matters of National Environmental Significance (MNES) and was referred to the Commonwealth Department of the Environment and Energy (DotEE). The Project was deemed to be a controlled action on 3 February 2017 requiring approval under the EPBC Act (EPBC ref 2016/7851). The EIS and SEIS has assessed potential impacts of the Project on the controlling provisions consistent with the bilateral agreement (s45 of the EPBC Act) between the Australian and Queensland governments for the purposes of the Commonwealth Government's assessment under Part 8 of the EPBC Act.

The bilateral process runs parallel with the EIS process with input from DotEE in the ToR, government consultation and review and assessment of the EIS. DotEE will issue a separate approval for the Project which outlines the required conditions to mitigate any impacts to MNES.

The draft ToR for the EIS was prepared under the EP Act and placed on public exhibition together with the Initial Advice Statement (IAS). The final ToR was issued by DES on 4 August 2017 and the EIS was prepared in accordance with the final ToR and other technical guidelines.

Preparation of the EIS followed the completion of baseline technical assessments, consideration of engineering, planning, and operational requirements (which determined the ultimate level of potential impacts), and measures required to mitigate those impacts. Surveys of soils, surface water, groundwater, terrestrial and aquatic ecology, cultural heritage and noise / air quality were completed during the development of the EIS. The EIS was made available for public comment and review from 6 November 2017 through to 18 December 2017. A total of 34 properly made submissions were received during this period. These submissions are discussed in Section 1.8.3.1.

The EIS process and the EA and ML approval processes are presented in Figure 1-5, with each step of the EIS processes described in more detail in SEIS Section 1.7.1. The sections have been updated where necessary from the EIS to reflect the advancement within the EIS process.

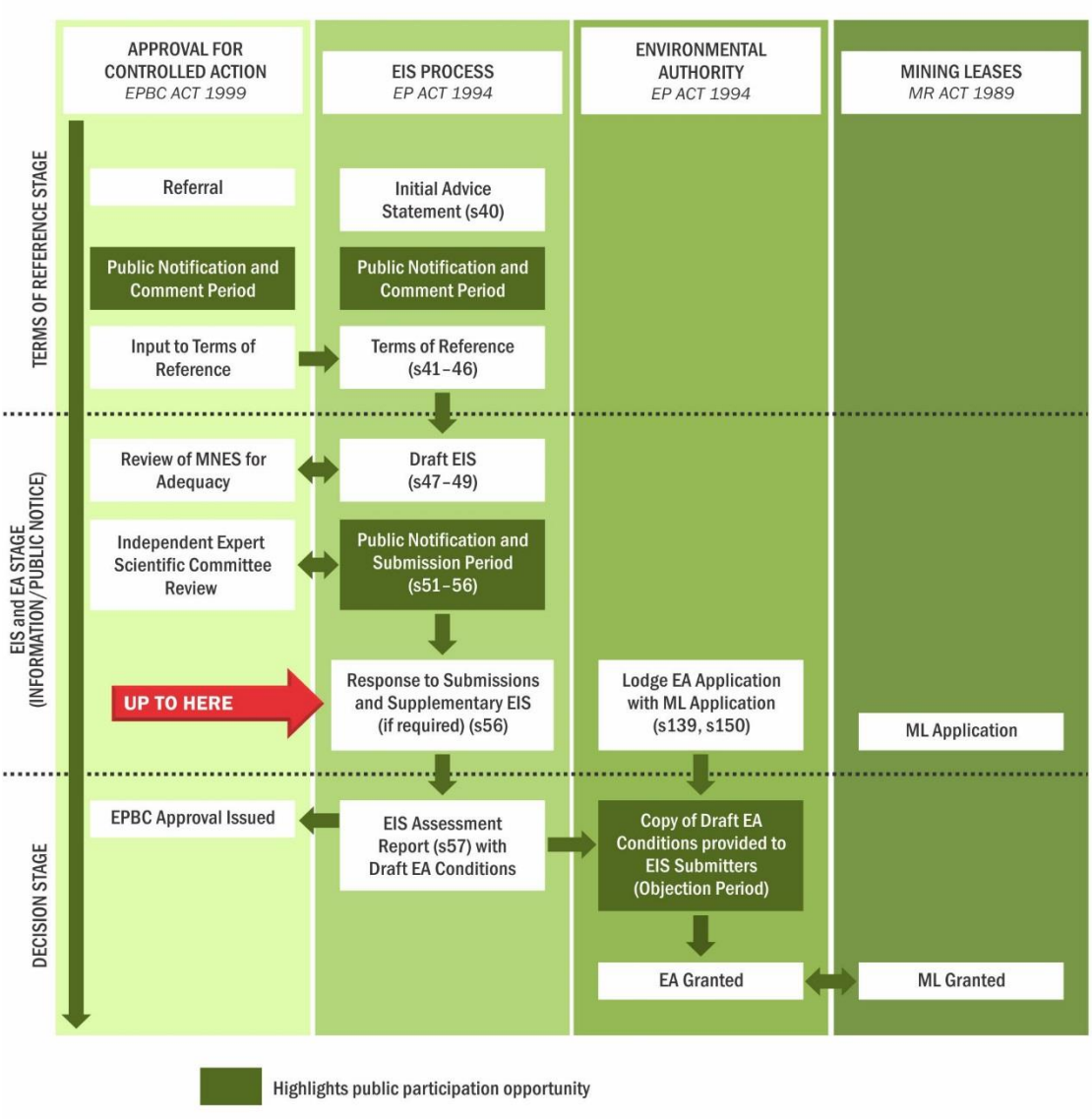

Figure 1-5 EIS and approvals process

1.7.1 Methodology of the EIS

The EIS process under the EP Act has a number of stages and decision milestones. The main steps involved in obtaining approval for the Project (including the EIS preparation and approval process) are outlined below.

Step 1 – Preliminary Planning

A number of investigations were undertaken as part of the preliminary planning phase. These assessments included exploration of resource and initial mine planning, assessments of EVs including flora and fauna, assessments of surface and subsurface water features and investigations into locations of surrounding sensitive receptors. This assisted to identify environmentally sensitive areas (ESA), develop targeted EIS field studies, select appropriate locations for mining infrastructure and establish the occurrence of the targeted resource.

Since the release of the EIS further site-specific studies have been undertaken to refine elements of the Project. The additional studies are:

- Mine design optimisation;
- Ongoing groundwater and surface water sampling;
- Ongoing ecological baseline surveys (including targeted MNES species surveys, targeted turtle trapping, camera trap surveys, nocturnal surveys);
- Updated groundwater modelling incorporating the new site specific groundwater data;
- Geotechnical assessment for works nearby to the Bruce Highway;
- Blasting impact assessment;
- Updated air quality impact and greenhouse gas assessment;
- Updated noise impact assessment;
- Updated economic impact assessment; and
- Updated Social Impact Assessment to include Isaac Regional Council (IRC) area.

The aforementioned studies have been used to inform the SEIS and are either included in the relevant chapter or as appendices.

Step 2 – Community and Government Consultation

Throughout the EIS process, community and State Government consultation has been ongoing and will continue throughout the duration of the Project. The Social Impact Assessment (SIA) utilised results of research conducted previously in the LSC area and the broader region (i.e. IRC and Rockhampton Region Council (RRC) areas), along with submissions received from the draft ToR and results of various consultation processes conducted by government agencies and other proponents. Following the release of the EIS, Central Queensland Coal held a community consultation meeting at Marlborough and continued consultation with various Government agencies.

Step 3 – Initial Advice Statement and Terms of Reference

On 16 December 2016, Central Queensland Coal submitted to DES an application to undertake a voluntary EIS under the EP Act which was subsequently approved on 27 January 2017. Further information on statutory requirements and legislative processes are discussed in Section 1.9. The draft ToR for the EIS was prepared under the EP Act and placed on public exhibition, together with the IAS. The final ToR for the Project was issued by DES on 4 August 2017 and the EIS has been prepared in accordance with the final ToR. To simplify assessment against the Project's final ToR, a cross-referencing checklist of each aspect has been included in the EIS (see final ToR cross-reference tables at the end of each chapter).

Step 4 – EIS Preparation

The EIS was prepared to address the final ToR and relevant technical guidelines for an EA application. Preparation of the EIS followed the completion of baseline technical assessments, consideration of engineering, planning, operational requirements (which determined the ultimate level of potential impacts) and measures required to mitigate those impacts. Baseline site surveys of soils, surface water, groundwater, ecology, cultural heritage and noise were completed during the development of the EIS. Impact assessments were undertaken by a multi-disciplinary team of qualified technical specialists from a range of organisations as outlined in Table 1-2.

Table 1-2 EIS technical sub-consultants

Discipline	Contributor	Discipline	Contributor
Groundwater	CDM Smith	**Social impact**	CDM Smith
Surface water	CDM Smith	**Air quality and greenhouse gas**	VIPAC Engineers
Soil and land suitability	CDM Smith	**Noise and vibration**	VIPAC Engineers
Ecology	CDM Smith, Terrestria and 3D	**Indigenous cultural heritage**	BWR
Transportation	GTA Consultants	**European cultural heritage**	BWR
Flood impact and mine water management	CDM Smith	**Stygofauna**	ALS
Economics	Economics Associates	**Geotechnical Assessment**	AMEC and Cardno

Step 5 – Submission and Release of the EIS

Upon submission of the EIS, DES had a 20 business day review period to determine whether the EIS can proceed to public submission. Once approved for public release, the general public and government agencies were able to provide comment on the EIS between 6 November 2017 through to 18 December 2017.

Step 6 – Proponent Response

EIS submissions were collated and forwarded by DES to Central Queensland Coal for consideration and reply. Central Queensland Coal analysed the issues and level of concerns and provided DES with appropriate responses to the submissions in parallel to the submission of the original SEIS.

Following review of the original SEIS by DES and DotEE, together with other key Government stakeholders, further information was sought from Central Queensland Coal before the SEIS could be accepted for assessment. The responses to the additional information requests have been included in this version of the SEIS.

Step 7 – Assessment under the EP Act

On acceptance of the SEIS, DES will assess the EIS and SEIS and produce an EIS assessment report. This report will outline the adequacy of the EIS in assessing the ToR, determine if impacts have been appropriately mitigated or avoided and recommend if the Project should proceed subject to any conditions. The EIS process is complete once the assessment report is provided to Central Queensland Coal.

This report, as well as documentation for the above steps will be available on the DES website: https://www.des.qld.gov.au/management/impact-assessment/eis-processes/styx-coal-project.html.

Step 8 – Decision of Environmental Authority

Central Queensland Coal has applied for a site-specific EA to authorise the Project. The EA application will be evaluated by DES once the EIS process is completed in Step 7. Based on the information provided in the EIS, DES will prepare a draft EA for the Project. Copies of the draft EA will be provided by DES to any person that made a submission on the EIS during Step 5 above. The submitters must then decide whether the final EIS and the draft EA resolve their concerns. If no submitters elect to object to the draft EA, then DES will grant the EA at the same time the ML applications are granted. If, however, submitters elect to object to the draft EA, those objections will

be heard in the Land Court. Draft EA conditions proposed by Central Queensland Coal are included in SEIS Chapter 23 – Draft EA Conditions as a starting point for the negotiation of the Project's approval conditions.

1.7.2 Accredited Process for Controlled Actions

The Project was identified as having the potential to impact on MNES and was referred to DotEE. The Project was deemed to be a controlled action requiring approval under the EPBC Act (EPBC ref 2016/7851).

In accordance with DotEE's guidelines for the preparation of the EIS for the Project, a stand-alone chapter has been prepared and assessed as part of approval under the EPBC Act. The assessment bilateral process allows for the assessment of impacts on MNES to be undertaken as part of the State EIS process, with input from the DotEE throughout (Figure 1-5). DotEE will issue a separate approval for the Project which outlines the required conditions to mitigate any impacts to MNES following completion of Step 7.

1.7.3 Purpose and Objective of the EIS

The purposes of the EIS is to:

- Assess the potential and beneficial environmental, economic and social impacts of the Project;
- Assess the management, monitoring, planning and other measures proposed to minimise any adverse environmental impacts of the Project;
- Consider feasible alternative ways to carry out the Project;
- Provide DES with sufficient information to decide the Project's EA application;
- Meet the Project's assessment requirements under the EPBC Act;
- Provide information for interested and affected persons to understand the Project and the existing environment as well as the likely impacts, alternatives and the mitigation measures adopted to manage the impacts; and
- Give information to other Commonwealth and State authorities to help them make informed decisions about the Project.

The EIS scope covers the life of the Project from construction and operation through to decommissioning. The EIS details realistic, deliverable, cost effective and technically achievable strategies aimed at reducing potential environmental, community and economic impacts to acceptable levels. The level of assessment undertaken for each EV outlined in the corresponding EIS chapters reflects the degree of environmental risk and the level of significance of the associated impact.

1.7.4 Risk Assessment Methodology

To quantify the potential for an impact to cause harm, a risk analysis was undertaken using the AS/NZS ISO31000 criteria. The New South Wales Department of Planning; Hazardous Industry Planning Advisory Paper 6 – Hazard Analysis (January 2011) (HIPAPs 2011) was also referenced during the risk assessment.

The risk assessment seeks to define the risk of any adverse outcome and considers the elements within the hazard analysis including the identified hazards, consequence and the likelihood. This

risk assessment rates these consequence and likelihood findings and applies a risk matrix to prescribe a risk. The risk assessment process was undertaken on both unmitigated risks and residual (mitigated) risks. Mitigated risks are those with controls to minimise the likelihood and consequence of a hazardous incident and might include:

- Alternative technology or processes;
- Alternative locations;
- Reduction in onsite storage of dangerous goods;
- Modification of process and storage conditions;
- Early detection, control and clean-up of any releases;
- Containment and collections systems;
- Improvements in plant operability; and
- Operational and organisational safeguards (including training).

The risk assessment criteria in AS/NZS ISO31000 establishes a method for identifying risk profiles through combining a likelihood rating of a hazard or impact occurring with a consequences rating of a hazard or impact occurring. The risk profiles used for this assessment have been detailed in Table 1-3. A description of the ratings used for likelihood and consequence has been provided in Sections 1.7.4.1 and 1.7.4.2, respectively.

Definitions applicable to the risk assessment process as described in this chapter are outlined in Table 1-3.

Table 1-3 Definitions for assessment of hazard and risk

Term	Definition
Hazard	Something with the potential to cause harm. This can include hazardous substances, plant and equipment, work processes or other aspects of the surrounding environment.
Likelihood	The chance or probability of an event resulting in an impact occurring.
Consequence	How much harm the impact could have, how many people it could affect and the duration of the harm.
Unmitigated Risk	The likelihood that a harmful consequence might result when exposed to the hazard without implementation of the proposed mitigation measures.
Residual Risk	The likelihood that a harmful consequence might result when exposed to the hazard with the effective implementation of the proposed mitigation measures.
“Major Accident Event (MAE)”	Sudden occurrence (including a major emission, loss of containment, fire, explosion or release of energy) leading to serious danger or harm to persons, property, both the built or natural environment, whether immediately or delayed.

1.7.4.1 Likelihood Assessment

A qualitative assessment of the possible event frequency was undertaken to assess the likelihood of an impact occurring and rated based on the ratings included in Table 1-4.

Table 1-4 Ratings for likelihood of occurrence

Probability Rating	Probability	Description
1	Almost certain	Will almost certainly occur. Has a 95% or greater chance of occurring within a 12 month period.
2	Likely	Probably will occur. Has a 70% to 95% chance of occurring within a 12 month period.
3	Possible	May possibly occur. Has a 30% to 70% chance of occurring within a 12 month period.
4	Unlikely	Could possibly occur. Has a 5% to 30% chance of occurring within a 12 month period.
5	Rare	Only likely to occur in exceptional circumstances. Has a 5% or less chance of occurring within a 12 month period.

1.7.4.2 Consequence Assessment

The potential level of consequence of an impact was rated in accordance with the definitions shown in Table 1-5. Each outcome has been individually assessed where a hazardous incident may have multiple impacts.

Table 1-5 Consequence ratings

Score	Maximum potential consequence (realistic)					
	Description	Environment	Reputation	Financial	Existing operations interruption	Legal
1	Catastrophic	Significant, extensive detrimental long term impact.	Negative international publicity. Very serious litigation. Reputation severely tarnished. Share price may be affected.	Losses to the Project > AUD $10M	Plant shutdown.	Significant prosecution and fines. Very serious litigation including class action.
2	Major	Wide spread long to medium term damage to valued area.	Significant negative attention, national publicity. Major breach of regulation. Reputation tarnished.	Losses to the Project > AUD $5M	Temporary plant shutdown.	Major breach of regulation. Major litigation.
3	Moderate	Localised medium term damage to an area of local value.	Attention from media, negative regional publicity. Serious breach of regulations with fine.	Losses to the Project > AUD $1M	Delays resulting in reduced throughput due to changes to existing practices.	Serious breach of regulation with prosecution or moderate fine possible.
4	Minor	Localised short to medium term damage to an area of minor local significance.	Negative publicity and attention from local media. Moderate breach of regulations.	Losses to the Project > AUD $0.5M	Sustained minor change to existing practices.	Minor legal issues, moderate non-compliances and breaches of regulations.
5	Insignificant	Limited damage to a localised area. No lasting effects.	Local public concern/ complaints. Minor technical non-compliance.	Losses to the Project > AUD $0.2M	Temporary minimal change to existing practices.	Minor non-compliances and breaches of regulations.

1.7.4.3 Risk Matrix

The risk matrix adopted for the assessment is included in Table 1-6. The colour shading refers to the qualitative bands of risk level. The risk assessment tables are structured to show the results of the unmitigated risk profile and residual risk profile. The table presents the results in the following order:

- The hazard that may impact on health and safety;
- The impact that could arise from the hazardous event;
- The consequence (C), likelihood (L) and risk (R) that may impact on health and safety;
- The strategy or strategies established to address the risk; and
- The consequence (C), likelihood (L) and risk (R) that may impact on health and safety after mitigations measures are implemented.

For the purposes of this risk assessment, risk levels are defined as follows:

- Extreme – Works must not proceed until suitable mitigation measures have been adopted to minimise the risk;
- High – Works should not proceed without consideration of alternative options or additional controls to minimise the risk. A documented action plan is required;
- Medium – Acceptable with formal review. A documented action plan is required; and
- Low – Acceptable with review.

Table 1-6 Risk assessment matrix

Likelihood	Consequence				
	Catastrophic 1	Major 2	Moderate 3	Minor 4	Insignificant 5
Almost Certain 1	Extreme	Extreme	Extreme	High	Medium
Likely 2	Extreme	Extreme	High	Medium	Medium
Possible 3	Extreme	High	High	Medium	Low
Unlikely 4	High	High	Medium	Low	Low
Rare 5	Medium	Medium	Low	Low	Low

1.7.5 SEIS Structure

The SEIS consists of two volumes:

- Volume 1 - SEIS chapters; and
- Volume 2 - SEIS appendices.

A summary of the contents of each volume is shown in Table 1-7 and Table 1-8. The following structure of the SEIS has been developed to meet the scope objectives of the final ToR, DES technical guidelines and to address section 125 of the EP Act.

Table 1-7 Volume 1 chapter content

Chapter	Chapter title	Chapter	Chapter title
i	Glossary and Abbreviations	**Chapter 13**	Noise and Vibration
ii	Executive Summary	**Chapter 14**	Terrestrial Ecology
Chapter 1	Introduction	**Chapter 15**	Aquatic Ecology
Chapter 2	Project Need and Alternatives	**Chapter 16**	MNES
Chapter 3	Description of the Project	**Chapter 17**	Biosecurity
Chapter 4	Climate	**Chapter 18**	Cultural Heritage
Chapter 5	Land	**Chapter 19A**	Economics
Chapter 6	Traffic and Transport	**Chapter 19B**	Social Environment
Chapter 7	Waste Management	**Chapter 20**	Health and Safety
Chapter 8	Waste Rock and Rejects	**Chapter 21**	Hazard and Risk
Chapter 9	Surface Water	**Chapter 22**	Key Commitments
Chapter 10	Groundwater	**Chapter 23**	Draft EA Conditions
Chapter 11	Rehabilitation and Decommissioning	**Chapter 24**	References
Chapter 12	Air Quality		

Table 1-8 Volume 2 specialist technical reports and laboratory results appended to this SEIS

Appendix	Appendix title	Appendix	Appendix title
A1	Approvals	**A9g**	Results of Landscape Fragmentation and Connectivity
A2	Standard Criteria	**A9h**	Broad Sound – shorebird survey count data
A3	Soil Survey Results	**A10**	Queensland Regional Profiles
A4a	Road Impact Assessment	**A11**	Final ToR for EIS
A4b	Geotechnical Assessment	**A12a**	Draft Construction EMP Structure
A4c	Draft Road-Use Management Plan	**A12b**	Draft Operational EMP Structure
A5a	Surface Water and Groundwater Quality Results	**A13**	EIS Submissions
A5b	Historical Surface Water Quality Results	**A14**	Stakeholder Engagement Plan
A6	Groundwater Technical Report	**A15**	ESCP Typical Drawings
A7	Air Quality and GHG Technical Report	**A16**	Construction Design Drawings
A8	Noise and Vibration Technical Report	**A17**	Social Impact Assessment
A9a	Terrestrial Fauna Reports	**A18**	Draft Offsets Delivery Plan
A9b	Flora and Vegetation Assessment	**A19**	Vegetation Map Amendment
A9c	Ecological Desktop Search Results	**A20**	*Draft* Significant Species Management Plam
A9d	Ecological Field Survey Results	**A21**	Water Way Barrier Work Mapping Amendment Application
A9e	Aquatic Ecology Results	**A22**	Independent Groundwater Model Peer Review
A9f	Stygofauna Results	**A23**	IESC Guideline Checklist

1.8 Public Consultation Process

This section provides a summary of the consultation undertaken to date as part of the EIS process and also describes the future consultation activities planned to take place as part of the Project. The stakeholder consultation and engagement processes were implemented in a manner aimed at enabling participation and involvement from the community and other stakeholders, as the project evolved. The outcomes from stakeholder consultation and engagement has been integrated in the

EIS. The outcomes have been used to establish future consultation processes and the inform the social impact assessment (see Appendix A17 – Social Impact Assessment). The feedback has been used to population draft strategies and action plans, which are discussed in Chapter 19B – Social and Appendix A17 – Social Impact Assessment. Further rounds of engagement will be undertaken prior to the commencement of construction activities and will continue through the life of the Project.

1.8.1 Terms of Reference Consultation

The draft ToR was publicly advertised for comment by DES from 10 April 2017 to close of business 8 June 2017. The extension of the public comment period was proposed by Central Queensland Coal as the Project area was under the damaging influences of Cyclone Debbie during the public review period. A total of 23 responses on the draft ToR were received by DES for consideration in finalising the ToR. Responses were received from government agencies, regional bodies and the community during the public submission period.

Seven respondents (29 per cent) had no comment to make on the draft ToR. Of those respondents who commented on the draft ToR, the most common issues raised included:

- Downstream greenhouse gas (GHG) emissions;
- Impacts to the Great Barrier Reef Marine Park;
- Offset package to compensate for significant residual impacts;
- Ongoing communications and liaison with stakeholders and the community;
- Aboriginal and Torres Strait Islander specific plans and strategies;
- Surface water and groundwater impacts;
- Groundwater dependent ecosystems and stygofauna impacts;
- Transport impacts;
- Local industry participation;
- Emergency and health services capacity;
- Impacts to arable land;
- Fish passage and connectivity for aquatic fauna;
- Impacts to the aquatic environment; and
- Potential for flooding.

The final ToR was issued on 4 August 2017 and encompassed the relevant and applicable issues raised during the consultation.

1.8.2 Ongoing Consultation during EIS Development

Consultation was undertaken in 2015 with representatives from government agencies, service providers and businesses from the local community to inform the scope and assessment of the Project during the preparation of the EIS. Consultation and discussions with landowners in the vicinity of the Project area commenced in 2012. A number of meetings and discussions have been

held with landholders regarding exploration activities. However, consultation regarding the impacts of the Project's development began formally with the publication of the EIS.

Discussions with the Traditional Owners commenced in 2017 and separate Cultural Heritage Management Plans (CHMP) are under development with the Darumbal People, the Barada Kabalbara Yetimarala People #1 and Barada Kabalbara Yetimarala People #2. The CHMPs will address the management of cultural heritage on land within the two MLs.

Consultation was undertaken with meetings and communications with representatives from the following agencies and organisations:

- Adjoining property owners and managers;
- Local businesses;
- Councils (LSC and RRC);
- Department of Environment and Science;
- Department of Natural Resources, Mines and Energy;
- Department of State Development;
- Department of Infrastructure, Local Government and Planning;
- Department of Transport and Main Roads;
- Department of National Parks, Sport and Racing;
- Department of Agriculture and Fisheries;
- Department of Energy and Water Supply;
- Department of the Environment and Energy;
- Federal Member for Capricornia;
- State Member for Mirani;
- State Member for Rockhampton;
- Aurizon;
- Queensland Rail;
- Pacific National;
- Ergon Energy;
- Powerlink;
- Telstra;
- Darumbal People;
- Barada Kabalbara Yetimarala People;
- Scorpion Energy Pty Ltd – EPC 2128;

- Waratah Coal Pty Ltd – EPC 2268; and
- Arrow Energy Pty Ltd – Authority to Prospect (ATP) 700.

The purpose of the consultation was to update and brief agencies and stakeholders on the status of the Project, along with identifying and discussing potential impacts and management options.

1.8.3 EIS Notification and Submissions

A total of 34 written submissions were received during the public notification period (6 November 2017 to 18 December 2017), which combined, provided 509 comments on the information presented in the EIS. Of the 34 submitters, seven submitters did not require any additional points or clarification. A single submission was made in support of the Project. Details of the interested parties are provided in Section 1.8.3.1.

The submissions were reviewed and categorised according to the relevant EIS chapter, technical area or appendix. Where recommendations were made to improve upon the information provided in the EIS, or where clarification of the information was sought, a cross-reference to the appropriate section of this SEIS where the recommendation or clarification is addressed, is provided at Appendix A13.

Where comments did not include a recommendation, seek clarification or where considered to be outside of the scope of the EIS, the comments were noted. Further, where recommendations were considered to have been already addressed in the EIS, these were noted and cross-referenced to the relevant section of the EIS. In these cases, the responses are included at Appendix A13.

1.8.3.1 Summary of Submitters

A total of 34 interested parties including independent organisations, State and Commonwealth advisory agencies and government departments made submissions to the EIS.

1.8.3.2 Key Comments in Submissions

The submissions are categorised in accordance with the relevant chapters, technical areas and appendices of the EIS. A breakdown of the submissions by EIS chapter is provided in Figure 1-6. The issues raised form the basis of this SEIS.

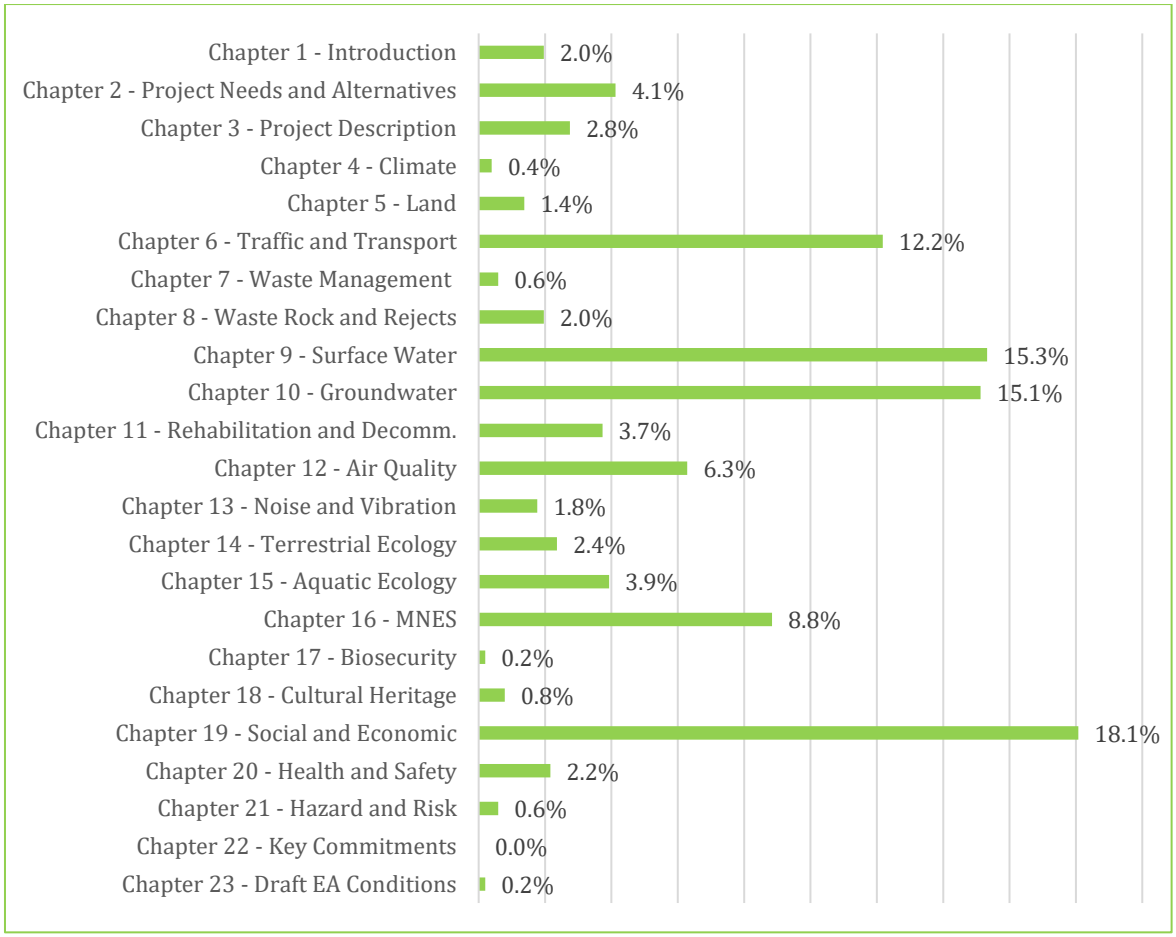

Figure 1-6 Percentage of submissions per EIS chapter

Following notification of the EIS, Central Queensland Coal consulted with DES, DotEE, advisory agencies, interested and affected persons to assist with their understanding of the EIS, the Project and the approvals process. Consultation was undertaken 21 - 22 November 2017 with representatives from government agencies. This took the form of a Government stakeholder briefing and site visit. A separate community consultation meeting was held 23 November and was attended by residents, Local Government representatives, service providers and businesses from the local community. Key issues raised during the meeting included:

- Employment opportunities for local communities (discussed in updated Chapter 19B – Social);
- Potential impacts to emergency services and allied health services (discussed in updated Chapter 20 and Chapter 21);
- Infrastructure improvements to support the Project (discussed in updated Chapter 3);
- Spending royalties in the local area (discussed in updated Chapter 19A - Economic);
- Perceived issues associated with accommodation camps (discussed in updated Chapter 3);
- Impacts to environmental values (i.e. surface water and groundwater (discussed in updated Chapter 9 and Chapter 10 respectively); and
- Increased traffic and potential road closures due to blasting (discussed in updated Chapter 6).

The issues raised in the community consultation meeting have been addressed variously throughout the SEIS. The key chapters addressing the comments are shown in each of the dot points above; however, the concerns may also be addressed in other Chapters within the SEIS.

Targeted consultation has continued with meetings and discussions held with representatives of various Departments and service providers. The purpose of these discussions was to update and brief agencies and stakeholders on the status of the Project, along with identifying and discussing potential impacts and opportunities. Letters were also sent to the State Member for Mirani and Federal Member for Capricornia.

A second community consultation meeting was held on 19 July 2018 at the Marlborough Community Hall. The purpose of this forum was for the Project management team to socialise updates about the Project's development and how comments to the EIS have been addressed. In line with the first community consultation there was significant positivity within the community towards the Project, particularly given the loss of business and families from the community due to the Defence buy-up of farming land to support the Shoalwater Bay Training Area expansion program. There were some concerns raised about noise and air quality but these were minor in comparison to the benefits associated with employment and business opportunities and the associated reinvigouration of the local communities.

In addition to the community meeting, interviews were held with property owners that immediately adjoin the Mamelon Property. Various businesses at The Caves, Yaamba, Rockhampton and St Lawrence were also consulted. Both LSC and RRC were briefed on the Project as part of this engagement process. The Capricorn Conservation Council were also briefed in person on the updated Project design and progress of the EIS. The results of the Social Impact Assessment are at Appendix A17 – Social Impact Assessment and discussion in Chapter 19B – Social.

Central Queensland Coal is in the process of negotiating a CHMP which covers the protection and management of all Indigenous cultural heritage in the Project area for the purposes of the Project activities. Central Queensland Coal commenced the process of negotiating the CHMPs with the Darumbal People, the Barada Kabalbara Yetimarala People # 1 and Barada Kabalbara Yetimarala People # 2 on 27 June 2017.

Various communications were exchanged with the recognised Indigenous groups until 4 September 2017, when written notice was provided to the groups advising that due to changes in the planning and approval schedule for the Central Queensland Coal Project, the commencement of discussions regarding the development of an approved CHMP has been set aside until early 2018. In January 2018 Central Queensland Coal recommenced the negotiations of the CHMPs with the three groups. Negotiations with each group will continue until each respective CHMP is finalised.

1.8.4 Consultation Beyond EIS Stage

Engagement with Project stakeholders and the community will continue for the life of the Project and be delivered through a Stakeholder and Community Engagement Plan. The Plan will be designed to maximise community and stakeholder input into the Project's development and delivery (including mine decommissioning) through capacity building and two-way communication mechanisms which will be in place for the life of the Project. It also outlines the communication tools which will be used and the purpose of these tools. The Plan will remain a dynamic document and will be updated as required throughout the Project's duration.

The Plan will be guided by IAP2's Public Participation Spectrum, as shown in Figure 1-7, which will be used to help define the role of Project stakeholders in any participation process.

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective informatio to assist them in understanding the problem, alternatives, opportunities and/ or solutions.	To obtain public feedback on analysis, alternatives and/ or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspiration, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Source: IAP2 2014

Figure 1-7 IAP2 public participation spectrum

1.8.5 Affected Persons and Interested Persons

In addition to the individuals, groups and businesses mentioned above, there are a wider range of interested and affected persons that may be impacted by, or have interest in, the Project. The identified stakeholders are represented in Figure 1-8 and directly affected landowners and tenement holders are outlined in Chapter 3 – Description of the Project.

For the purpose of managing the level of engagement with stakeholders in accordance with IAP2's Public Participation Spectrum presented above, stakeholders have been grouped as follows:

- Level 1: Landholders, registered Native Title Claimants or body corporates, underlying tenure holders and local government;
- Level 2: Key stakeholders and local community of Ogmore and surrounds; and
- Level 3: General public, community and special interest groups, wider regional and state-wide Project communication.

Figure 1-8 Project stakeholders

The level of engagement anticipated for the stakeholder groupings are shown at Figure 1-9. For Level 3 stakeholders the level of participation for this Project is anticipated to be Inform and Consult, for Level 2 stakeholders Inform, Consult and Involve, and for Level 1 stakeholders, Collaboration is anticipated. The stakeholders' ability to influence decisions depends on the decision type and what aspects of the Project are negotiable and what aspects are non-negotiable. The process is intended to be flexible and open to including all stakeholders to the maximum extent possible.

Where practicable, communication and engagement activities will be prioritised in the following order:

- Key stakeholders and directly affected landholders;
- Local Marlborough communities, neighbouring landholders, and other stakeholders; and
- General public and wider regional community.

Level 1 Stakeholders Level 2 Stakeholders Level 3 Stakeholders	Level 1 Stakeholders Level 2 Stakeholders	Level 1 Stakeholders
Inform → Consult	Involve	Collaborate → Empower
Government and industry groups on regulatory issues associated with the Project. Community and special interest groups on the Project's need, purpose, history, scope, benefits, progress, events, consultation process and engagement opportunities. The local and regional community on Project progress, impacts and opportunities.	The communities of Ogmore, Marlborough, and surrounding area in managing and mitigating impacts and opportunities and contributing to the achievement of desired Community Plan outcomes.	With directly affected landholders, Native Title claimants, tenement holders, and targeted agricultural sector stakeholders. With directly affected landholders managing and mitigating impacts and opportunities from the Project.

Figure 1-9 Levels of engagement

Key ongoing Project consultation activities include:

- Meetings with directly affected and neighbouring land owners to discuss the Project and the management of its impacts;
- Meetings with recognised Indigenous parties;
- Discussions with resource companies owning tenements that overlap the Project's ML application areas;
- Ongoing group meetings with representatives of the local community;
- Ongoing consultation with the LSC and Department of Transport and Main Roads (DTMR) regarding affected roads and road reserves;
- Meetings to progress social impact management action plans including Department of State Development, LSC, Queensland Ambulance Service, Queensland Fire and Emergency Service and Skills Queensland;
- Maintaining the Project website;
- Development of a Local Content Strategy and engagement with local businesses at one or more events to determine whether their capabilities can be drawn upon; and
- Planning for the implementation of a community advisory group or similar where interested members of the local community can meet and discuss the Project regularly.

1.9 Social Impacts

Following comments received in respect of the original SEIS, Central Queensland Coal took the decision to separate the Social and Economic Chapters and to prepare a stand alone Social Impact Assessment. This approach was discussed with, and agreed to, by the Department of State Development Social Impact Assessment Team. Social impacts are now discussed in Chapter 19B – Social Environment. Further, the updated social impact assessment, now incorporates data for the IRC area.

In addition to the stand alone social impacts chapter, a Stakeholder Engagement Plan is included in Appendix A14 and Social Impact Assessment at Appendix A17.

1.10 Project Approvals

An application was made by Central Queensland Coal to DES on 16 December 2016, under section 71 of the EP Act, for the preparation of a voluntary EIS. The application was approved on 27 January 2017 and DES' decision notice accepting the application to prepare a voluntary EIS was signed and forwarded to Central Queensland Coal. The final ToR for the EIS was issued to Central Queensland Coal on 4 August 2017 for the preparation of the EIS.

On 3 February 2017, DotEE deemed the Project to be a controlled action under the EPBC Act. The EIS will be carried out under the assessment bilateral agreement between the Commonwealth and the State of Queensland, which allows DotEE, to rely on the State EIS process for the assessment of Project impacts on MNES.

Central Queensland Coal currently holds ML 80187 which contains the mine pits, MIA and various ancillary infrastructure. A second ML (700022) has also been lodged to the DNRME under the MR Act, for the haul road transport corridor and TLF.

The purpose of this section is to summarise the key regulatory framework for the Project under Commonwealth, State and local government legislation and policies. State, regional and local planning instruments, applicable guidelines, local planning schemes and local laws have been reviewed. A full list of likely approvals required for the Project has been included in Appendix A1. The list specifies approval requirements, the administering authorities and other pertinent details.

The Project staging from feasibility through to post closure monitoring, and timings of management plans for the various stages of the Project are outlined in Figure 1-10.

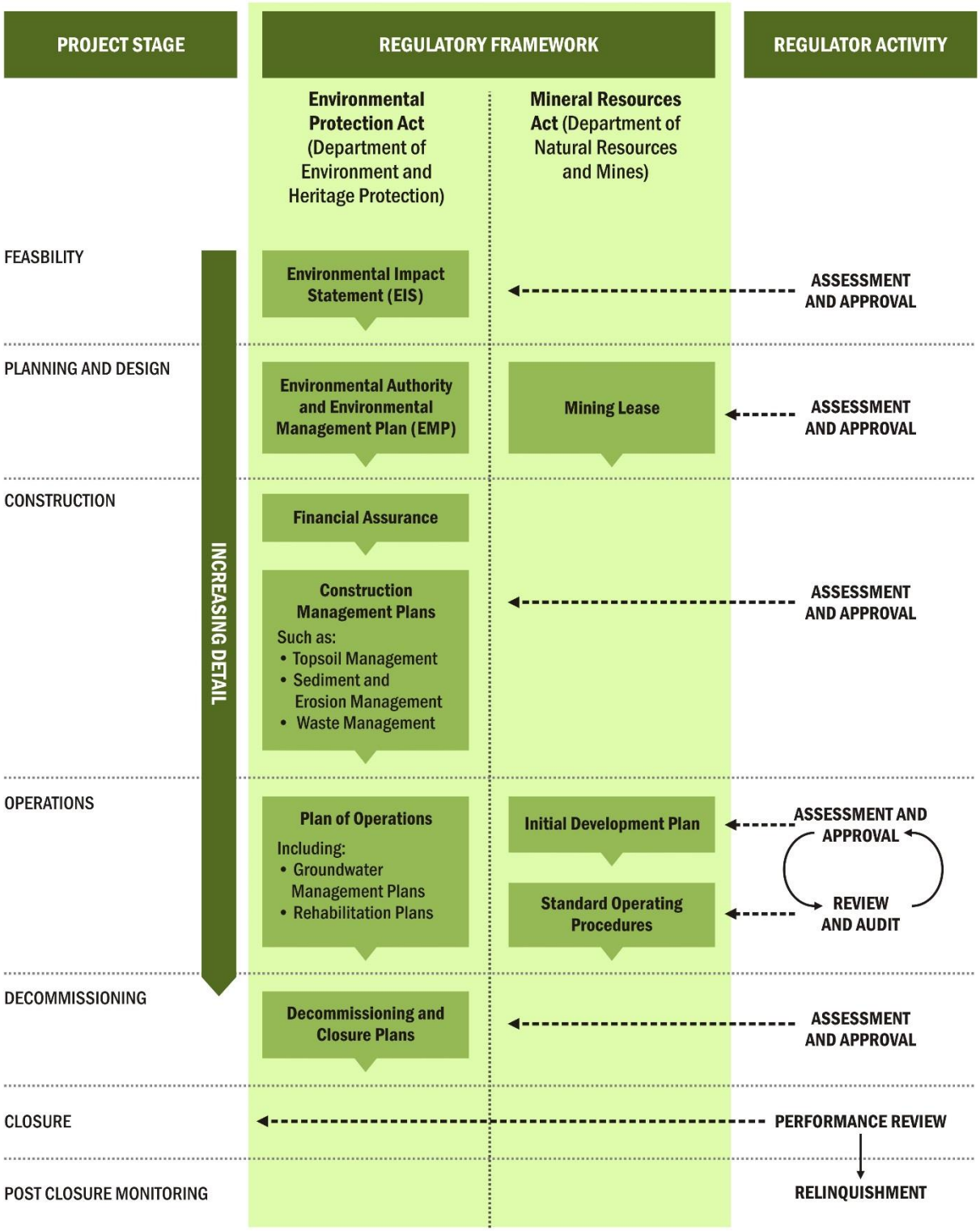

Figure 1-10 Project stages and management plans

1.11 Relevant Legislation, Policies and Standards

This section outlines and describes the key Commonwealth and State legislation, policies and standards applicable to the approval of the Project that will need to be considered by DES in its assessment. Based on the findings presented in this SEIS, the Project conforms to national, state and regional applicable legislation and guidelines. It also provides sufficient information for the purpose of decision making and condition setting under the EPBC Act and EP Act. A full list of likely approvals required for the Project has been included in Appendix A1. The list specifies approval requirements, the administering authorities and other pertinent details.

1.11.1 Commonwealth Legislation

- *Environment Protection and Biodiversity Conservation Act 1999;*
- *Native Title Act 1993;*
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984;* and
- *National Greenhouse Energy Reporting Act 2007.*

1.11.1.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act provides a legal framework to protect and manage MNES including nationally and internationally important flora, fauna, ecological communities, heritage places and water resources. The EPBC Act implements obligations under international conventions and treaties, such as protection of migratory species (Migratory Bird Agreements and Bonn Convention 1979) and World Heritage Area values (World Heritage Convention 1972). The EPBC Act is administered by DotEE.

The EPBC Act establishes a process for assessment and approval of proposed actions that have, or are likely to have, a significant impact on MNES. Proponents refer projects to DotEE initially for determination on whether a project is a controlled action or not a controlled action. If the referral is deemed to be a controlled action, then it is likely to have a significant impact on MNES and must be undertaken in accordance with prior approval from the Minister.

The Project was referred to DotEE, on 22 December 2016 (EPBC 2016/7851). A decision on the referral was released on 3 February 2017 for listed threatened species and communities, migratory species and water resources deeming the proposed action a controlled action if undertaken in a particular manner and requiring assessment by an EIS. Thus, the controlling provisions for the Project are:

- Sections 12 and 15A (world heritage values of a declared World Heritage property);
- Sections 15B and 15C (the heritage values of a National Heritage place);
- Sections 18 and 18A (Listed threatened species and communities);
- Sections 20 and 20A (Listed migratory species);
- Sections 24B and 24C (Great Barrier Reef Marine Park); and
- Sections 24D and 24E (a water resource, in relation to coal seam gas development and large coal mining development).

For this Project, the EIS process is accredited under the assessment bilateral agreement between the Commonwealth and Queensland Governments. Hence, the EIS addresses the impacts to MNES

in Chapter 16 – MNES as a standalone separate chapter within the EIS which addresses the matters relevant to the controlling provisions of the EPBC Act.

The EPBC Act also establishes the Australian Heritage List, which includes natural, Indigenous and historic places that are of outstanding heritage value to the nation. The Act also establishes the Commonwealth Heritage List, which comprises natural, Indigenous and historic places on Commonwealth lands and waters or under Australian Government control and identified by the Minister for the Environment (the Minister) as having Commonwealth Heritage values. There are no listed areas within the LSC area.

The EPBC Act Environmental Offset Policy provides upfront guidance on the role of offsets in environmental impact assessments, and how the department considers the suitability of a proposed offset. Offsets are defined as measures that compensate for the residual impacts of an action on the environment, after avoidance and mitigation measures are taken. This policy aims to improve environmental outcomes through the consistent application of best practice offset principles and encourage advanced planning of offsets. Offsets have been considered during the assessment phase of this environmental impact assessment. The suitability of a proposed offset is considered as part of the decision to approve or not approve a proposed action under the EPBC Act. The assessment of offset requirements has been provided in Chapter 14 – Terrestrial Ecology and Chapter 16 – MNES.

1.11.1.2 Native Title Act 1993

The *Native Title Act 1993* (NT Act) recognises the land rights and interests of Indigenous peoples where they have historically resided and regulates the conduct of 'future acts', including development. The legislation provides for the determination of Native Title claims, the treatment of 'future acts' that may impact on Native Title rights and the requirement for consultation and/or notification to relevant claimants where 'future acts' are involved. The provisions of the NT Act are administered by the National Native Title Tribunal.

The National Native Title Tribunal is established under the NT Act to work with people to understand Native Title and reach outcomes that recognise everyone's rights and interests in land and waters. The Barada Kabalbara Yetimarala People have a current Native Title claim over the area where the mine pits, TLF and ancillary infrastructure are proposed (Tribunal Number: QC2013/004). The MLs are over freehold land or road reserves on which Native Title has been extinguished.

1.11.1.3 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The purpose of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act) is to preserve and protect from injury or desecration, areas and objects in Australia and in Australian waters that are of particular significance to Aborigines in accordance with Aboriginal tradition. The ATSIHP Act enables Traditional Owners to make an application to DotEE to declare certain areas or objects as protected. The ATSIHP Act also includes provisions to manage the discovery and appropriate management of Aboriginal remains.

1.11.1.4 National Greenhouse Energy Reporting Act 2007

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) provides a single national reporting framework for the reporting and dissemination of information related to Greenhouse Gas (GHG) emissions, GHG projects, energy consumption and energy production of corporations. The NGER Act imposes various registration, reporting and record-keeping requirements.

The NGER Act provides the framework for mandatory reporting of GHG emissions and production and consumption of energy when threshold values are exceeded by a corporation or single facility. Threshold values relevant to the Project are provided in Table 1-9. If these threshold values are exceeded Central Queensland Coal as the controlling corporation (as defined under the NGER Act) will apply to the Greenhouse and Energy Data Officer to register on the National Greenhouse and Energy Register. If these values are exceeded, Central Queensland Coal must provide annual reports to the data officer on its GHG emissions, energy production and consumption.

The Technical Guidelines for the Estimation of Greenhouse Gas Emissions by Facilities in Australia (DotEE 2016) will be used to estimate emission quantities relevant to coal mining activities. GHGs are assessed in Chapter 12 – Air Quality and based on that assessment, the NGER Act is expected to apply to the Project.

Table 1-9 Threshold values of greenhouse gas emissions and production

	Threshold values		
	Emission of GHG	**Energy production**	**Energy consumption**
Controlling corporations	50 kilotonnes per year of carbon dioxide equivalence (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

1.11.2 Key Queensland Legislation

Queensland legislation of relevance to the Project includes:

- *Mineral Resources Act 1989;*
- *Environmental Protection Act 1994;*
- *Regional Interests Planning Act 2014;*
- *Environmental Offsets Act 2014;*
- *Water Act 2000;*
- *Fisheries Act 1994*
- *Coal Mining Safety and Health Act 1999;*
- *Nature Conservation Act 1992;*
- *Work Health and Safety Act 2011;*
- *Mineral and Energy Resources (Common Provisions) Act 2014;* and
- *Strong and Sustainable Resources Communities Act 2017.*

1.11.2.1 Mineral Resources Act 1989

The MR Act provides for the assessment, development and utilisation of mineral resources. The MR Act establishes a framework to facilitate mining-related activities, through the leasing of prospecting, exploration, mineral development and mining tenure. The MR Act is administered through DNRME.

Central Queensland Coal is the holder of ML 80187 and ML 700022. This SEIS supports the applications for the Project's MLs under Part 7 of the MR Act.

A ML provides entitlements to:

- Enter and be on the ML for mining purposes or transportation through land to access the mining area;
- Use any sand, gravel and rock within lease area for mining activities;
- Prospecting, exploring or mining;
- Processing a mineral won or extracted by the mining;
- An activity that is directly associated with, or facilitates or supports, the mining or processing of the mineral; and
- Rehabilitating or remediating environmental harm because of a mining activity.

The MR Act also sets royalty payments, rents, landholder compensation and notification requirements which Central Queensland Coal must comply.

Section 4A of the MR Act precludes the application of the *Planning Act 2016* (Planning Act) to activities undertaken for purposes of the mining tenure, except for provisions in relation to the *Queensland Heritage Act 1992*. It also makes building work controlled under the *Building Act 1975* self-assessable development within the lease.

Pursuant to the *Mineral Resources Regulation 2003*, various restricted areas have been declared across parts of Queensland that limit exploration and mining activities. It is noted there are restricted areas within the proposed ML boundaries such as bores and dams. Consents to surface rights over these restricted land areas will be required as a prerequisite to grant of the MLs.

The *Water Reform and Other Legislation Amendment Act 2014* (as amended by the *Environmental Protection (Underground Water Management) and Other Legislation Amendment Act 2016* and the *Water Legislation Amendment Act 2016*) (refer collectively herein as the Water Reform Acts) changes the rights and obligations of ML and MDL holders when extracting or interfering with groundwater.

Prior to the commencement of the Water Reform Acts, the MR Act stated that where any Act provided that water may be diverted or appropriated only under authority granted under that Act, the holder of a ML could not divert or appropriate water unless the holder held that authority. Consequently, because of this, together with section 808 of the *Water Act 2000* (Water Act), ML holders were generally required to obtain a water licence to take or interfere with groundwater where the ML was located within a declared underground water area, or where underground water was regulated though a water plan.

Since the ascent of the various water reform Acts, the MR Act and the Water Act have been modified to bring the rights and obligations of ML and MDL holders in respect of "associated water" in line with that existing for petroleum tenure holders under the petroleum legislation. The modifications provide rights for the holder of a MDL or ML to take or interfere with underground water in the area of the licence or lease where the taking or interference happens during the course of, or results from, the holder's authorised activities (associated water).

MDL and ML holders will be required to measure and report on the volume of associated water taken and also advise the chief executive of the exercise of the holder's underground water rights immediately after the holder starts exercising those rights.

1.11.2.2 Environmental Protection Act 1994

The EP Act provides the key legislative framework for environmental management and protection in Queensland. 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 ecological processes on which life depends' (s 3). Under the EP Act, Central Queensland Coal must comply with the general environmental duty not to undertake an: 'Activity that causes, or is likely to cause, environmental harm unless…all reasonable and practicable measures to prevent or minimise the harm are taken' (s 319).

The process for obtaining an EA for mining activities is established in Chapter 5 of the EP Act. According to the Act, the Project requires a site–specific application for ineligible Environmentally Relevant Activities (ERA) (s 124), that is for which eligibility criteria are not in effect. The EA imposes environmental management conditions based on DES' Model Mining Conditions on mining activities undertaken on the ML that Central Queensland Coal must comply with. This EIS demonstrates that the model mining conditions are acceptable or identifies areas where suitable alternatives to model conditions are appropriate for the Project and existing background EVs. DES is the regulatory authority that has responsibility for administration of EAs, oversight of compliance and retaining financial assurance bonds to ensure the area is suitably rehabilitated.

Under changes from *Environmental Protection (Greentape Reduction) and Other Legislation Amendment Act 2012* which commenced on the 31 March 2013, this EIS will satisfy the Information and Notification stages for EAs and the EA conditions will largely comprise the model mining conditions. Upon lodgement of the EA application the application will only require the decision stage to be completed, thus reducing the duplication of information submission and public notification which previously existed.

The water reforms that came in power in December 2016 contain amendments to the EP Act to include additional application requirements for site-specific EA applications (and amendment applications) involving the exercise of groundwater rights for resource projects for which the relevant tenure is an MDL or ML. The changes as a result of the water reforms, with respect to the taking or interfering with groundwater and administration through the site specific EA, are discussed in Chapter 10 - Groundwater.

The EP Act imposes a general environmental duty prohibiting the carrying out of activities that cause or are likely to cause environmental harm unless all reasonable and practical measures are taken to prevent or minimise the harm.

To comply with this duty, Central Queensland Coal must consider:

- The nature of the harm / potential harm;
- The sensitivity of the receiving environment;
- The current state of technical knowledge for the activity;
- The likelihood of successful application of the different measures to prevent or minimise environmental harm that might be taken; and
- The financial implications of the different measures as they would relate to the type of activity.

This EIS demonstrates the proponent's compliance with its general environmental duty.

The EP Act also requires that the administering authority and other relevant persons are notified if the proponent becomes aware that an event has happened that causes or threatens to causeserious or material environmental harm. The proponent will comply with this duty if a notifiable event occurs.

Environmentally Relevant Activities

Pursuant to the EP Act, activities that will, or have the potential to, release contaminants into the environment and which may cause environmental harm are defined as ERAs. In accordance with the *Environmental Protection Regulation 2008* (EP Regulation) (Schedule 6, Item 5), the development will be a site-specific EA mining project for the mining of black coal. The activities associated with the Project will require a number of ERAs (as prescribed in Schedule 2, EP Regulation). The EA is an integrated authority that allows for the carrying out of multiple ERAs that are part of a project, as such all ERAs must be listed and described in the EIS for inclusion in the EA. The EA is expected to provide approval conditions for each of the required ERAs.

The Project has the potential to involve three ERAs applicable to the construction and operational stages as listed in Table 1-10.

Table 1-10 Environmentally relevant activities for the Project

ERA number	Relevant activity	Location and activity summary
ERA 13	Mining Black Coal.	Central Queensland Coal Area – ML 80187 and ML 700022.
ERA 8 (1)(a)	Chemical Storage – more than 500 m3 of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3; or (EP Regulation – Sch 2, Part 2).	Central Queensland Coal Area – ML 80187 and ML 700022.
ERA 31 (2b)	Mineral Processing – processing in a year >1,000,000 tonnes or more of mineral products (EP Regulation – Sch 2, Part 7).	Central Queensland Coal Area – ML 80187 and ML 700022.

Notifiable Activities

Land contamination and activities that have been identified as likely to cause land contamination are listed as notifiable activities in Schedule 3 of the EP Act. Any person undertaking these notifiable activities must notify DES and the land is recorded on the Environmental Management Register (EMR). Potentially notifiable activities associated with the Project are listed in Table 1-11.

Table 1-11 Anticipated notifiable activities for the Project

Item number (Schedule 3 EP Act)	Description of activity
1	Abrasive blasting—carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material.
23	Metal treatment or coating - treating or coating metal including, for example, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and spray painting using more than 5L of paint per week.
24	Mine wastes – (a) Storing hazardous mine or exploration wastes, including, for example, tailings dams, overburden or waste rock dumps containing hazardous contaminants; and (b) Mining or processing, minerals in a way that exposes faces, or releases groundwater, containing hazardous contaminants.
29	Petroleum product or oil storage in above ground tanks.
37	Waste storage, treatment or disposal – storing, treating, reprocessing or disposing regulated waste including operating a sewage treatment facility with on-site disposal facilities.

Note: Under Section 371 of the EP Act, the owner or occupier of land must notify DES within 20 business days of becoming aware of the notifiable activity having occurred or going to occur on the subject land.

Regulated and Hazardous Waste Dam

The final EA approved for the Project will include conditions that require Central Queensland Coal to have the consequence category of structures which are dams or levees constructed as part of the Project (EHP 2017). The hazard assessment will determine whether a structure is a 'regulated structure' for the purpose of the EA. Assessments are carried out by a 'suitably qualified and experienced person' in accordance with the *Manual for assessing consequence categories and hydraulic performance of structures* (the Manual) (EHP 2016a).

Structures may be assessed using the Manual as being in one of three consequence categories: low, significant or high. This consequence category is based on its potential impact to humans, livestock, the environment or general economic loss in the event the structure overflows or fails. Dams are automatically classified as high or significant hazard dams if the dam wall exceeds a height of 10 m or the quality of the stored water exceeds DES' contaminant concentration criteria and minimum volume requirements. Where categorised as a significant or high consequence, the structure is referred to as a regulated structure.

Regulated dams must be able to withstand seasonal rainfall events without releasing contaminants from the dam in an unauthorised manner. A minimum available storage, called a design storage allowance, is required to be estimated for regulated dams in accordance with the Manual, in order to accommodate seasonal rainfall to a specified annual probability. Onsite water management must allow for and provide the design storage allowance volume in each regulated dam, going into each new wet season (that is, on 1 November each year). Regulated dams are also assigned mandatory reporting levels, which if volume reaches this level, notification must be provided to DES. Regulated structures will require certified design plans to be submitted to the administering authority demonstrating compliance with the Manual requirements. Such structures will be subject to annual inspection and reporting by a suitably qualified and experienced person. Regulated dams also require details to be entered in a register of regulated dams kept by the holder of the authority and an electronic copy provided annually to the administering authority (EHP 2017).

As this Project includes a number of structures (water storage dam, environmental dams and possible levees) which are likely to be assessed as regulated, the applicable model conditions for regulated structures should be applied to the EA. The locations and functional significance of all dams required for the Project are outlined in Chapter 9 – Surface Water.

If a regulated dam also meets the definition of a 'referable dams' pursuant to the *Water Supply (Safety and Reliability) Act 2008*, duplication of failure impact assessment is not required as there is an exemption from the referable dams (Chapter 3) in the Act for 'hazardous waste dams' and definition of the term 'hazardous waste dams' largely overlaps with 'regulated dams' under the Manual.

Existing Agricultural ERA

The EP Act regulates agriculture to protect the Great Barrier Reef. The provisions predominantly relate to chemical usage and water quality leaving the property. This is part of the ongoing response aimed at reversing the decline in water quality in the Great Barrier Reef World Heritage Area that has occurred as a result of land management practices in adjacent catchments over the past 150 years. The Project area is located outside of the Wet Tropics, Burdekin Dry Tropics and Mackay Whitsundays catchments and as such is not required to hold an Agricultural ERA.

Subordinate Legislation

The EP Act has a range of subordinate legislation which assists in achieving the objective. The EP Act is supported by the following subordinate environmental protection policies (EPPs):

- Environmental Protection (Air) Policy 2008 (EPP (Air));
- Environmental Protection (Noise) Policy 2008 (EPP (Noise)); and
- Environmental Protection (Water) Policy 2009 (EPP (Water)).

Where relevant impacts could occur for this Project, impact assessments have been undertaken having due regard to the EVs specified in each EPP.

Environmental Protection (Air) Policy 2008

The objective of the EPP (Air) is to achieve the object of the EP Act in relation to Queensland's air environment. To achieve this objective, the EPP (Air) provides a framework for:

- Identifying EVs to be enhanced or protected;
- Specifying air quality indicators and goals to protect or enhance the EVs; and
- Providing processes which manage the air environment and involve the community in achieving air quality goals that best protect Queensland's air environment.

Air quality values of the Project area, potential impacts from the Project and management of those impacts are discussed in Chapter 12 – Air Quality. As set out in Chapter 12, the Project has applied the air quality objectives outlined with the EPP (Air) to the Project activities.

Environmental Protection (Noise) Policy 2008

The objective of the EPP (Noise) is to achieve the object of the EP Act in relation to Queensland's acoustic environment. The EPP (Noise) provides a framework for:

- Identifying the EVs to be enhanced or protected;
- Stating acoustic quality objectives for enhancing or protecting the EVs; and
- Providing a framework for making consistent, equitable and informed decisions about the acoustic environment.

The acoustic values of the Project area, potential impacts from the Project and management of those impacts are discussed in Chapter 13 – Noise and Vibration and the Model Mining Conditions (MMC) criteria have been applied to the Project.

Environmental Protection (Water) Policy 2009

The EPP (Water) establishes a process for identifying EVs to be protected and states standards for water quality in support of those values. The EPP (Water) provides a framework for:

- Identifying EVs and management goals for Queensland waters;
- Stating water quality guidelines and objectives to protect or enhance the EVs;
- Providing a framework for making consistent, equitable and informed decisions about Queensland waters; and
- Monitoring and reporting on the condition of Queensland waters.

Potential impacts on surface water and groundwater and the management measures are addressed in Chapter 9 – Surface Water and Chapter 10 – Groundwater. The identified EVs and water quality objectives (WQOs) have been applied to the Project's activities.

1.11.2.3 Regional Planning Interests Act 2014

The *Regional Planning Interests Act 2014* (RPI Act) replaced the *Strategic Cropping Land Act 2011* on the 13 June 2014. The RPI Act seeks to manage the impacts from resource activities, and other regulated activities through protecting:

- Living areas in regional communities;
- High-quality agricultural areas from dislocations;
- Strategic cropping land (SCL); and
- Regionally important EVs.

Under the RPI Act, an approval is required when a resource activity or regulated activity is proposed in an area of regional interest. Areas of regional interest are identified as:

- Priority living areas;
- Priority agricultural areas;
- Strategic cropping areas; and
- Strategic environmental areas.

No areas of regional interests are found within the Project's disturbance area. No approval under the RPI Act is therefore, required for the Project.

1.11.2.4 Environmental Offsets Act 2014

The *Environmental Offsets Act 2014* (EO Act), *Environmental Offsets Regulation 2014* and the *Queensland Government Environmental Offsets Policy* provide a streamlined framework for environmental offset requirements. Offsets are required where there is an unavoidable impact on significant EVs. In addition, an environmental offset can only be required if impacts from a prescribed activity constitute a significant residual impact as identified through the following guidelines:

- The State guideline that provides guidance on what constitutes a significant residual impact for Matters of State Environmental Significance (MSES);
- The Commonwealth Significant Impact Guidelines for what constitutes a significant residual impact on MNES; and
- Any relevant local government significant impact guideline for Matters of Local Environmental Significance (MLES).

The *Queensland Environmental Offsets Policy* provides a decision support tool to enable administering agencies to assess offset proposals in accordance with the EO Act. An environmental offset may be required as a condition of approval where the activity is likely to result in a significant residual impact on prescribed environmental matters. The *Significant Residual Impact Guideline* issued in December 2014 is used for consideration of all potential offset requirements for MSES, for applications made under the EP Act. It is used to determine if a residual impact from a prescribed activity is significant. Offsets may be delivered through a variety of manners including financial settlement offsets, proponent driven offsets and a combination of these approaches.

To avoid duplication with offsets required under the EPBC Act, the policy provides that the administering agency must consider other relevant offset conditions for the same or substantially the same prescribed impact. If duplicating conditions are imposed it allows Central Queensland Coal to remove the duplication.

1.11.2.5 Water Act 2000

The *Water Act 2000* (Water Act) provides a structured system for the planning, protection, allocation and use of Queensland's surface waters and groundwater. Under section 808 of the Water Act, a person must not take, supply or interfere with water unless authorised. The Water Act was amended in 2016 to require all mining activities to be assessed and approved for the take of incidental water extracted during operations. The changes as a result of the water reforms, with respect to the taking or interfering with groundwater, are discussed in Chapter 10 - Groundwater.

Water Supply

The Project area lies wholly within the Styx Catchment (Queensland river basin 127), a small catchment forming part of the Fitzroy River Natural Resource Management region, which discharges into the Coral Sea adjacent to Rosewood Island (in the vicinity of the Project). No water resource plan is in force over the catchment. As such, no permit is required by the Project to interfere with overland flow.

The Project is not located within a declared sub-artesian area or a groundwater management area.

Water for the construction and operation of the Project will be sourced from an external supply and trucked to the site. Once operational, water will be sourced from a number of options (see Chapter 9 – Surface Water and Chapter 10 – Groundwater).

Pursuant to section 376 of the Water Act an Underground Water Impact Report (UWIR) will be prepared prior to exercising its rights to utilise groundwater associated with the mining operations. Under the *Water Reform and Other Legislation Amendment (WROLA) Act 2014* additional matters are required to be addressed as part of the EA process. The UWIR will address the requirements of chapter three, division four, section 376 of the Water Act which stipulates that the UWIR must include:

- Part A: Information about underground water extractions resulting from the exercise of underground water rights:
  - Quantity of water already produced
  - Quantity of water to be produced in the next three years
- Part B: Information about aquifers affected, or likely to be affected:
  - Aquifer descriptions
  - Underground water flow and aquifer interactions
  - Underground water level trend analysis
- Part C: Maps showing the area of the affected aquifer(s) where underground water levels are expected to decline:
  - Maps of affected areas
  - Methods and techniques used in building a computer based hydrogeologic model, and the associated water level maps and predictions
  - Water bores within Immediately Affected Areas
  - Annual review of maps produced
- Part D: Impacts on Environmental Values:
  - Identification and description of environmental values
  - Nature and extend of any impacts on the environmental values
  - Impacts to formation integrity and surface subsidence
- Part E: A water monitoring strategy:
  - Rational behind water monitoring strategy
  - Timetable for the water monitoring strategy
  - Reporting program for the water monitoring strategy
- Part F: A spring impact management strategy:
  - Spring inventory and values
  - Connectivity between the spring and aquifer
  - Management of impacts
  - Timetable for strategy
  - Reporting program.

In accordance with section 370(2) the UWIR must be submitted prior to Central Queensland Coal exercising its underground water rights. Central Queensland Coal will ensure the mandatory consultation and submission period (20 business days) as described in sections 381 and 382 of the Water Act is addressed. The UWIR submitted to DES will be accompanied by a submissions summary which is described in section 383 of the Water Act. A new UWIR will be prepared and submitted to DES generally within 10 business days after each third anniversary of the day the first UWIR took effect.

Interfering with a Watercourse

A number of watercourses intersect the Project area and are subject to the provisions of the Water Act if interfered with. Placing fill or excavating in a watercourse, as required for works associated with construction of haul roads, bridges and culverts require a Riverine Protection Permit (RPP). A general exemption for this permit has been granted for resource holders where the works are authorised by an EA and comply with the guidelines for RPP exemption requirements' WSS/2013/726, Version 2.00 (dated 18 May 2018) (DNRME 2018). Consequently, Central Queensland Coal will be exempt from requiring a RPP.

No diversions are proposed as a result of the Project. Minor waterway diversions or realignments may be required around the open pit areas and are described in Chapter 9 – Surface Water. Watercourse diversions undertaken as part of a mining resource activity are now assessed as part of the issuing of an EA by DES. The guideline for *Works That Interfere With Water In A Watercourse – Watercourse Diversions* (DNRM 2014) outlines the considerations which must be satisfied in the assessment of the EA. As such no additional approvals under the Water Act are required for watercourse diversions or realignments.

1.11.2.6 Fisheries Act 1994

The main purpose of the *Fisheries Act 1994* (Fisheries Act) is to provide for the use, conservation and enhancement of the fish resources and habitats to apply and promote the principles of Ecologically Sustainable Development. It regulates the taking and possession of specific fish, removal of marine vegetation, the control of development in areas of fish habitat and listed noxious fish species. Approvals for waterway barrier works within waterways are not required within ML areas as the MR Act states that the *Planning Act 2016* (through which the Fisheries Act is administered for development within a waterway) does not apply to development authorised under the MR Act.

All waters of the state are protected against degradation by direct or indirect impact under s125 of the EP Act. If litter, soil, a noxious substance, refuse or other polluting matter is on land, in waters or in a fish habitat and the polluting adversely affects fisheries resources or habitat then penalties apply. There is no mapped fish habitat area within the Project area.

1.11.2.7 Coal Mining Safety and Health Act 1999

The object of the *Coal Mining Safety and Health Act 1999* (CMSH Act) is to protect the health and safety of people at, or who may be impacted by, a coal mine and to monitor and ensure that the risk of injury or illness is at an acceptable level. Central Queensland Coal is required to comply with the obligations and approvals of the CMSH Act and *Coal Mining Safety and Health Regulation 2001* (CMSH Regulation) for the Project.

In particular, the Project will require approval and documentation including:

- Notification to regional inspector of mine operation commencement (ss 49-50, CMSH Act);
- Documentation of management structure (ss 51 and 55 CMSH Act);
- Safety Health and Management System (s 62, CMSH Act);
- Principle hazard management plan and standard operating procedures (ss 63-64, CMSH Act);
- Records and reporting (ss 65-69 CMSH Act); and
- Hazardous substance register and standard operating procedure (ss 55-56, CMSH Regulation).

Chapter 20 – Health and Safety outlines Central Queensland Coal's health and safety obligations and commitments for the Project incorporating the requirements detailed in the CMSH Act, CMSH Regulation and the *Mineral Resources Regulation 2003*.

1.11.2.8 Nature Conservation Act 1992

In broad terms, the objective of the *Nature Conservation Act 1992* (NC Act) is the conservation of nature (plants and animals) within Queensland. Specifically, the NC Act seeks to gather relevant information, identify critical habitat areas, manage protected areas, protect wildlife and promote ecologically sustainable development. The NC Act has 10 subordinate regulatory instruments in the form of regulations, conservation plans and notices. Of relevance to the Project is the *Nature Conservation (Wildlife) Regulation 2006* which categorises flora and fauna species as extinct in the wild, endangered, vulnerable, near threatened or of least concern. Also listed is international wildlife and prohibited wildlife.

The NC Act will play an important role in approvals for the Project by providing legislative guidance in respect to the conservation and protection of flora and fauna deemed to be of State significance. Under the NC Act, permits for the movement of protected animals and the clearing of protected plants are required and a Species Management Program must be approved when interfering with native fauna habitat and breeding places. Baseline surveys have not identified any protected plants or critical breeding places of protected species (see Chapter 14 – Terrestrial Ecology).

1.11.2.9 Work Health and Safety Act 2011

The purpose of the *Work Health and Safety Act 2011* (WH&S Act) is to provide a regulatory framework for workplace health and safety that is consistent with national policy. Under Schedule 1, Part 2, the WH&S Act does not apply to operational coal mines regulated under the CMSH Act.

For construction activities and any operations or activities outside of the Project area, the full provisions of the WH&S Act apply.

1.11.2.10 Mineral and Energy Resource (Common Provisions) Act 2014

Since the release of the EIS the Queensland Government has introduced the Mineral and Energy Resources (Financial Provisioning) Bill 2017.The Bill:

- Establishes a new financial assurance system for resource activities in Queensland, including a pooled fund for resource entities that meet the criteria; and
- Reforms the mine rehabilitation process, including requirements for upfront commitments to progressive rehabilitation and mine closure though a Progressive Rehabilitation and Closure Plan (PRCP).

The new requirements for financial assurance and rehabilitation for resources activities is expected to commence on 1 July 2019.

The primary change introduced by the Financial Provisioning Bill is that plans of operations for mining projects with site-specific environmental authorities will be replaced with PRCPs, that will:

- Provide the plan for the mining activity;
- Identify the post mining land use; and
- Detail progressive rehabilitation, including milestones and timeframes. Land will be available for rehabilitation generally if it is not being used for mining, does not contain permanent infrastructure and will not be mined within the next 10 years.

A PRCP guideline will be developed, to assist with the preparation of PRCPs. The detail required for the progressive rehabilitation requirements will not be known until the guideline is released. Central Queensland Coal will, once appropriate guidance is developed and disseminated by the Queensland Government, prepare a PRCP.

1.11.2.11 Strong and Sustainable Resource Communities Act 2017

The *Strong and Sustainable Resource Communities Act 2017* (SSRC Act) was assented to on 31 August 2017. This Act includes:

- Prohibitions affecting Queensland resources projects that utilise 100 per cent fly-in, fly-out (FIFO) workers;
- Anti-discrimination provisions aimed at protecting workers in regional communities; and
- Strong powers for the Coordinator-General to administer the Act and ensure compliance.

The SSRC Act has a stated object of supporting regional Queensland communities located near large resources projects to ensure that they are able to benefit from these projects. This is being achieved by limiting the use of FIFO workforces in order to provide employment opportunities for those that live in nearby communities.

The prohibition on using 100 per cent FIFO workers applies to all large resources projects in Queensland, both existing and future, that have a nearby regional community, regardless of when the resources project was approved and public notification given of the EIS. The default definition of a 'nearby regional community' is a regional town of at least 200 residents that is located within a 125 km radius of the main access of a project site, although the Coordinator-General has discretion to determine a greater or lesser radius.

Anti-discrimination provisions in the Act also apply to all existing and future resources projects to ensure that discrimination against local workers does not occur as part of future recruitment activities by resources projects, and to also allow FIFO workers to move into the community if they wish to.

Significantly, the Coordinator-General has been given discretion, as part of the EIS evaluation, to decide whether the provisions of the Act will extend to workers engaged for the construction phase of a project.

In anticipation of the assent of the SSRC Act EIS Section 19.8.6 – Management Strategies presents a management plan framework for the social impacts associated with the Project. This framework is

referred to as the Social Impact Strategy. The Social Impact Strategy will involve indicative frameworks for the management of:

- Community and stakeholder engagement;
- Workforce management;
- Housing and accommodation;
- Local business and industry content; and
- Health and community wellbeing.

The management strategies will support ongoing management of the social change processes and social impacts and benefits associated with the Project. In recognition of the changing nature of social impacts and benefits over the life of the Project, the management strategies will be built on an adaptive management approach and will include regular reviews and updates. It is anticipated that a comprehensive review of management strategies will be undertaken in consultation with stakeholders every five years in line with the release of ABS Census data.

Each management strategy framework is summarised Chapter 19B, Section 19.8 – Management Strategies and at Appendix A14 –Stakeholder Engagement Plan.

1.11.3 Other Queensland Legislation

Other state legislation relevant to the Central Queensland Coal Project includes:

- *Aboriginal Cultural Heritage Act 2003;*
- *Biosecurity Act 2016;*
- *Coastal Protection and Management Act 1995;*
- *Food Act 2006;*
- *Forestry Act 1959;*
- *Health (Drugs and Poisons) Regulation 1996;*
- *Land Act 1994;*
- *Native Title (Queensland) Act 1993.*
- *Planning Act 2016;*
- *Radiation Safety Act 1999;*
- *Transport Infrastructure Act 1994; and*
- *Vegetation Management Act 1999.*

1.11.3.1 Aboriginal Cultural Heritage Act 2003

The *Aboriginal Cultural Heritage Act 2003* (ACH Act) contains provisions for identifying significant Aboriginal cultural heritage and protecting it from development, including:

- The requirement to comply with a duty of care towards Aboriginal cultural heritage;
- The requirement to notify the existence and location of Aboriginal human remains;
- The establishment of an Aboriginal Cultural Heritage Database which was searched as part of Chapter 18 – Cultural Heritage; and
- The establishment of a Register of Aboriginal Cultural Heritage which was searched as part of Chapter 18 – Cultural Heritage.

The ACH Act requires that, when carrying out an activity, all reasonable and practicable measures are taken to ensure that the activity does not harm Aboriginal cultural heritage. This is referred to as the cultural heritage duty of care.

Central Queensland Coal is in the process of negotiating CHMPs with the Darumbal People, the Barada Kabalbara Yetimarala People #1 and Barada Kabalbara Yetimarala People #2 which will govern management of Aboriginal cultural heritage associated with the Project.

1.11.3.2 Biosecurity Act 2014

The following provides an updated summary to that in the EIS of the purposes of the *Biosecurity Act 2014* (Biosecurity Act).

The purposes of the Biosecurity Act are to:

- Provide a framework for an effective biosecurity system for Queensland that helps to minimise biosecurity risks and facilitates responding to impacts on a biosecurity consideration, including responding to biosecurity events, in a timely and effective way;
- Ensure the safety and quality of animal feed, fertilisers and other agricultural inputs;
- Help align responses to biosecurity risks in the State with national and international obligations and requirements for accessing markets for animal and plant produce, including live animal and plants; and
- Manage risks associated with emerging, endemic and exotic pests and diseases that impact on plant and animal industries, the build environment, companion or leisure animals, biodiversity and the natural environment, tourism, lifestyle and pleasure industries or infrastructure and service industries, the transfer of diseases from animals to humans and from humans to animals, biological, chemical and physical contaminants in carriers.

The Biosecurity Act provides a consistent regulatory approach for the management of invasive biosecurity matter across Queensland. The Biosecurity Act specifically requires the local governments to have a biosecurity plan for invasive biosecurity matter for its local government area and to pay an amount each financial year to the Land Protection Fund when requested.

Under the Biosecurity Act everyone has a 'general biosecurity obligation'. This means everyone is responsible for managing biosecurity risks that are under their control and that they know about or should reasonably be expected to know about.

Under the general biosecurity obligation, individuals and organisations whose activities pose a biosecurity risk must:

- Take all reasonable and practical steps to prevent or minimise each biosecurity risk;
- Minimise the likelihood of causing a 'biosecurity event' and limit the consequences if such an event is caused; and
- Prevent or minimise the harmful effects a risk could have, and not do anything that might make any harmful effects worse.

1.11.3.3 Coastal Protection and Management Act 1995

The *Coastal Protection and Management Act 1995* provides for the protection, conservation, rehabilitation and management of the coastal zone, including its resources and biological diversity. It applies to areas within the coastal zone, as defined in the Queensland Coastal Plan 2012.

The project area is not located within the coastal zone. Consequently this legislation will not apply to activities conducted within the tenement boundaries. Notwitstanding, the Project will not result in temporary or permanent adverse impacts to the coastal zone.

1.11.3.4 Food Act 2006

The EIS originally referred to the proposed establishment of an overflow accommodation camp to be located at Mamelon on the western side of the Bruce Highway. This accommodation camp will now not proceed. The Marlborough Caravan Park will seek to provide for accommodation needs (dependant on a separate assessment required to be undertaken by the owners of the Marlborough Caravan Park). If the Project does provide Project specific accommodation facilities, the supply of food will be undertaken in accordance with the requirements of the Act, and other subordinate legislation.

The *Food Act 2006* (the Food Act) is the primary food safety legislation in Queensland and applies to all Queensland food businesses. The objectives of the Act are to:

- Ensure food for sale is safe and suitable for human consumption,
- To prevent misleading conduct in relation to the sale of food; and
- To apply the Australia New Zealand Food Standards Code.

The Act manages food safety according to the level of risk that the food business presents to the community. The higher the level of risk, the higher the level of food safety regulation.

Enforcement of the Food Act is a joint responsibility of Queensland Health and Local Government.

There are other pieces of food safety legislation in Queensland that address food safety at a different level of the food supply chain:

- *Food Regulation 2016* (the Regulation) - prescribes details in relation to licensable food businesses, display of licence details by mobile premises, isolation of contaminants in food and fees for applications;
- *Food Production (Safety) Act 2000* - regulates the production of primary produce for which a food safety scheme applies, as detailed in the *Food Production (Safety) Regulation 2014*. Currently, the following schemes are included:
  - egg and egg products
  - dairy produce

  - meat and meat products (including pet meat and rendered products)
  - seafood

- Enforcement of the *Food Production (Safety) Act 2000* in Queensland is the responsibility of Safe Food Production Queensland; and
- *Food Production (Safety) Regulation 2014* - is subordinate legislation to the *Food Production (Safety) Act 2000*.

1.11.3.5 Forestry Act 1959

The *Forestry Act 1959* (Forestry Act) provides for, among other things, the sale and disposal of State-owned quarry material and forest products including commercially valuable timber. Forest products and quarry materials on all State land and on some freehold lands where these products and materials are reserved to the State are the property of the State. State-owned forest products and quarry material under the Forestry Act are administered by the Department of Agriculture and Fisheries. The Project infrastructure is generally located on freehold land with no forest products reserved to the State and as such, no authorities are required under the Forestry Act for these areas. Additional tenure exists in the form of three road reserves and two State-issued leases. The MR Act permits the use of quarry material from within these reserves. Consequently, it is not anticipated that there will be a requirement to obtain a permit for clearing of timber.

Following submissions from the Department of Agriculture and Fisheries, it was identified that authorisation under the Forestry Act is required to remove State-owned quarry or forestry material from within the ML for whatever proposed use outside of the ML. Authorisation under the Forestry Act is also required to remove and use State-owned quarry or forestry material sourced from outside of the ML irrespective of the proposed use or proposed location of this proposed use of the quarry material.

The MR Act provides the right to quarry material to holders of a ML subject to the requirements of the MR Act. No quarrying is proposed to occur outside any ML as part of the Project. Central Queensland Coal does not anticipate having a requirement to remove State-owned quarry material from within either of the MLs for use outside of the MLs. Should there be a requirement to use State-owned quarry material sourced from outside of either ML, irrespective of the proposed use or proposed location of this proposed use of the quarry material, Central Queensland Coal will seek to obtain the appropriate approvals to use the quarry materials if not sourced from an existing commercial operation. The requirements of the Forestry Act will continue to apply to land converted to freehold where there is an issued deed of grant for the State's continued ownership or reservation of quarry material. Any approvals will be sought outside of this EIS process.

1.11.3.6 Health (Drugs and Poisons) Regulation 1996

The management of Schedule 7 (S7) poisons are regulated under the *Health (Drugs and Poisons) Regulation 1996*. S7 poisons are substances with a high potential for causing harm at low exposures which require special precautions during manufacture, handling or use. These poisons are generally available only to specialised or authorised users who have the skills necessary to handle them safely. Special regulations restricting their availability, possession, storage or use generally apply.

It is not anticipated that S7 poisons will be stored on site and pest animal and plant services will be undertaken by appropriately licenced contractors. It is expected that licenced contractors will be responsible for the use and management of S7 poisons in accordance with the Standard for the Uniform Scheduling of Medicines and Poisons which contains amongst other matters, requirements

for labelling, containers, storage, disposal, record-keeping, possession, distribution of product samples and any other relevant controls.

Should this change during the life of the Project, Central Queensland Coal will discuss the handling, use and storage requirements for S7 poisons with Queensland Health.

1.11.3.7 Land Act 1994

The *Land Act 1994* (Land Act) provides a framework for the allocation of State land as leasehold, freehold or other tenure and its subsequent management. Under the Land Act, permits to occupy are required for the occupation of a reserve, road or unallocated State land. Where electricity, water, or other infrastructure is to be developed on unallocated State land, reserves or roads, a Permit to Occupy will be required. A permit to occupy entitles the holder to non-exclusive possession of the land. In addition, development on any leasehold or other state land requires the consent from DNRME as the landholder.

Section 98 of the Land Act provides that an application can be made to DNRME to permanently or temporarily close a road. During the mine construction and operation, the existing road easement traversing the mine site will be required to be temporarily or permanently closed or realigned. It is noted that this reserve is not currently used as a road. If an application to temporarily close a road is approved, a road licence will be issued to the applicant that grants exclusive occupation of the road.

Upgrades will be required at the turn off to the access roads from the Bruce Highway and detailed information about the nature of these works is available in Chapter 6 – Traffic and Transport. After consultation with LSC, DNRME and DTMR, Central Queensland Coal will obtain the required approvals prior to the works being carried out.

1.11.3.8 Native Title (Queensland) Act 1993

The *Native Title (Queensland) Act 1993* operates to ensure that Queensland law is consistent with the Commonwealth's NT Act. It does not impose additional obligations or requirements to those contained in the NT Act.

1.11.3.9 Planning Act 2016

The Planning Act establishes a new planning system for the state and replaces the *Sustainable Planning Act 2009* (SP Act). The Act provides a planning framework and development assessment system for Queensland. Activities within the ML are largely exempt from the requirements of the Planning Act through the exemption within the MR Act outlined above. The *Planning Regulation 2017* (Planning Regulation) commenced on 3 July 2017. Similar to the *Sustainable Planning Regulation 2009,* the Planning Regulation gives effect to a suite of supporting instruments such as the *State Planning Policy 2017* (SPP). The Planning Regulation, under Schedule 10, Part 5, Division 2, item 8 excludes development for a Material Change of Use (MCU) for an ERA for a mining activity from assessable development.

The SPP is a statutory instrument prepared under the Planning Act that relates to matters of Queensland interest. The SPP applies to a range of circumstances under the Planning Act, including for development assessment and when proposed new planning schemes are made or amended. The SPP is applicable to assessable development within Queensland. The provisions of the SPP may also be considered under the standard criteria of the EP Act which includes matters of State interest, as such the EIS considers the relevance of the SPP to the Project.

The relevant State interests to the Project which are managed under the SPP are:

- Biodiversity - MSES - Regulated vegetation and MSES - Regulated vegetation (intersecting a watercourse); and
- Water Quality - Climatic regions - stormwater management design objectives.

1.11.3.10 Radiation Safety Act 1999

The *Radiation Safety Act 1999* (Radiation Safety Act) sets the requirements for handling radioactive substances and the monitoring of persons exposed to the hazard.

During operations, mining or coal processing, equipment that contains radionuclide material, such as industrial gauges or soil / moisture density gauges, will be held under licence (issued under the Radiation Safety Act). Machinery and equipment operators will be trained and carry the current licenses, where necessary. The safety risk presented by equipment / machinery operation is considered low.

1.11.3.11 Transport Infrastructure Act 1994

The *Transport Infrastructure Act 1994* (TI Act) encourages effective integrated planning and efficient transport infrastructure management for the planning and management of road, rail and air infrastructure. Approvals under this Act will be required for any upgrades to State Controlled Roads (SCR) and SCR intersections. The subsidiary regulations include the *Transport Infrastructure (Rail) Regulation 2006* and *Transport Infrastructure (Ports) Regulation 2005* which prescribe requirements when using rail and port infrastructure.

1.11.3.12 Vegetation Management Act 1999

The *Vegetation Management Act 1999* (VM Act) regulates the conservation and management of vegetation communities and provides protection for regional ecosystems classified as 'endangered', 'of concern' or 'least concern' under the VM Act. The clearing of native vegetation for the Project will be exempt from the provisions of the VM Act under Schedule 21 Part 1, item 1 [(6) a resource activity as defined under the EP Act, section 107] of the Planning Regulation where clearing occurs within the Project's ML areas for a mining activity.

1.11.4 Considered Legislation and Guidelines

The Project may be subject to other infrastructure and associated mining activity approvals. Table 1-12 provides an overview of additional Commonwealth and State legislation that may be applicable to the Project.

Table 1-12 Other relevant legislation

Legislation	Administering authority	Project relevance
Building Act 1975	Local Government, Building certifier	Not relevant as all works will be on MLs. Buildings will still meet relevant codes.
Electrical Safety Act 2002 Electrical Safety Regulation 2003	Electrical Safety Office	This Act ensures safe utilisation, instalment and use of electricity so as not to endanger persons, property or the environment.
Electrical Safety Code of Practice 2010—Working Near Overhead and Underground Electric Lines	Electrical Safety Office (under the *Electrical Safety Act 2002)*	This code is a practical guide to managing risk when working near overhead and underground electric lines. This code applies to anyone who has an electrical safety duty as outlined in the code.

Legislation	Administering authority	Project relevance
Explosives Act 1999	DNRME	The Act sets standards, duty of care requirements and penalties associated with the possession of explosives and explosive activities. Central Queensland Coal will obtain required approvals for storing and using explosives. A safety management system in compliance with section 42 of the *Explosives Regulation 2003* will be developed prior to explosive handling.
Fire and Rescue Service Act 1990	QFRS	The Act requires Project operators to establish effective relationships with the administering authority for the prevention of and response to fires and certain other incidents. Chapter 20 – Health and Safety outlines the safety obligations and commitments for the Project.
Petroleum and Gas (Production and Safety) Act 2004 and *Petroleum Act 1923*	DNRME	There are no overlapping petroleum lease or exploration tenements within the mine area. No agreements under this Act are required.
Queensland Heritage Act 1992	DES	The Act provides for the conservation and protection of post European settlement cultural heritage. A search of the Queensland Heritage Register did not identify any Registered (Protected) Places within the Project footprint. Notification in accordance with the requirements of Part 9 of the Act will occur if artefacts potentially protected under the Act are located unexpectedly.
Transport Infrastructure Act 1994	DTMR	The Act provides for the planning and management of transport infrastructure for all modes of transport including (but not limited to) air, sea, road, rail, bus ways and light rail. Any interference with state controlled roads requires a Traffic Control Permit, including a Police Traffic Control Permit.
Transport Operations (Road Use Management – Mass Dimensions and Loading) Regulation 2005	DTMR	The Regulation defines limits of the mass, dimensions and loading of transportation on Queensland's road network. Central Queensland Coal will obtain the required approvals when transporting large, indivisible loads using over dimensional vehicles. Queensland Police Permits are required under the *Transport Infrastructure Act 1994*.
Waste Reduction and Recycling Act 2011	DES	The Act provides a nationally consistent framework that minimises the production and impacts of waste and promotes the recovery, reuse and recycling of waste.

1.11.5 Queensland Plan

In 2014 the Queensland Government established the *ResourcesQ 30-year vision and action plan* to the deliver the objectives of the Queensland Plan pertaining to the resources sector. The intention is that by 2044 Queensland will be recognised as a preferred resource destination, with an enviable investment track record and competitive operating environment.

A number of initiatives are being implemented to deliver the *ResourcesQ* vision by the Queensland Government, including a number of strategic plans to support the development of coal, particularly in central Queensland. The government's commitments to the development of coal are overseen by the Coal Infrastructure Taskforce. The taskforce is responsible for delivering the *CoalPlan 2030* and the *Coal Infrastructure Program of Actions*.

The *CoalPlan 2030* provides a strategic framework for coal infrastructure development throughout the state. The plan provides a linked network of rail systems to four export port facilities on the east coast. There are five rail systems that provide infrastructure for delivery of coal export: Newlands, Goonyella, Blackwater, Moura and Western systems. The Project is consistent with the objectives of the *CoalPlan 2030* through its reliance on key existing coal export infrastructure i.e. the North Coast Rail Line and existing port capacity at either Mackay or Gladstone. Since 2008, the *Coal Infrastructure Program of Actions* has committed more than $19.3 billion to coal related infrastructure, including transport systems, water and energy supplies, skills and social infrastructure. It is anticipated that the Project will also contribute to a variety of plans outlined in the *Coal Infrastructure Program of Actions* including, but not limited to, skills development and contribution to social infrastructure (see Chapter 19B – Social for further details).

The Queensland Government has undertaken strategic planning activities to support the growth and development in areas of mining communities and coal export facilities. These legislative and non-statutory frameworks include:

- Governing for Growth Economic Strategy and Action Plan;
- Royalties for the Regions; and
- Queensland Ports Strategy.

1.11.6 Regional Planning

The Queensland Government has developed statutory regional plans for the individual Queensland regions, with the aim of providing overarching strategic direction to achieve regional outcomes that align with the state's interest in planning and development as set out in the SPP (DILGP 2017). The following section provides discussion in respect of the regional planning frameworks.

1.11.6.1 Central Queensland Regional Plan

The Central Queensland Regional Plan (DSDIP 2013) includes two of the three community profiles to be assessed further in Chapter 19A – Economics and Chapter 19B - Social Environment regarding existing economic and social environment – LSC and RRC. Based on consultation with the Regional Planning Committee, local government, industry / community stakeholder and state agencies, the following regional policies were identified as most relevant to the region:

- Maximise the productive use of key mining resources;
- Provide for liveable communities; and
- Support the long-term viability and growth of the agricultural sector.

The local government planning schemes are designed to integrate the economic, social and environmental needs of the local community through focusing on land use, development, infrastructure and valuable features of the area (DILGP 2017).

1.11.6.2 Livingstone Planning Scheme 2018

The Livingstone Planning Scheme 2018 commenced on 1 May 2018. It replaced the Livingstone Shire Planning Scheme 2005 (Reprint 7). The planning scheme sets out LSC's intention for the future development in the planning scheme area, over the next ten years. The planning scheme seeks to advance state and regional policies, including state planning policies and the Central Queensland

Regional Plan, through more detailed local responses considering the local context (Livingstone Shire Council 2018).

1.11.6.3 Livingstone Shire Council Corporate Plan 2014 – 2019

The Livingstone Shire Council Corporate Plan 2014 – 2019 is the principal document from which the Livingstone Shire plans and strategic document are developed. The Project will provide input into the implementation of the following key aspects addressed in the Corporate Plan:

- Assets – The goal is implementing reliable, durable, cost effective infrastructures and Council assets which meet the needs and aspirations of the communities of the LSC. The proponent will contribute with this aspect through undertaking upgrades to existing infrastructures in the area in conjunction with the LSC;
- Environment – The goal is preserving an environment which is valued, sustainable and maintains a balance between the natural and built forms. The proponent will work with the LSC to ensure environmental impacts are minimised through the implementation of management measures. These measures will reduce potential harm to the environment in the region and contribute with the LSC's achievement strategies;
- Economy – The goal is a diverse, strong, innovative and sustainable local economy providing employment and business opportunities for residents. The Project has the potential to impact the local economy through providing employment for the local population and diversifying local economy. The proponent will engage with the LSC to maximise these opportunities in the region;
- Community – The goal is to create diverse and unique communities which are connected with larger community in order to achieve a more engaged, supportive, inclusive, creative and confident Shire. The Project has the potential to enhance local communities through engagement of local work force and services. This will contribute with the LSC to achieve its goals; and
- Governance – The goal is an efficient, progressive, transparent and financially sustainable organisation which is responsive to the needs of the community through sound decision making and leadership. The proponent will engage with the LSC to ensure that transparent and sustainable communication is achieved throughout the Project lifetime.

1.11.6.4 Rockhampton Region Planning Scheme 2015

The Rockhampton Region Planning Scheme is a revised planning scheme for the area, replacing and consolidating the individual Fitzroy Shire, Mount Morgan Shire and Rockhampton City Planning Schemes. The Planning Scheme has been developed into an online planning and development service (Rockhampton Regional Council 2017a).

1.11.6.5 Rockhampton Regional Council Corporate Plan 2017-2022

The Rockhampton Regional Council Corporate Plan 2017 – 2022 sets the strategic direction and priorities for the Council's five years strategic plan document which outlines the goals and outcomes to achieve the community's expectations. This corporate plan is designed around five themes as follows:

- Community – The goal is to create strong communities with sense of belonging where residents will celebrate their diversity and have modern services available to support a safe, healthy and

engaged lifestyle. The Project has the potential to contribute with the RRC to achieve its goal through providing better conditions to the local community residents;

- Economy – The goal is to create and nurture diverse opportunities to balance work, play and growth. The Project has the potential to improve and diversify the local economy through providing employment for residents and involve local services;
- Environment – The goal is to have an environmentally balanced and aware community, which preserves and maintains the environment and incorporates sustainability principals. The proponent will work with the RRC to ensure environmental impacts are minimised and sustainable practices are applied through implementation of management measures. These measures will be aligned and contribute with the RRC's achievement goal;
- Service Excellence – The goal is to focus on community outcomes that effectively balances the community's aspirations with the resources available. The Project has the potential to enhance local community through providing employment diversity and seeking local work force which will promote local economic growth. This contributes with the RRS's achievement goal; and
- Local Government Leader – The proponent will contribute to the RRC to achieve its goal through maintaining a clear, transparent and close relationship with the RRC.

1.11.6.6 Isaac Regional Council - Broadsound Shire Council Planning Scheme 2005

The IRC was formed in 2008 from the Belyando, Nebo and Broadsound Shire Councils (IRC 2018), as a result there are three different planning schemes across the IRC. The IRC is currently in the process for preparing a new planning scheme. The relevant planning scheme for the affected communities includes the Broadsound Planning Scheme 2005. The Broadsound Planning Scheme 2005 includes Desired Environmental Outcomes (DEOs). The relevant DEOs include:

- Economic development; and
- Maintenance of cultural, economic, physical and social wellbeing of people and communities.

A review of the desired environmental outcomes concluded that the proposed project assists council and contributes positively in meeting the objectives of the DEO's by providing the residents of the regional with a range of economic development and employment opportunities if they choose to engage with the project.

1.11.6.7 Isaac Regional Council Community Strategic Plan 2015-2035

The IRC Community Strategic Plan 2015-2035 informs all IRC's strategic planning documents, including the Corporate Plan – Isaac 2020, the Annual Operational Plan and the Budget. The Plan identifies key themes that reinforce what the Isaac regions communities, economy, infrastructure and environment is to be in 2035 and how to measure success in each of these areas. The key themes include:

- Communities;
- Economy;
- Infrastructure; and
- Environment.

Each theme contains goals and achievement guides. For the key theme of 'communities', the Project will be able to help deliver a range of programs and services to promote community safety, health and wellbeing through the presence and location of its workers. Additional workers will be able to promote and help deliver community facilities and services. Regarding the 'economy' theme, the Project will help improve the regional economy through providing a mix of industry sectors. The Project will utilise support services located within the IRC. In regard to the 'infrastructure' theme, the Project, through the requirement of IRC's infrastructure services, will allow the IRC to provide infrastructure that the region requires and needs. In regard to the 'environment' theme, the Project will put in place various management measures and programmes to prevent significant and long lasting impacts to the surrounding region.

1.11.6.8 Isaac Regional Council Corporate Plan 2015-2020

The IRC adopted a five year corporate plan following two phases of community consultation. The Plan has five clear strategic themes that mirror those of the IRC Community Strategic Plan 2015-2035, with the addition of Governance as a key theme. These themes identify goals, strategies and performance indicators to show how these will be achieved for the future. In regard to the five themes, the proponent will provide input into the implementation of the following themes:

- Communities – strategies involved improved engagement/partnerships in the region, as such, the proponent will facilitate these relationships with the IRC and through Project services will be able to facilitate community services;
- Economy – strategies include proactively engaging with and supporting all industry sectors, commerce and government. The proponent will engage with the IRC regarding opportunities to capitalise on the Project's injection of personnel and services in the region;
- Infrastructure – strategies involve provision of roads, water, sewer and parks infrastructure. The Project through its economic injection will support the IRC with the provision of these services to the community;
- Environment – strategies involve the management of natural resources and partnering with industry to minimise environmental harm. While the Project is located in the LSC LGA, the proponent will work with the IRC to ensure environmental impacts are appropriately managed; and
- Governance – strategies include pursuing financial sustainability through use of council's resources and assists. The Project through its financial injection in the region will assist with providing financial sustainability in the region through the use of IRC services and labour forces.

1.11.6.9 Mackay, Isaac and Whitsunday Regional Plan

The Mackay, Isaac and Whitsunday Regional Plan [Department of Local Government and Planning (DLGP) 2012] includes one of the community profiles assessed, being the IRC. This Plan establishes a vision and direction for the region to 2031 (DLGP 2012) and is the pre-eminent plan for the Mackay, Isaac and Whitsunday region. The Plan identifies Desired Regional Outcomes (DROs), that articulate the preferred direction for development and land use outcomes for the Mackay, Isaac and Whitsunday region. Relevant DROs identified include:

- Environment;
- Natural resource management;
- Strong communities;

- Strong economy; and
- Transport.

Local government planning schemes refine the strategic intentions of the Regional Plan.

1.11.7 Standards, Codes and Guidelines

The Project will comply with all relevant standards, codes and guidelines available to monitor and control construction and operations on site, including Australian Standards, industry codes of best practice and DES Guidelines.

1.11.7.1 Standards

Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to. Relevant standards applicable to the Project include:

- ISO 14001 – Environmental Management Systems;
- ISO 31000 – Risk Management;
- Australian Standards AS 1940 – 2004 – The Storage and Handling of Flammable and Combustible Liquids;
- AS/NZ 1547: On-site Domestic Wastewater Management;
- AS 2187.0:1998 Explosives – Storage, Transport and Use; and
- AS 3187.2:2006 Explosives – Storage and Use.

1.11.7.2 Guidelines

Guidelines are sets of best practices that are supported by consensus. Central Queensland Coal will attempt to follow guidelines, though they will be best treated with common sense, and occasional exceptions may apply. The guidelines applicable to the Project include:

- Model Mining Conditions – ESR/2016/1936 (EHP 2016b);
- Site specific EA application requirements for activities with impacts to air -ESR/2015/1840;
- Site specific EA application requirements for activities with impacts to land - ESR/2015/1839;
- Site specific EA application requirements for activities with noise impacts - ESR/2015/1838;
- Site specific EA application requirements for activities with impacts to water - ESR/2015/1837;
- Site specific EA application requirements for activities with waste impacts - ESR/2015/1836;
- Stormwater Guideline for ERAs (EHP 2014a);
- EHP Manual for assessing consequence categories and hydraulic performance of structures (EHP 2016a);
- EHP Guideline – Structures which are dams or levees constructed as part of ERAs (EHP 2017);
- Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure And Ground Vibration (ANZECC 1990);

- Riverine protection permit exemption requirements WSS/2013/726, Version 2.00 (DNRME 2018);
- DNRM Guideline - Works that interfere with water in a watercourse – watercourse diversion (DNRM 2014);
- EHP Guideline - Financial assurance under the EP Act (EHP 2016c); and
- EHP Guideline – Resource Activities - Rehabilitation requirements for mining resource activities (EHP 2014b).

1.11.7.3 Codes

A code of practice is generally a collection of rules or procedures about a particular topic or activity. Codes have different roles and functions under Queensland legislation. These codes can be grouped into different types: industry codes, nature conservation codes of practice and codes of environmental compliance.

A number of National Mine Safety Codes of Practice are currently being developed by Safe Work Australia, these are currently in consultation stage and include:

- Managing naturally occurring radioactive materials;
- Roads and other vehicle operating areas;
- Inundation and in rush hazard management;
- Emergency response; and
- Mine closure.

1.12 Commitments

Each technical chapter outlines the relevant Central Queensland Coal commitments and these commitments are consolidated in Chapter 22 – Key Commitments.

1.13 ToR Cross-reference Table

Table 1-13 ToR cross-reference

Terms of Reference	Section of the EIS
5. Introduction	
Clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. Include an overview of the structure of the document.	Sections 1.1 and 1.7
5.1 Project proponent	
Provide information about the proponent(s) and their business, including: ▪ the proponent's full name, street and postal address, and Australian Business Number, including details of any joint venture partners; ▪ the nature and extent of the proponent's business activities; ▪ proponent's environmental record, including a list of any breach of relevant environmental laws during the previous 10 years; and ▪ the proponent's environmental, health, safety and community policies.	Section 1.2

Terms of Reference	Section of the EIS
5.2 The Environment impact statement process	
Outline the steps of the environmental impact statement process, note which steps have been completed, and provide an estimated completion date for each remaining step. Highlight the steps in which the public will have the opportunity for input. The information in this section is required to ensure readers are informed of the process and are aware of their opportunities for input and participation.	Section 1.7
Inform the reader how and when properly made public submissions on the EIS can be made, and outline how the submissions are taken into account in the decision-making process.	Section 1.8
5.3 Project approvals process	
Describe the approvals that are required to enable the project to be constructed and operated, and note the legislation under which the approvals are assessed and issued. Explain how the EIS fits into the assessment and approval processes for the environmental authority, leases, licences and permits required by the proponent before construction and operations can start.	Section 1.10 and 1.11
Describe the approvals process under the EPBC Act if this project is to be assessed under the bilateral agreement between the Queensland and the Australian Governments.	Section 1.11
6. Consultation process	
Provide information on the development and implementation of a consultation plan for the people and organisations identified as affected or interested persons, or stakeholders for the project.	Sections 1.8, 1.9, Chapter 19B – Social and Appendix A17 – Social Impact Assessment
Describe issues of potential concern to any and all stakeholders at various stages of the project from project planning to commencement, project operations and decommissioning.	Sections 1.8, 1.9, Chapter 19B – Social and Appendix A17 – Social Impact Assessment
The description should at least include the following matters: ▪ the objectives of the consultation process; ▪ timing of consultation; ▪ the number and interests of the people and organisations involved in the consultation (particularly the affected and interested persons defined in sections 38 and 41 of the EP Act); ▪ methods of consultation and communication; ▪ reporting and feedback methods of the consultation process; ▪ an assessment explaining how the consultation objectives have been met; and ▪ an analysis of the issues raised and their completed or planned resolution, including any alterations to the proposed project as a result of the received feedback.	Sections 1.8, 1.9, Chapter 19B – Social and Appendix A17 – Social Impact Assessment