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3. PROJECT APPROVALS

3.1 Overview of EIS Process and Project Approvals

The approval of the project is being sought under a suite of Commonwealth and Queensland legislation. The primary environmental, planning and mining approvals required for the project include:

- Approval as a 'controlled action', under the *Environment Planning and Biodiversity Conservation Act* 1999 (Cth) (EPBC Act).
- Approval as a 'significant project', under the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act).
- Approval as a 'level 1 mining activity', including applicable 'environmentally relevant activities' (ERAs), under the *Environmental Protection Act 1994* (Qld) (EP Act).
- Grant of a number of mining leases (MLs) for the project under the *Mineral Resources Act 1989* (Qld) (MR Act).

On 22 November 2010, the proponent applied for a significant project declaration for the project under section 27AA(1) of the SDPWO Act and lodged an initial advice statement (IAS) (dated November 2010) in support of that application.

On 1 March 2011, the Coordinator-General (CG) declared the project to be a 'significant project for which an EIS is required' under section 26(1)(a) of the SDPWO Act. This declaration initiated the statutory environmental impact assessment procedure set out in Part 4 of the SDPWO Act, which requires the proponent to prepare an EIS for the project.

On 13 January 2011, the Australian Government Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) determined that the Project constitutes a 'controlled action' pursuant to section 75 of the EPBC Act due to likely significant impacts on matters of national environmental significance (MNES). On 4 March 2011, pursuant to the Bilateral Agreement between the Commonwealth of Australia and the State of Queensland (2004),¹ SEWPaC decided that Queensland's EIS assessment approach under Part 4 of the SDPWO Act would govern SEWPaC's assessment of the controlled action.

Mining lease applications (MLAs) were lodged with the Mining Registrar on 29 and 30 June 2010.

The completion of the EIS process (described in **Chapter 1- Introduction**) addresses the requirements of the EIS provisions of the EPBC and SDPWO Acts.

The EIS allows for the environmental approval of the project under the EPBC Act. However, it does not provide for environmental approval under the SDPWO Act or EP Act, and merely allows for the completion of the EIS stage and progression to subsequent stages in the environmental approval of the project under the EP Act.

The EIS, amongst other documentation (specifically an environmental management plan (EM Plan)), will provide information for consideration by the Chief Executive of the Department of Environment and Heritage Protection (EHP), when deciding whether to issue an Environmental Authority (EA) for the project. The proponent will implement the EM Plan as approved by the administering authority.

¹ This Agreement was amended on 14 June 2012, however, these changes do not affect the applicable assessment approach.



The provision of an EA is a pre-requisite for the continuation of the MLA process, and must be obtained prior to grant of a ML.

Ultimately, the approval of the project will result in the grant of a number of MLs (under the MR Act), an EA (under the EP Act) and approval as a controlled action under the EPBC Act. Together, these approvals enable the proponent to commence mining activities.

There are a number of other statutes, regulations, policies and standards that must also be addressed, considered, and approvals obtained as part of the EIS, subsequent to the EIS, and subsequent to the grant of the MLs.

This chapter sets out the primary and additional approvals required for the project. It also describes the implications of associated regulations, policies and standards that may need to be addressed as part of the project approvals process.

3.2 Scope of Activities for which Approval is Being Sought

The section describes the scope of the activities for which approval is being sought through this EIS and those activities that are outside the scope of this EIS, including:

- activities proposed to be undertaken by the proponent for which approvals, separate to this EIS, will be sought
- interrelated projects, which affect the operation of the Byerwen project, for which approvals have or will be sought by another project proponent

At the commencement of conceptual design for the project an underground mine in the northern tenement area was under consideration. Accordingly the possibility of an underground mine was included in the initial advice statement (IAS) for the project and was subsequently included in the project's Terms of Reference (ToR) and referral under the EPBC Act. Following further subsequent mine planning, the proponent has decided that underground mining will not form part of the project. Impact assessments therefore do not do not consider underground mining.

3.2.1 Proponent Activities for which a Separate Approval will be Sought

Accommodation for up to 780 workers is required for the project's peak (year 16) for the combined construction and operation workforce. The proponent's preference is for accommodation to be provided in Glenden, however should this option be rejected by the local authorities, the proponent will seek the necessary approvals to accommodate all workers in a camp on the project mining leases. This may include complying with the requirements of Division 3A Changes to project, under the SDPWO Act.

Accommodation in Glenden is off tenement and will require development approval under the *Sustainable Planning Act 2009* (SP Act). The proponent has an arrangement with a third party who will develop the accommodation facilities in Glenden and seek all relevant approvals for the construction and operation of the facilities.

This EIS assesses the social and community impacts of an accommodation village in Glenden and the traffic and transport impacts of workers commuting between Glenden and the mine site. This EIS does not assess the localized impacts from accommodation facilities in Glenden, such as impacts to the ecology within the accommodation facility footprint or noise impacts on nearby sensitive receptors, as the location of the accommodation facilities cannot be confirmed at the time of this EIS and these impacts will be assessed during the application for development approval.



3.2.2 Interrelated projects

The project is interrelated with a number of other projects across the region and the state. Although project timing and success may be dependent on these other projects, approvals for these projects are not being sought by Byerwen Coal. These interrelated projects are the:

- Goonyella to Abbot Point expansion (GAPE) project, including the Northern Missing Link railway and upgrades to the existing Newlands Rail System
- Abbot Point Coal Terminal, including any planned expansions
- Supply of water via SunWater's Burdekin to Moranbah water pipeline system
- Electricity supply from the national electricity grid

These projects and point of interface between the project and other interrelated projects is described below.

3.2.2.1 Rail

QR National is the proponent for the GAPE project which includes:

- 69 kilometres of new track across the 'Northern Missing Link' to join the existing Goonyella and Newlands systems
- Expansion and upgrading of existing track and 15 new bridges along the Newlands to Abbot Point Railway Line, including associated rail unloading infrastructure at the Abbot Point Coal Terminal

The CG approved the GAPE project in 2006. Construction of the GAPE project has been completed.

The Newlands - Abbot Point Railway Line is an existing railway connecting the Xstrata-owned Newlands mine to the west of the project to Abbot Point. The Byerwen project's northern train loading facility (including rail spur and rail loop) will connect to the existing Newlands – Abbot Point Railway Line.

The Byerwen project's southern train loading facility (including rail spur and rail loop) will connect to the newly constructed Northern Missing Link section of the GAPE railway line. The rail corridor for the Northern Missing Link line traverses the Byerwen project tenement area. It is expected that five heavy vehicle and one light vehicle overpass crossings will be required over the GAPE railway alignment.

Completing the rail link, in conjunction with an expansion of the Abbot Point Coal Terminal to 50 million tonnes per annum (Mtpa) capacity, would allow an additional 35 Mtpa of coal to be exported through Abbot Point, beyond the current throughput.

QCoal consider that the approved and constructed GAPE railway will provide sufficient capacity to transport the projects product coal to Abbott Point Coal Terminal.

3.2.2.2 Abbot Point Coal Terminal

The Ports Corporation of Queensland (PCQ) is the proponent for the expansion of Abbot Point coal terminal to a capacity of 50 Mtpa. The proponent has secured capacity for 5 Mtpa of coal product to be exported from Abbot Point Coal Terminal and negotiations are underway to secure an additional 5 Mtpa capacity.

3.2.2.3 Water Supply

Byerwen Coal has commenced discussions with a third party water supplier (SunWater) for the sourcing and delivery of water for the project. SunWater's existing Burdekin to Moranbah water pipeline connects the Burdekin water supply scheme at Gorge Weir to Moranbah and intersects the project area. SunWater are planning to duplicate this water pipeline to the project by constructing a water pipeline parallel to the existing pipeline which will also intersect the project's tenements. The project will source



raw water from the existing pipeline in the initial years of construction and operation and from the duplicate pipeline once it is constructed and operational.

SunWater will be responsible for assessing impacts and obtaining any approvals associated with the construction and operation of the duplicate pipeline. The proponent will construct water pipelines to connect SunWater's pipelines to raw water storage facilities. These pipelines will be wholly within the mining lease tenements. This EIS assesses the impacts of constructing and operating the project's water supply infrastructure from the point of connection to SunWater's pipeline.

3.2.2.4 Electricity Supply

Power supply to the southern and northern infrastructure areas of the project will be via spurs to an existing 66 kV line that originates from the Newlands substation and traverses the project tenements. The existing line was built to provide power to a de-commissioned gold mine west of the project area. The spurs will be entirely on Byerwen's mining leases and this EIS considers the impacts of constructing and operating these spurs.

Approvals for any upgrades to off tenement electricity supply infrastructure, if required, will be sought by the relevant power supply company.

3.3 Primary Statutory Approvals

Section 3.3 and **3.4** describe the primary and other statutory approvals required for the project. **Appendix 3** provides a list of the project approvals required for the project, including project triggers and the relevant administrative agency, for the approvals described below.

3.3.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act establishes a process for environmental assessment and approval of proposed actions that have, or are likely to have a significant impact on MNES or the environment on Commonwealth land. Such an action is a 'controlled action'. It is an offence to undertake a controlled action without the approval of the Commonwealth Minister responsible for administering the legislation.

The project has been determined to be a controlled action under the EPBC Act in relation to listed threatened species and communities (sections 18 and 18A) and listed migratory species (sections 20 and 20A). This EIS assesses the potential impacts on MNES in **Chapter 35**.

The EPBC Act is also the key piece of Commonwealth legislation for the management of cultural heritage. The EPBC Act protects sites with world heritage values that are listed on the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) World Heritage List. It also protects sites of national significance that are listed on the Australian Heritage List or the Commonwealth Heritage List (both of which may incorporate sites previously registered on the Register of the National Estate). There are no World, Commonwealth or Australian Heritage-listed sites within the project area or likely to be impacted by project activities.

Following the declaration of a controlled action, the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities (Commonwealth Minister for the Environment) was notified by the State of Queensland that, under the terms of the Bilateral Agreement between the Commonwealth of Australia and the State of Queensland (2004), the assessment of the project would occur under Part 4 of the SDPWO Act and the *State Development and Public Works Organisation Regulation 1999* (Qld). On 4 March 2011, the assessment approach under Part 4 of the SDPWO Act, involving the development of an EIS, was adopted for the project.

When the EIS process has finished and the CG's Report on the EIS (the CG's Report) has been completed, this will be provided to the Commonwealth Minister for the Environment who will decide whether to approve the controlled action under Part 9 of the EPBC Act. Pursuant to section 134 of the EPBC Act, the



Minister must consider any conditions which have been imposed by the state of Queensland on the project, before attaching additional requirements.

The Environment Protection and Biodiversity Conservation Amendment (Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development) Act 2012 (Cth) (EPBCA Act) was proclaimed on 9 November 2012. The EPBCA Act establishes the Independent Scientific Expert Committee to provide scientific advice on proposed coal seam gas or large coal mining developments and amends Part 9 of the EPBC Act. The Commonwealth Minister for the Environment will be required to seek and take into account the Committee's advice when considering the approval of a controlled action involving a coal seam gas or large coal mining development.

3.3.2 State Development and Public Works Organisation Act 1971

The SDPWO Act provides for 'state planning and development through a coordinated system of public works organisation, for environmental coordination and for related purposes' to facilitate large projects in Queensland. The project will be assessed under the provisions of the SDPWO Act.

The following steps are required to complete the EIS:

- submissions received in relation to the public notification of the EIS will be provided to the proponent
- the CG may request that the proponent provide additional information about environmental effects or other matters related to the project
- the proponent may prepare an EIS Supplementary Report which addresses the submissions received and additional information requested by the CG
- the CG will prepare a report evaluating the EIS and Supplementary Report (if prepared).

The CG must provide a copy of the report evaluating the EIS and Supplementary Report to the proponent and publicly notify the report by placing it on the relevant departmental website. The CG's report is also given to the Commonwealth Minister for the Environment to decide whether to approve the controlled action under the EPBC Act.

The CG's report will include conditions of approval, which will also be included in subsequent state and local government approvals, such as the proposed MLs under the MR Act and the draft EA under the EP Act.

3.3.3 Environmental Protection Act 1994

3.3.3.1 Overview of Requirements

The EP Act provides the key legislative framework for environmental management and protection in Queensland. The EP Act utilises a number of mechanisms to achieve its objectives. Those which are relevant to this project include:

- the Environmental Protection Regulation 2008 (Qld) (EP Regulation) which identifies ERAs that require approval
- notifiable activities set out in Schedule 2 of the EP Act
- the Environmental Protection (Waste Management) Regulation 2000
- Environmental Protection Policies (EPPs) for water, noise, air and waste management (section 3.6.3)
- Environmental Authorities (EAs) setting out the conditions for approval of the project
- duties of care associated with environmental harm
- management of regulated and hazardous waste dams.



In reference to the project, Chapter 5 of the EP Act establishes a process for obtaining an EA for a ML. A Level 1 EA is applicable to the project as the project meets the criteria under Sections 30, 31 and 32 of the Environmental Protection Regulation 2008. These criteria include more than 10 ha of land being disturbed at any one time, carrying out mining in a category B environmentally sensitive area, carrying out Environmentally Relevant Activities (see below) and carrying out mining mining with greater than 20 persons at any one time.

Under the EP Act, EHP is the regulatory authority which has responsibility for granting the EA, as well as compliance, auditing and monitoring of the project's mining activities in relation to environmental management. EHP will refer to this EIS before assessing and approving an EA for the project.

3.3.3.2 Environmental Protection Regulation 2008

Pursuant to the EP Act, activities that will, or will have the potential to, release contaminants into the environment and which may cause environmental harm, are referred to as Environmentally Relevant Activities (ERAs).

Schedule 2 of the EP Regulation contains the ERAs regulated under the EP Act. The following ERAs may occur within the project area and will require approval as part of the EA application:

- ERA 8 Chemical storage storing 500 m³ or more of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3.
- ERA 15 Fuel burning any process involving the use of fuel burning equipment (including, for example, a standby power generator) that is capable of burning (whether alone or in total) 500kg or more of fuel in one hour.
- ERA 56 Regulated waste storage operating a facility for receiving and storing regulated waste for more than 24 hours.
- ERA 57 Regulated waste transport transporting, on a non-commercial basis, 250kg or more of regulated waste in a vehicle.
- ERA 58 Regulated waste treatment operating a facility for receiving and treating regulated waste.
- ERA 60 Waste disposal operating a facility for disposing of regulated waste.
- ERA 63 Sewage treatment operating sewage treatment works at a site that have a total daily peak design capacity of at least 21 EP; or operating a sewage pumping station with a total design capacity of more than 40KL in an hour.

The potential impacts on environmental values and the management of impacts associated with ERAs is described in Chapters 8 to 33 of this EIS.

3.3.3.3 Notifiable Activities

Under section 371 of the EP Act, an owner or occupier of land must notify EHP if a 'notifiable activity' is being carried out on the land. A list of notifiable activities is provided in Schedule 3 to the EP Act and includes activities such as storing mine wastes, mineral processing and fuel storage.

The effect of this notification is that information about the activity will be made publicly available on EHP's Environmental Management Register.

The following notifiable activities are expected to occur within the project area (i.e. the project's mining leases):

 7 Chemical Storage (other than petroleum products or oil) – storing more than 10t of chemicals that are dangerous goods.



- 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 storing hazardous mine wastes including tailings dams, overburden or waste rock dumps containing hazardous contaminants.
- 29 Petroleum product or oil storage storing petroleum or oil products that are class C1 or C2 combustible liquids in above ground tanks with more than 25,000L capacity.
- 37 Waste storage, treatment or disposal storing or disposing of regulated waste.

3.3.3.4 Environmental Protection (Waste Management) Regulation 2000

The EPR (Waste Management) aims to protect the environment through minimising the impact of waste on the environment and establishing an integrated framework for minimising and managing waste under the principles of ecologically sustainable development.

Of relevance to the project, Parts 2A, 3 and 4 of the EPR (Waste Management) includes provisions regarding general waste management. Project activities governed by the EPR (Waste Management) will include the management of waste on-site, tracking of wastes and the disposal of wastes off-site. The relevant department or agency responsible for issuing approvals under the EPR (Waste Management) will be identified in advance of waste generation and management activities.

Waste generated by the project during its construction and operation phases, and the management of that waste, is discussed in **Chapter 9 – Waste Rock and Rejects** and **Chapter 26 - Waste Management**.

3.3.3.5 Environmental Authorities for Mining Activities

An EA is issued by EHP to allow mining activities to proceed, in conjunction with the grant of a ML by the Department of Natural Resources and Mines (DNRM). The EA is issued subject to various conditions that set out how the project's environmental impacts will be managed and mitigated.

This EIS supports an application for the project's EA under Chapter 5, Part 6 of the EP Act.

3.3.3.6 Environmental Duties of Care

Section 319 of the EP Act imposes a general environmental duty that prohibits 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.

In order to comply with this duty, the proponent of the project 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
- 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.

Section 320A of 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 cause serious or material environmental harm. The proponent will comply with this duty if a notifiable event occurs.



3.3.3.7 Regulated and Hazardous Waste Dams

The final EA approved for the project will include conditions that require the proponent to have the hazard category of any structures which are dams or levees that are constructed as part of a project assessed by a 'suitably qualified and experienced person'. The hazard assessment will determine whether a structure is a 'regulated structure' for the purpose of the EA and will be carried out in accordance with the *Manual for Assessing Hazard Categories and Hydraulic Performance of Dams* (DERM, February 2012). Regulated structures will require certified design plans to be submitted to the administering authority, and will be subject to annual inspection and reporting by a suitably qualified and experienced person.

In addition, any dams containing hazardous waste within the project area will require assessment as to their level of hazard. If a dam is assessed to be a 'high hazard dam', the holder of the EA will be required to comply with the *Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste*. If a dam is assessed to be a 'low hazard dam', the holder of the EA must comply with the conditions relating to hazardous waste dams in the *Code of Environmental Compliance for Mining Lease Projects*.

The proponent will determine the status of each dam or other containment structure located within the project area, and comply with the relevant conditions outlined above. It is noted that some of these structures may also be 'referable dams' pursuant to the *Water Supply (Safety and Reliability) Act 2008* (Qld) and additional requirements will apply, as outlined in **Section 3.4.41**.

3.3.4 Mineral Resources Act 1989

The MR Act provides for the 'assessment, development and utilisation of mineral resources to the maximum extent practicable consistent with sound economic and land use management'. The principle objectives of the MR Act can be summarised as being to encourage and facilitate mining of minerals and encourage environmentally responsible mining, including responsible land care management.

With particular relevance to the project, the MR Act also establishes a framework to facilitate miningrelated activities, through the granting by DNRM of Prospecting and Exploration Permits, Mineral Development Licences, and MLs.

An ML under Part 7 of the MR Act is required to allow mining activities to occur within the project area. The proponent has applied for six MLs over the project area, being MLA 10355, MLA 10356, MLA 10357, MLA 70434, MLA 70435 and MLA 70436. The proponent also holds the two underlying exploration tenements in the project area, being Exploration Permit for Coal (EPC) 614 and EPC 739.

The MLs cannot be granted until an EA is approved under the EP Act. The information in this EIS will inform the content of any conditions that are included as part of the MLs and EA.

3.3.4.1 Mineral Resources Regulation 2003

Pursuant to the *Mineral Resources Regulation 2003* (Qld), various restricted areas have been declared across parts of Queensland that limit exploration and mining activities. One such restricted area, Restricted Area 8 (Suttor River Dam Site) is located in the southern portion of the project area. Activities associated with the project are not planned to be carried out within this area.

3.4 Additional Statutory Approvals

3.4.1 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

The protection of Indigenous heritage is predominantly governed by Queensland's *Aboriginal Cultural Heritage Act 2003* (Section 3.4.2). The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) (ATSIHP Act) operates to provide additional levels of protection.



The purpose of the ATSIHP Act, as described under section 4 of the Act, is to provide for the 'preservation and protection from injury or desecration of areas and objects in Australia and in Australian waters, being areas and objects that are of particular significance to Aboriginals in accordance with Aboriginal tradition'.

The ATSIHP Act enables an application to be made on behalf of an Aboriginal person or an Aboriginal group to the Minister administering the Act to declare certain areas or objects as protected on either an emergency or ongoing basis. The proponent is obligated to ensure that any area or an object declared under Part II, Divisions 1 or 2 of the ATSIHP Act is protected or preserved.

Furthermore, in accordance with section 20 of the ATSIHP Act, if the proponent discovers anything it has 'reasonable grounds to suspect to be Aboriginal remains', the proponent will need to report the 'discovery to the Minister, giving particulars of the remains and of their location'.

Any requirements for the proponent to take actions under the ATSIHP Act will be determined during project activities if and when the need arises.

3.4.2 Aboriginal Cultural Heritage Act 2003

The *Aboriginal Cultural Heritage Act 2003* (Qld) (ACH Act) provides a system to protect, preserve and manage Aboriginal cultural heritage areas and objects. The object of the ACH Act is to provide recognition, protection and conservation of Aboriginal cultural heritage.

The ACH Act establishes a 'duty of care' that requires anyone conducting activities on land to take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage. The *Duties of Care Guidelines* outline reasonable and practicable measures for ensuring activities are managed to avoid or minimise harm to cultural heritage values. Penalties apply for causing unauthorised harm.

The ACH Act also:

- establishes the process for identifying the relevant Aboriginal parties
- requires a cultural heritage management plan (CHMP) be developed and approved when an EIS is required for the approval of any project
- establishes a cultural heritage database maintained by the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs (DATSIMA)
- vests ownership of Aboriginal cultural heritage with Aboriginal People.

The proponent has in place CHMPs with the project area's Aboriginal parties, which have been approved by the Chief Executive Officer of DATSIMA, in anticipation of the commencement of mining activities. Detailed information about the approved CHMPs is available in **Chapter 28 – Indigenous Cultural Heritage**.

3.4.3 Building Act 1975

The *Building Act 1975* (Qld) (Building Act) sets out what building works constitute assessable development under the *Sustainable Planning Act 2009* (Qld) (SP Act) and sets out additional requirements for making a building development application. The Building Act also provides that buildings should be constructed in accordance with the building regulations set out in either the *Building Code of Australia 2012* (BCA) or the *Queensland Development Code 2012* (QDC).

Under section 319(3) of the MR Act, carrying out building work for development authorised under the MR Act is regarded as 'self-assessable' for the purposes of the SP Act. Accordingly, a development



permit is not required for any building work undertaken within the boundaries of the MLs. All work associated with the assessment under this EIS will be undertaken within the boundaries of the MLs.

Section 21 of the Building Act provides that for self-assessable development (i.e., building works within the boundaries of the project area), the proponent must still comply with the relevant provisions of the BCA or QDC when undertaking the work.

3.4.4 Building and Construction Industry (Portable Long Service Leave) Act 2002

The *Building and Construction Industry (Portable Long Service Leave) Act 2002* (Qld) (BCI Act) provides long service leave entitlements to workers in the building and construction industry. Pursuant to section 43 of the BCI Act, if the proponent engages employees or contractors to undertake building and construction activities within the project area, it must register as an 'employer' with the Building and Construction Industry (Portable Long Service Leave) Authority (QLEAVE). Under section 47, it must also provide to QLEAVE a 'certificate of service' for each employee engaged in a building and construction capacity.

3.4.5 Coal Mining Safety and Health Act 1999

The *Coal Mining Safety and Health Act 1999* (Qld) (CMSH Act) is designed to protect the safety and health of persons at coal mines and persons who may be affected by coal mining operations through the imposition of health and safety obligations.

Before the proponent commences activities within the project area, and during the conduct of those activities, it must:

- Develop and implement a safety and health management system for the mine (section 40)
- Prepare and implement principal hazard management plans for the mine (section 40)
- Provide and maintain a place of work and plant in a safe state (section 41)
- Appoint a site senior executive for the mine (section 41)
- Notify the inspector for the region before coal mining operations commence (section 49).

Detailed information about mining safety and health is available in **Chapter 32 – Hazard and Risk** and **Chapter 33 – Health and Safety**.

3.4.6 Coastal Protection and Management Act 1995

The *Coastal Protection and Management Act 1995* (Qld) 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*.

As the project area is not located within the coastal zone, this legislation will not apply to activities conducted within the tenement boundaries. In respect of those activities conducted outside the project area, primarily involving the transport of the product from the mine, more information is available in **Chapter 27 – Traffic and Transport**.

3.4.7 Coroners Act 2003

The *Coroners Act 2003* (Qld) requires the reporting of particular deaths. Section 7 requires that if a person becomes aware of a reportable death, it must be reported immediately to either a police officer or coroner. Under section 8, a death is a reportable death if the body is located in Queensland and it is not known how the person died. The coroner will investigate the death, unless it is determined that indigenous burial remains are involved. At this point, the requirements for dealing with indigenous remains set out under the ATSHIP and ACH Acts apply.



If human remains are discovered in the course of carrying out project activities, the proponent will immediately cease all activity in the area and perform the notifications listed above. Work will only resume after approval is given by the relevant administering authority.

3.4.8 Criminal Code Act 1899

Under the *Criminal Code Act 1899* (Criminal Code), it is an offence to improperly or indecently interfere with human remains. The proponent will follow the requirements outlined in **Section 3.4.7** if human remains are discovered within the project area.

3.4.9 Customs Act 1901

The *Customs Act 1901* (Qld) (Custom Act), in section 114, requires that the exporter of a product make an Export Declaration to the Australian Customs Service. This declaration contains information about the goods and the export transaction.

It is unlikely that the project's coal product will be exported directly by the proponent. However, if this does eventuate, the proponent will comply with all export requirements under the Customs Act.

3.4.10 Dangerous Goods Safety Management Act 2001

This legislation, relating to the management of dangerous goods, was repealed in 2011.

3.4.11 Electricity Act 1994

The *Electricity Act 1994* (Qld) (Electricity Act) regulates the electricity industry and electricity use. Under section 99, the proponent must give 14 days written notice to the relevant electricity entity if project activities will be carried out near electrical infrastructure.

The proponent will be using existing electrical infrastructure located within the project area to meet the project's power requirements. This existing infrastructure may need to be diverted in some circumstances. Detailed information about this process is provided in **Chapter 7 – Operation** and the proponent will consult with the relevant electrical entity before carrying out any works.

Additional approvals under the Electricity Act, such as those associated with connecting on-site power stations to the national grid, are not required.

3.4.12 Energy Efficiency Opportunities Act 2006

The *Energy Efficiency Opportunities Act 2006* (Cth) (Energy Efficiency Act) aims to improve the identification and evaluation of energy efficiency opportunities by large energy-using businesses and, as a result, to encourage implementation of cost effective energy efficiency opportunities. Sections 9 and 10 of this Act require corporations to register under the Act if its combined energy use exceeds 0.5 petajoules.

Once registered, pursuant to sections 14 and 18, the corporation must provide an assessment plan which sets out a proposal for assessing the opportunities for improving the energy efficiency of the corporation and its activities. Once approved, the corporation must ensure that the proposal is implemented under section 20. An annual report is also required pursuant to section 22.

The proponent will fulfil these requirements once project activities commence and the energy use threshold listed above is exceeded. Detailed information about the project's energy use is provided in **Chapter 6 – Construction** and **Chapter 7 – Operation**.

3.4.13 Environmental Protection (Sea Dumping) Act 1981

This Act, pursuant to section 10A, prohibits the dumping of waste material into Australian waters.



The proponent will not dump any waste material into Australian waters in contravention of this Act. Detailed information about transportation of the project's coal product is provided in **Chapter 27 – Traffic and Transport**.

3.4.14 Explosives Act 1999

The transport, storage, use and possession of explosives is regulated under the *Explosives Act 1999* (Qld) (Explosives Act) and the *Explosives Regulation 2003* (Qld) (Explosives Regulation). Section 32 of the Explosives Act requires that a person who is doing an act involving explosives must take reasonable precautions and use reasonable care to avoid endangering any person's safety, health and property.

Under section 29 of the Explosives Regulation, a Licence to Use Explosives is required to use, possess, store and transport explosives, pursuant to the conditions set out in the licence.

The proponent will obtain a Licence to Use Explosives from DNRM prior to carrying out any activities that involve the use of explosives.

3.4.15 Fisheries Act 1994

The *Fisheries Act 1994* (Qld) provides for the use, conservation and enhancement of the community's fisheries, resources and fish habitats in a way that promotes ecologically sustainable development.

Under section 76E, approval from the Department of Agriculture, Fisheries and Forestry (DAFF) is required for any waterway barrier works constructed pursuant to a development permit under the *Sustainable Planning Act 2009* (Qld) (Section 3.4.33). All project activities described in this EIS are within the project's mining leases and therefore do not require a development permit under the *Sustainable Planning Act 2009*. As the project will not involve the construction of any infrastructure, outside the tenement boundaries, this approval is not required.

3.4.16 Food Act 2006

The *Food Act 2006* (Qld) (Food Act) ensures food is safe and suitable for human consumption through the provision of appropriate licensing.

All food provided to employees associated with the project will be supplied by third party providers holding appropriate licensing under the Food Act.

3.4.17 Foreign Acquisitions and Takeovers Act 1975

This Act regulates investment by non-Australian persons and corporations in Australian businesses and projects, through the establishment of the Foreign Investment Review Board.

The proponent of the project is is a joint venture between JFE Steel and QCoal Pty Ltd. QCoal is 100% Australian owned and JFE Steel is a subsidiary of the JFE Group of Japan.

3.4.18 Great Barrier Reef Marine Park Act 1975

The *Great Barrier Reef Marine Park Act 1975* (Cth) (GBRMP Act) provides for the long-term protection and conservation of the environment, biodiversity and heritage values of the Great Barrier Reef Region, through the establishment of the Great Barrier Reef Marine Park.

The proponent will not be undertaking activities in the Great Barrier Reef Marine Park.

3.4.19 Greenhouse Gas Storage Act 2009

The *Greenhouse Gas Storage Act 2006* (Qld) (GHG Storage Act) aims to reduce the impact of greenhouse gas (GHG) emissions on the environment. This purpose is achieved by facilitating the process of GHG storage. The GHG Storage Act provides for the granting of authorities to explore for underground



geological formations or structures to store carbon dioxide and creates a regulatory system for the carrying out of activities relating to GHG authorities.

The proponent will not be engaging in any GHG storage activities.

3.4.20 Land Act 1994

The Land Act 1994 (Qld) (Land Act) provides a framework for the allocation of State land as leasehold, freehold or other tenure and its subsequent management. Under Chapter 4, part 4 of 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.

Section 98 of the Land Act also provides that an application can be made to DNRM to permanently or temporarily close a road, if required. If an application to temporarily close a road is approved, a road licence will be issued to the applicant that grants exclusive occupation of the road.

Due to the nature of the activities associated with the project, the proponent may be required to apply for permits to occupy. Road closures of State controlled roads are not expected but there may be closures of local roads. Detailed information about the nature of these works is available in **Chapter 6 – Construction and Chapter 7 - Operations**. After consultation with DNRM and the Department of Transport and Main Roads (DTMR), the proponent will obtain the approvals referred to above, if required, prior to the works being carried out.

3.4.21 Land Protection (Pests and Stock Route Management) Act 2002

The Land Protection (Pest and Stock Route Management) Act 2002 (Qld) (LP Act) provides for the management of pests and the stock route network.

The LP Act outlines provisions for preventing the spread of declared pest species and identifies declared plants and animals that are targeted for control because they are pest species. Landowners must take reasonable steps to keep land free of class 1 and class 2 pests, and control class 3 pests, where the land is in or adjacent to an environmentally sensitive area.

Field assessments have been undertaken within the project area which identified various weed and pest species. On the basis of this information, the proponent will prepare a Pest Management Plan to manage pests and weeds during both the construction and operation phases of the project. This Pest Management Plan will also manage the pests and weeds identified as being 'of concern' by the Isaac Regional Council (IRC) and the Whitsunday Regional Council (WRC). No approval is required under the LP Act for the preparation of a Pest Management Plan. Detailed information about the pest and weed species identified within the project area is provided in **Chapter 18 – Terrestrial Ecology**.

The LP Act also provides that a person must not, without reasonable excuse, obstruct the movement of stock on a stock route (section 179), burn or remove pasture on a stock route (section 180) and place things on a stock route that may harm travelling stock (section 181).

Stock routes in the project area are managed by the IRC and the WRC. One unused/inactive stock route has been identified that bisects the southern area of the project. Any potential impacts to stock routes will be managed in consultation with regional councils and EHP and agreement reached on any mitigations required for stock route impacts.

Potential project impacts to this stock route and measures to mitigate those impacts are described in **Chapter 14 – Land Use and Land Contamination**.



3.4.22 Local Government Act 1993

The *Local Government Act 1993* (Qld) empowers local governments to make and enforce any local law that is necessary or convenient for the good rule and local government of local government areas (LGAs).

The project is within the LGAs of the IRC and the WRC. The proponent will adhere to all local laws that are relevant to the project. This may include alteration to local government controlled roads, carrying out works on a road or interfering with a road or its operation and control of local pests declared by councils.

3.4.23 Maritime Safety Queensland Act 2002

This Act, in association with the *Maritime Safety Queensland Regulation 2002* (Qld), establishes Maritime Safety Queensland to perform functions in relation to marine safety, ship-sourced pollution and related matters.

The scope of project activities described in this EIS will not impact matters concerned with maritime safety.

3.4.24 Mining and Quarrying Safety and Health Act 1999

Pursuant to section 4, this Act does not apply to coal mines. Those aspects of the project that relate to safety and health will be dealt with under the CMSH Act.

3.4.25 National Greenhouse and Energy Report Act 2007

This Act introduces a single national framework for the reporting of information relating to GHG emissions by requiring the submission of an annual report to the Commonwealth Department of Climate Change and Energy Efficiency recording GHG emissions, energy produced and energy consumed.

The proponent will meet its annual reporting requirement upon commencement.

3.4.26 Native Title Act 1993

The *Native Title Act 1993* (Cth) (NT Act) recognises native title rights and provides the government with ways in which to validate or legitimise past acts such as the granting of leases. This legislation provides for the determination of native title claims, the treatment of future acts which may impact on native title rights and the requirement for consultation and/or notification to relevant native title claimants, where future acts are involved.

It is noted that the Birriah People (Federal Court No. QUD 6244/98; National Native Title Tribunal No. QC 98/12) and the Jangga People (QUD 6230/98; QC 98/10) are the relevant Native Title Parties for the project area.

3.4.27 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, which has been addressed in **Section 3.3.26**.

3.4.28 Nature Conservation Act 1992

The *Nature Conservation Act 1992* (Qld) (NC Act) provides for the conservation of Queensland's biodiversity. In support of the purpose and the provisions of the NC Act, the *Nature Conservation*



(Wildlife) Regulation 2006 (Qld) lists all flora and fauna species which are considered to be 'extinct in the wild', 'endangered', 'vulnerable', 'near threatened' and 'least concern' wildlife.

The following approvals are required from the EHP under the NC Act when dealing with protected plants and animals:

- Protected Animals Movement Permit (section 88 of the NC Act).
- Protected Plants Clearing Permit (section 89 of the NC Act).
- Wildlife Movement Permit (section 97 of the NC Act).

The Nature Conservation (Protected Plants) Conservation Plan 2000 (NC Conservation Plan), in section 41(1)(a)(ii), provides that a clearing permit is not needed for taking a protected plant if the taking happens in the course of an activity conducted under an MR Act authority (such as activities authorised under a ML). This exemption authorises the clearing of prescribed least concern protected plants, but not the clearing of endangered, vulnerable or near threatened protected plants. The approval is granted subject to compliance with conditions imposed by EHP.

Section 332 of the *Nature Conservation (Wildlife Management) Regulation 2006 (Qld)* provides that a person must not, without a reasonable excuse, tamper with an animal breeding place that is being used by a protected animal to incubate or rear the animal's offspring. This requirement will not apply where the proponent has put in place a species management program Approved by EHP.

The protected plants and animals occurring within the project area are identified in **Chapter 18** – **Terrestrial Ecology**. The proponent will secure the approvals listed above, in consultation with the EHP, prior to undertaking project activities that could potentially impact protected flora and fauna.

The NC Act also dedicates and declares protected areas under thirteen classes for the conservation of natural and cultural heritage within national parks, conservation parks or resource reserves. The NC Act sets out management principles for each class of protected area. The Act also requires the declaration of 'management intent' with regards to significant cultural and/or natural resources and values for any proposed protected area. Under the NC Act, it is an offence to take, use, keep, or interfere with a cultural or natural resource in a protected area except in accordance with the interim or declared management intent, or under a permit from the Department of National Parks, Recreation, Sports and Racing (DNPRSR).

3.4.29 Queensland Heritage Act 1992

The QH Act provides:

- For the establishment of the Queensland Heritage Register a register of places significant to the State of Queensland.
- A process for entering new places onto the Queensland Heritage Register.
- For the protection for places entered in the register.
- For the establishment of local heritage registers to be maintained by local government authorities.
- A process for reporting discoveries of artefacts with potential historical cultural heritage significance.
- A detailed process for managing historical cultural heritage items, sites or places during project activities that may have an impact on cultural heritage values.

The QH Act places restrictions on development within Queensland heritage places and archaeological places listed in the Queensland Heritage Register and protected areas listed under the regulation. If any aspect of the project is likely to occur on a place listed on the Queensland Heritage Register, a



development permit must be obtained. No areas of the project have currently been identified which are listed on the Queensland Heritage Register and, accordingly, this approval is not required.

Section 89 of the QH Act requires that anyone who discovers an archaeological artefact that may be an important source of information about an aspect of Queensland's history must report it to EHP. Under section 90 of the QH Act, it is an offence to interfere with any archaeological discovery for at least 20 business days after EHP has been notified, unless consent has been granted under the QH Act to do so. The proponent will notify EHP in accordance with these requirements if any archaeological artefacts are discovered within the project area.

3.4.30 Soil Conservation Act 1986

Parts 3 and 4 of the *Soil Conservation Act 1986* (Qld) (SC Act) allow for the approval of soil conservation property plans to ensure the coordination of runoff amongst individual properties to control erosion.

No approved plans under the SC Act have been identified within the project area.

3.4.31 Strategic Cropping Land Act 2011

The purposes of the Strategic Cropping Land Act 2011 (Qld) (SCL Act) are to:

- protect land that is highly suitable for cropping
- manage the impacts of development on that land
- preserve the productive capacity of that land for future generations.

These purposes are achieved by:

- identifying areas in which land that is likely to be highly suitable for cropping may exist (called 'potential SCL')
- deciding whether or not land is highly suitable for cropping (called 'strategic cropping land' or 'SCL')
- establishing protection areas and management areas for SCL and potential SCL, principles to protect land that is SCL or potential SCL and to manage the impacts of development on SCL.

Management of the impacts on land that is SCL or potential SCL is achieved by an assessment under the SCL Act for development under other Acts; and imposing conditions on the development. To the extent the land is in a management area and the impacts are permanent, the SCL Act requires mitigation for the land.

Areas of potential SCL have been identified within the project area. A validation assessment will be undertaken and provided to DNRM to confirm whether these areas are, in fact, SCL. More information about the underlying land use of the area and soil characterisation is available in **Chapter 13 – Geology**, **Topography and Soils** and **Chapter 14 – Land Use and Land Contamination**.

3.4.32 Survey and Mapping Infrastructure Act 2003

Survey marks, reference marks and bench marks may have significant cultural heritage value not only to the organisation and individuals that placed them but also for the study of Australian culture as a whole. They can be used to show the routes taken by explorers, boundary changes over time, government policy changes and how population changes and historical events can affect perceptions and management of land and resources.

Similarly, survey marks can have significant national historical value. For example, many survey marks, reference marks and bench marks including blazed trees and posts indicating distances to nearby towns and cities, were altered or defaced during World War II by volunteers in the Defence Corps to confuse any Japanese forces.



Under Part 4 of the *Survey and Mapping Infrastructure Act 2003* (Qld) (SMI Act), it is an offence to interfere with any permanent survey mark, whether knowingly or unknowingly, by any person who 'ought reasonably to know' of its existence. There is provision within the SMI Act to allow marks to be removed or disturbed. Prior application must be made to DNRM which may decide that the mark must be replaced in a nearby location or that sufficient adjacent marks exist to allow the reinstatement of the original mark at any time.

The proponent will comply with the requirements listed above, if any survey, reference or bench marks are identified within the project area. Further detail on the process for future identification of survey, reference or bench marks is provided in **Chapter 29 – Historical Cultural Heritage**. No survey, reference or bench marks have been identified within the project area as part of EIS studies.

3.4.33 Sustainable Planning Act 2009

The purpose of the SP Act is to seek to achieve ecological sustainability by:

- managing the process by which development takes place, including ensuring the process is accountable, effective and efficient and delivers sustainable outcomes
- managing the effects of development on the environment, including managing the use of premises
- continuing the coordination and integration of planning at the local, regional and State levels.

Part 8 of the MR Act states the SP Act does not apply to development authorised under the MR Act, other than when administering the QH Act or in relation to the Building Act.

Accommodation in Glenden is off tenement and will require development approval under the SP Act. The proponent has an arrangement with a third party who will develop the accommodation facilities in Glenden and seek all relevant approvals for the construction and operation of the facilities.

Development associated with QH Act and the Building Act has been addressed in **Sections 3.4.29** and **3.4.3** above.

3.4.34 Transport Infrastructure Act 1994

The *Transport Infrastructure Act 1994* (Qld) (TI Act) was established to allow for and encourage effective integrated planning and efficient transport infrastructure management. The TI Act provides for the planning and management of road, rail, and air infrastructure.

DTMR manages the Queensland State-controlled road network. The project will be developed in the vicinity of the following State-controlled Roads:

- Bowen Development Road.
- Collinsville-Elphinstone Road.
- Suttor Developmental Road.

Under section 50 of the TI Act, project works to construct, maintain, operate or conduct ancillary works and encroachment on state roads (e.g. intersection upgrades, water and gas supply pipelines traversing under the road) will require an Ancillary Works and Encroachment Permit under the TI Act.

Chapter 7 of the TI Act deals with rail transport infrastructure. Under section 255 of the TI Act, connection of the project's rail spur to the Goonyella to Abbott Point (GAP) Rail Line will require the approval of the existing railway's manager. The proponent is in consultation with the railway manager regarding these activities.

The project activities that require these approvals are detailed in **Chapter 27 – Traffic and Transport**.



3.4.35 Transport Operations (Marine Pollution) Act 1995

The *Transport Operations (Marine Pollution) Act 1995* (Qld) (TOMPA Act), in association with the *Transport Operations (Marine Pollution) Regulation 2008* (Qld), is designed to protect Queensland's marine and coastal environment by minimising deliberate and negligent discharges of ship-sourced pollutants into coastal waters.

The project will not involve activities where discharge of ship-sourced pollutants will occur in contravention of the TOMPA Act.

3.4.36 Transport Operations (Marine Safety) Act 1994

The *Transport Operations (Marine Safety) Act 1994* (Qld) (TOMSA Act), in association with the *Transport Operations (Marine Safety) Regulation 2004* (Qld), regulates the maritime industry to ensure marine safety.

The project will not involve activities involving the maritime industry in contravention of the TOMSA Act.

3.4.37 Transport Operations (Road Use Management) Act 1995

The *Transport Operations (Road Use Management) Act 1995* (Qld) provides for the effective and efficient management of road use in the State. The *Transport Operations (Road Use Management – Mass, Dimensions and Loading) Regulation 2005* (Qld), pursuant to section 51, requires that approval be granted prior to the transport by road of over-mass or over-dimensions loads.

During the construction phase of the project, the transport of over-mass or over-dimension loads will occur. The proponent will seek approval from DTMR prior to these activities taking place. Additional information about the transportation of material during the construction phase is provided in **Chapter 6** – **Construction** and **Chapter 27** – **Traffic and Transport**.

The *Transport Operations (Road Use Management – Fatigue Management) Regulation 2008* (Qld) also requires that heavy vehicle must not be driven by persons impaired by fatigue (sections 21 and 22). This requirement will be addressed by the proponent as part of its general health and safety obligations (Chapter 33 – Health and Safety).

3.4.38 Transport Planning and Coordination Act 1994

The *Transport Planning and Coordination Act 1994* (Qld) is designed to improve overall transport effectiveness and efficiency through strategic planning and management of transport resources.

No approvals or statutory obligations are imposed by this Act.

3.4.39 Vegetation Management Act 1999

The Vegetation Management Act 1999 (Qld) (VM Act) regulates the conservation and management of vegetation communities and clearing of vegetation. It provides protection for regional ecosystems classified as 'endangered', 'of concern' or 'not of concern' under the VM Act. The application for approval to clear vegetation is made under the SP Act.

Approval for vegetation clearing within the project area will occur as a result of the grant of the EA. As no vegetation will be cleared outside of the tenement boundaries, no additional development permits will be required.

Accommodation in Glenden is off tenement and will potentially require approval under the VM Act. The proponent has an arrangement with a third party who will develop the accommodation facilities in Glenden and seek all relevant approvals for the construction and operation of the facilities.



More information about the vegetation types located within the project area is available in **Chapter 18** – **Terrestrial Ecology**. The requirements to offset cleared vegetation are addressed in **Chapter 21** – **Environmental Offsets**.

3.4.40 Water Act 2000

The *Water Act 2000* (Qld) (Water Act) establishes a sustainable system for the planning, allocation and use of the majority of Queensland's non-tidal waters (including groundwater). There are a number of watercourses within the project area that are subject to the provisions of the Water Act. These have been determined by EHP in accordance with a site inspection conducted and letter provided by EHP in November 2011. In some areas, project works will occur in the vicinity of these watercourses, which will necessitate watercourse diversions (refer **Chapter 16**). There are other drainage features (also referred to as drainage lines) in the project area. In addition groundwater inflows to the open pits will be extracted.

Under s808(1), a person must not take or supply water unless authorised under the Water Act. Section 808(2) goes on to state that a person must not interfere with water, other than overland flow water, unless authorised under the Water Act.

In respect of the watercourses within the project area, a water permit will be required (approval from DNRM) to take or interfere with water. A riverine protection permit for placing fill or excavating in a watercourse will be required prior to carrying out diversionary works.

In relation to overland flow water and subartesian water (i.e. groundwater), section 20(6) provides that a person may take overland flow water or take or interfere with subartesian water for any purpose unless a provision of a water resource plan applies to the contrary. The water resource plan that applies to the project area is discussed further in **Section 3.6.4**.

In respect of groundwater, the water resource plan and resource operation plan for the Burdekin Basin do not deal with subartesian water and the project is not located within a groundwater management area. Accordingly, approval to take or interfere with groundwater is not required.

3.4.41 Water Supply (Safety and Reliability) Act 2008

Under the *Water Supply (Safety and Reliability) Act 2008* (Qld), any proposed dam for which a failure impact assessment is required is termed a 'referable dam'. Pursuant to section 343, a failure impact assessment must be undertaken prior to the construction of dams that are more than 10 m in height and either have a storage capacity of more than 1,500 ML or have a storage capacity of more than 750 ML and a catchment area that is more than three times its maximum surface area at full supply level.

It is anticipated that the project may require the construction of one dam (the southern co-disposal dam) for which a failure impact assessment will be required with approval from the Department of Energy and Water Supply. Detailed information about the dams that will be constructed as part of the project is available in **Chapter 8 – Water Management**.

3.4.42 Work Health and Safety Act 2011

Under Schedule 1, Part 2, this Act does not apply to coal mines regulated under the CMSH Act.

3.5 Commonwealth Obligations

3.5.1 World Heritage Values

The Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) defines the national and cultural heritage sites which can be considered for inscription on



the World Heritage List. It also sets out the duties of State signatories in the identification, protection and preservation of potential sites. Australia ratified this Convention on 17 December 1975. Australia's obligations under the World Heritage Convention are primarily given effect in the EPBC Act (refer **Section 3.3.1**).

The list of controlled actions for the project does not include world heritage sites.

3.5.2 Migratory Animals

Australia's international obligations in respect of migratory animals are imposed by a number of instruments.

The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) aims to conserve terrestrial, aquatic and avian migratory species throughout their range. Migratory species threatened with extinction are listed in Appendix I of the Bonn Convention and migratory species that need or would significantly benefit from international cooperation are listed in Appendix II of the Bonn Convention 1 September 1991 and its obligations are primarily given effect in the EPBC Act.

Australia has also entered into three bilateral agreements in respect of migratory birds as follows:

- Agreement between the Government of Australia and the Government of the Republic of Korea on the Protection of Migratory Birds (ROKAMBA) (signed 16 December 2006)
- Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and their Environment (JAMBA) (signed 6 February 1974)
- Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment (CAMBA) (signed 20 October 1986).

These agreements are concerned with the management and protection of birds that migrate between the relevant countries. Australia's obligations under the ROKAMBA, JAMBA and CAMBA are primarily given effect in the EPBC Act (refer Section **3.3.1**).

The protection and conservation of threatened migratory species will form part of the project's approval as a controlled action and is addressed in **Chapter 18 – Terrestrial Ecology**.

3.5.3 Biodiversity

The Convention on Biological Diversity (Biodiversity Convention) is concerned with the conservation of biological diversity, the sustainable use of components of biological diversity and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources. Australia ratified the Biodiversity Convention on 18 June 1993 and its obligations are primarily given effect in the EPBC Act (refer **Section 3.3.1**).

The protection of threatened flora and fauna species will form part of the project's approval as a controlled action and is addressed in **Chapter 18 – Terrestrial Ecology**.

3.5.4 Climate

The United Nations Framework Convention on Climate Change (UNFCCC) is the international community's premier climate change convention, and is designed to facilitate the stabilisation of greenhouse gas (GHG) emissions at a level that will prevent dangerous anthropogenic interference with the climate system. Australia ratified the UNFCCC on 30 December 1992.



The UNFCCC is complemented by the Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol) which imposes a GHG emission target for State signatories. Australia ratified the Kyoto Protocol on 12 December 2007. Australia's obligations under these two instruments are primarily given effect in the Clean Energy Legislative Package passed by the Australian Senate on 8 November 2011 (refer **Chapter 23**).

The ability of the project to adapt to changes in climate is discussed in **Chapter 12 – Climate and Climate Change** and the estimated greenhouse gas emissions and measures to reduce emissions are described in **Chapter 23 – Greenhouse Gas Emissions**.

3.5.5 Wetlands of International Importance

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) provides the framework for national action and international cooperation for the conservation of wetlands and their resources. Australia signed the Ramsar Convention on 21 December 1975 and its obligations are primarily given effect in the EPBC Act (refer **Section 3.3.1**).

The list of controlled actions for the project does not include Ramsar wetlands.

3.6 Government Policies, Planning Processes and Standards

3.6.1 Overview

This section describes government policies, planning processes and standards that are relevant to the project.

Policies, planning processes and standards include:

- State Planning Policies
- Environmental Protection Policies
- Water Resource Plans
- Guidelines for Environmental Management
- Natural Resource Management Plans
- Regional Planning Policies
- Codes, standards and guidelines for monitoring and controlling operations on-site.

This section contains a summary of key planning processes and standards relevant to the project. It is not an exhaustive list of every planning process, policy, standard, code or guideline that may be relevant to the project.

3.6.2 State Planning Policies

State Planning Policies (SPPs) are statutory planning instruments that relate to matters of Queensland State interest. The Queensland Government has developed a draft SPP to replace the multiple SPPs in existence. The draft SPP was released for public consultation from 15th April 2013 to 12th June 2013 and is due to be finalised for release later in 2013.

The draft SPP sets out policies on matters of state interest in relation to planning and development, and provides a key framework for the government's broader commitment to planning reform. The draft SPP identifies the state's interests in planning and development and how these are to be dealt with in planning instruments, council development assessment processes and in designating land for community infrastructure. The draft SPP applies to:

1) the making or amending of a local planning instrument, and



- 2) the assessment of a development application by a local government, to the extent the SPP is not identified in the planning scheme or a regional plan as being appropriately reflected in the planning scheme or a regional plan, and
- 3) the designation by a Minister of land for community infrastructure, and
- 4) the making or amending of a regional plan, and
- 5) the assessment of development applications by the chief executive responsible for administering the SP Act.

Where applicable to the Byerwen project, the proponent will consider the SPP, once finalised, in development decisions. The existing SPPs are discussed below.

3.6.2.1 SPP 1/92 - Development and the Conservation of Agricultural Land

Development and the Conservation of Agricultural Land - 1/92 (SPP 1/92) protects good quality agricultural land (GQAL) from subdivision into uneconomic units and to minimise the potential for land use conflicts between agricultural and non-agricultural land uses. The IRC and WRC must have due regard to SPP 1/92 when carrying out their planning functions.

Government mapping of GQAL within the project area shows the distribution of Class A Cropping Land across the site. More information about this distribution is available in **Chapter 13 – Geology, Topography and Soils**.

The long-term viability and sustainability of the GQAL on which the project is located is likely to be impacted by project excavation, construction and operation. Measures will be taken to mitigate these impacts, including rehabilitation of the site. It is intended that that the project area will be returned to a pre-mining land use that is stable and self-sustaining. This process is described in **Chapter 10 – Rehabilitation and Decommissioning**.

3.6.2.2 SPP 1/12 - Protection of Queensland's Strategic Cropping Land (SCL)

The objective of the SPP is to ensure that development assessable under the SP Act, local government planning schemes and regional plans include appropriate consideration of SCL. The SPP commenced when the SCL Act came into effect on 30 January 2012.

Two areas of SCL are identified on the SCL trigger map—Strategic Cropping Protection Areas (SCPAs) and a Strategic Cropping Management Area (SCMA). Land within the SCPAs that meets the SCL criteria will be afforded the highest protection by the SCL Act. The SCL Act provides that developments on land that meet the SCL criteria in the SCMA will need to be assessed to ensure that they avoid SCL to the maximum extent possible, and where they are not able to avoid SCL, to minimise their impacts.

Land that meets the SCL criteria can be assessed by development proponents to see if the land has a history of cropping or not, and if it is shown the land does not have a history of cropping it will not fall within the SCL Act. Developments that permanently impact SCL will be required to mitigate their impacts to ensure Queensland's agricultural cropping productive capacity is maintained.

The project is within a SCMA, but not within a SCPA. Approximately 4,154 ha of project tenement area (22,697 ha) is mapped as an area of potential SCL. Not all of this SCL will be directly impacted by mining activities.

Based on the findings of the site investigation, the proponent will undertake a validation assessment under the provisions of the SCL Act for land that is currently mapped as potential SCL to be designated non-SCL land.



3.6.2.3 SPP 1/03 - Mitigating the Adverse Impacts of Flood, Bushfire and Landslide

This SPP establishes the Department of Community Safety's interests with regards to floods, bushfires and landslides, and ensures these matters are adequately addressed when carrying out development assessment.

The IRC and WRC Planning Schemes show that the project is within an area of low to medium bushfire hazard. An assessment of bushfire, flooding and landslide hazards is provided in **Chapter 12 – Climate and Climate Change, Chapter 16 – Hydrology and Hydraulics** and **Chapter 32 – Hazard and Risk**.

3.6.2.4 SPP 4/11 - Protecting Wetlands of High Ecological Significance in Great Barrier Reef Catchments

This SPP aims to prevent the loss or degradation of wetlands and associated environmental values, or enhance these values through the appropriate planning, designing and constructing of development in or adjacent to wetlands of high ecological significance in Great Barrier Reef catchments. There is one Great Barrier Reef Wetland Protection Area within the project area. This is discussed further in **Chapter 19 – Aquatic Ecology**.

3.6.2.5 SPP 2/12 – Planning for Prosperity

This Temporary SPP is aimed at facilitating economic growth but ensuring that it is not adversely impacted by planning processes. The Temporary SPP is to be reflected in State and local government decision-making and aims to promote activities associated with agriculture, tourism, mineral and extractive industries and construction. It applies to a range of circumstances set out in the SP Act, including a referral agency's assessment of a development application.

At the decision-making stage on a development application, the purpose of the SPP will be achieved by a balancing of competing or conflicting outcomes that gives additional weight to:

- Agricultural uses in areas zoned for agricultural uses
- Urban areas in areas zoned for urban areas
- Tourist development which can be shown to be complementary to an area's environmental, scenic and cultural values
- Mineral and extractive resources development which can be shown to be complementary to an area's primary intended land use.

The land use of the project area and relevant planning provisions are discussed further in **Chapter 14 –** Land Use and Land Contamination and Section 3.6.9.

3.6.2.6 SPP 2/11 – Planning for Stronger, More Resilient Floodplains

This Temporary SPP was developed to support the designation of Natural Hazard Management Areas (NHMA (Flood)). Through the identification of NHMA (Flood), local governments can amend their existing planning schemes and incorporate planning scheme provisions to regulate assessable development within the NHMA (Flood). The SPP seeks to ensure that development is planned, designed and constructed to minimise potential flood damage to towns and cities and to improve safety of individuals and communities.

An assessment of flooding hazards is provided in **Chapter 12 – Climate and Climate Change** and **Chapter 16 – Hydrology and Hydraulics**.

3.6.2.7 Other State Planning Policies

The following SPPs were also considered and determined not to be relevant to the project:

SPP 3/11 – Coastal Protection. The project is not being developed in a coastal zone.



- SPP 1/02 Development in the Vicinity of Certain Airports and Aviation Facilities 1.0. The project does not involve development in the vicinity of an airport.
- SPP 2/02 Planning and Managing Development Involving Acid Sulfate Soils 1.0. This SPP applies to all land, soil and sediment at or below 5 metres Australian Height Datum (AHD) where the natural ground level is less than 20 metres AHD. The project does not fall within this threshold.
- SPP 1/07 Housing and Residential Development. The project does not involve or impact housing and residential development.
- SPP 2/07 Protection of Extractive Resources. There are no Key Resource Areas in the project area.
- SPP 2/10 South East Queensland Koala Conservation. The project is not located within South East Queensland.
- SPP 5/10 Air, Noise and Hazardous Materials. The project is not located within a management area to which this SPP applies.
- SPP 4/10 Healthy Waters. This SPP applies to development for urban purposes only. The management of stormwater and waste water for the project will be addressed in Chapter 8 Water Management.

3.6.3 Environmental Protection Policies (EPPs)

Under the EP Act, the following EPPs have been developed to achieve the objectives of the EP Act and to provide guidance on specific aspects of the environment, namely air, noise and water management:

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

Where relevant impacts could occur for this project, impact studies have been undertaken, having due regard to the environmental values specified in each EPP.

3.6.3.1 Environmental Protection (Air) Policy 2008

The object of the EPP Air 'is to achieve the object of the EP Act in relation to Queensland's air environment' (section 5, EPP Air). Section 6 of the EPP Air states that, to achieve this object, the EPP Air provides a framework for:

- identifying environmental values to be enhanced or protected
- stating indicators and air quality objectives for enhancing or protecting environmental values
- providing a framework for making consistent, equitable and informed decisions about the air environment.

The air quality values of the project area, potential impacts from the project and management of those impacts are described in **Chapter 22 – Air Quality**.

3.6.3.2 Environmental Protection (Noise) Policy 2008

The object of the EPP Noise 'is to achieve the object of the EP Act in relation to Queensland's acoustic environment' (section 5, EPP Noise).

The EPP Noise provides a framework for:

- identifying environmental values to be enhanced or protected
- stating acoustic quality objectives for enhancing or protecting environmental values



 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 described in **Chapter 24 – Noise and Vibration**.

3.6.3.3 Environmental Protection (Water) Policy 2009

The EPP Water establishes a process for identifying environmental values to be protected and sets out water quality standards in support of those values. The EPP Water provides a framework for:

- identifying environmental values and management goals for Queensland waters
- stating water quality guidelines and objectives to enhance and protect environmental values
- providing a framework for making consistent, equitable and informed decisions about Queensland waters
- monitoring and reporting on the condition of Queensland waters.

The project's environmental values relating to water, potential impacts from the project, and management of those impacts are described in **Chapter 15 – Surface Water Quality, Chapter 16 – Hydrology and Hydraulics** and **Chapter 17 – Groundwater**.

3.6.4 Water Resource Plans

The project falls within the Burdekin catchment, which reaches the Pacific Ocean on the Queensland coast near Ayr. The *Water Resource (Burdekin Basin) Plan 2007* (WRBBP) applies to the following water in the plan area:

- (a) water in a watercourse or lake;
- (b) water in springs not connected to-
 - (i) artesian water; or
 - (ii) subartesian water connected to artesian water;

(c) overland flow water, other than water in springs connected to-

- (i) artesian water; or
- (ii) subartesian water connected to artesian water.

The purposes of the WRBBP is to:

- define the availability of water in the plan area;
- provide a framework for sustainably managing water and the taking of water;
- identify priorities and mechanisms for dealing with future water requirements;
- provide a framework for establishing water allocations;
- provide a framework for reversing, where practicable, degradation that has occurred in natural ecosystems, including, for example, stressed rivers; and
- regulate the taking of overland flow water.

The WRBBP allows the taking of overland flow water provided it has been approved in an EA under the EP Act.

The Burdekin Basin Resource Operations Plan 2010 (BBROP) (DERM, 2010) implements the WRBBP through the issue of water licences for taking water described in the WRBBP. The proponent is in



discussions with a third party water supplier for the sourcing and delivery of water for the project from the SunWater Burdekin to Moranbah pipeline system that traverses the western side of the tenement area and connects to the Burdekin water supply scheme at Gorge Weir. The connection point will be within the tenement area. more information about water supply infrastructure is available in **Chapter 7** – **Operation**.

The proponent will secure approval from SunWater for access as well as enter into a water supply contract, pursuant to the conditions of the BBROP.

Neither the WRBBP nor the BBROP apply to subartesian water (i.e., groundwater). The project is not located within a groundwater management area and accordingly, approval is not required to take or interfere with groundwater.

Project impacts on water defined in the WRBBP and mitigation measures are also assessed in **Chapter 15 – Surface Water Quality**.

3.6.5 EPBC Act Environmental Offsets Policy

The EPBC Act Environmental Offsets Policy (DSEWPaC, 2012) provides guidance on the role of offsets in environmental impact assessments, and how the department considers the suitability of a proposed offset. It aims to improve environmental outcomes through the consistent application of best practice offset principles, provide more certainty and transparency, and encourage advanced planning of offsets.

The proponent will identify suitable offsets under the requirements of the EPBC Act Environmental Offsets Policy, as described in **Chapter 21**.

3.6.6 Queensland Government Environmental Offsets Policy

The Queensland Government's *Environmental Offsets Policy* (QGEOP) (EPA, 2008) is the overarching framework that provides an integrated, consistent and transparent approach to using environmental offsets in Queensland. An environmental offset is an action taken to counterbalance unavoidable, negative environmental impacts that result from an activity or a development. Environmental offset conditions may be included by EHP as part of an EA.

The QGEOP is based on seven principles that direct the way offsets must be used to contribute to ecologically sustainable development (ESD). These are:

- 1. Offsets will not replace or undermine existing environmental standards or regulatory requirements, or be used to allow development in areas otherwise prohibited through legislation or policy.
- 2. Environmental impacts must first be avoided, then minimised, before considering the use of offsets for any remaining impact.
- 3. Offsets must achieve an equivalent or better environmental outcome.
- 4. Offsets must provide environmental values as similar as possible to those being lost.
- 5. Offset provision should minimise the time-lag between the impact and delivery of the offset.
- 6. Offsets must provide additional protection to environmental values at risk, or additional management actions to improve environmental values.
- 7. Offsets must be legally secured for the duration of the offset requirement.

There are a number of specific-issue offset policies that operate as part of the QGEOP. These are described below.

3.6.6.1 Biodiversity Offset Policy

The *Biodiversity Offset Policy* (BOP) (DERM, 2011) applies when development impacts on an area with State-significant biodiversity values cannot be avoided or minimised. The BOP applies to development



authorised under the SP Act and mining activities carried out under the EP Act. This policy does not apply to a development that is a significant project declared under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971*. However the BOP may be considered by the CG for projects or activities under the SDPWO Act in relation to development impacts on an area with State significant biodiversity values.

The identification of suitable offsets is described in **Chapter 21 – Environmental Offsets**.

3.6.6.2 Offsets for Net Gain of Koala Habitat in Southeast Queensland

The project is not located in South East Queensland and accordingly, this offset policy does not apply.

3.6.6.3 Policy for Vegetation Management Offsets

This policy applies to vegetation clearing pursuant to a development application under the SP Act. Vegetation clearing associated with the project will be authorised under the EA and will not require a development application. Accordingly, this offset policy does not apply to the project.

3.6.6.4 Mitigation and Compensation for Works or Activities Causing Marine Fish Habitat Loss

This policy applies when marine fish habitats are to be permanently or temporarily lost, or otherwise modified, causing loss of fisheries resources and fish habitats. The project's activities will not impact marine fish habitats and accordingly, this policy does not apply.

3.6.7 Regional Plans

The project is located within the boundaries of the *Mackay, Isaac and Whitsunday Regional Plan* (MIWRP) (2012) (DLGP, 2012) area. The MIWRP is a statutory instrument under the *Statutory Instruments Act 1992* (Qld) and influences planning schemes, community plans and strategic land use decisions. The relationship between the MIWRP and project is further described in **Chapter 14 – Land Use and Land Contamination**. The regional strategies of the MIWRP are listed below:

- Sustainability, climate change and natural hazards The region grows and changes in a sustainable manner generating prosperity, maintaining and enhancing quality of life, minimising the use of resources, providing high levels of environmental protection, reducing greenhouse gas emissions, and increasing resilience to natural hazards and the anticipated effects of climate change.
- Regional Landscapes Environmental, economic, social and cultural values of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.
- Environment A healthy and resilient natural environment supports the region's rich biodiversity and ecosystem services, which contribute to the economic development and social and cultural identity of the region.
- Natural resource management Regional natural resources and primary production areas continue to provide cultural, social, economic and environmental values to the region, while being protected, managed, enhanced and used sustainably.
- Strong communities The region has vibrant, inclusive, safe, active and healthy communities, where
 a range of social services are accessible by all, and where unique cultural heritage and diversity is
 acknowledged, valued and celebrated.
- Strong economy A thriving regional economy that is sustainable, resilient and robust, and advances the prosperity and liveability of communities across the region.
- Managing growth An efficient and sustainable settlement pattern that supports the efficient use and delivery of urban land and infrastructure, housing choice and affordability and well-planned development areas to accommodate further growth.



- Urban form The towns and cities of the region are accessible and build on their heritage, character and liveability through designs that respond to the natural environment and the provision of highquality urban green space.
- Infrastructure The region's communities have access to well-planned, coordinated, accessible, sustainable and reliable infrastructure.
- Transport An integrated and efficient transport system and network that supports and responds to growth consistent with the intended settlement pattern, economic development and community needs.

In relation to the project, this EIS addresses the potential impacts on the region in **Chapters 8 to 34**, including an assessment of potential impacts on all environmental and social values and measures to mitigate those impacts. For example **Chapter 14 - Land Use and Land Contamination** assesses impacts on land use; **Chapter 31 - Social Impacts** assesses impacts from temporary workers and impacts on housing and labour availability; and **Chapter 27 – Traffic and Transport** assesses impacts on the regional and local transport network.

3.6.8 Regional Natural Resource Management (NRM) Plans

The project is located within the boundaries of the North Queensland Dry Tropics Regional (NQDT) Natural Resource Management (NRM) area.

The *Burdekin Dry Tropics NRM Plan (2005-2010)* (Burdekin Dry Tropic Board, 2005) deals with regionally significant natural resource assets, issues and processes, while supporting the planning processes of catchment and sub-catchment groups. The NRM Plan addresses management of regional assets through the setting of targets and actions. NRM Plans integrate with other regional planning activities such as the Regional Vegetation Management Plans (RVMP) and Water Resource Plans.

Table 3-1 identifies the chapter of the EIS in which impacts to, and management of regional assets, as identified by the Burdekin Dry Tropics NRM Plan, have been addressed in the EIS.

| Regional Asset | EIS Chapter |
|-----------------------------|--|
| Land, Soils and Agriculture | Chapter 13 - Geology, Topography and Soils |
| | Chapter 14 – Land Use and Land Contamination |
| Biodiversity | Chapter 18 – Terrestrial Ecology |
| | Chapter 19 – Aquatic Ecology |
| | Chapter 20 - Stygofauna |
| Surface Water and | Chapter 15 – Surface Water Quality |
| Groundwater | Chapter 16 – Hydrology and Hydraulics |
| | Chapter 17 - Groundwater |
| Coastal and Marine | Chapter 15 – Surface Water Quality |
| Atmosphere | Chapter 12 – Climate and Climate Change |
| | Chapter 22 – Air Quality |
| | Chapter 23 – Greenhouse Gas |
| Community | Chapter 4 – Public Consultation Process |
| | Chapter 30 – Economic Impacts |
| | Chapter 31 – Social Impacts |
| Cultural Resources | Chapter 28 – Indigenous Cultural Heritage |
| | Chapter 29 – Historical Cultural Heritage |
| | Chapter 31 – Social Impacts |

Table 3-1Management of Regional Assets – North Queensland Dry Tropics

3.6.9 Local Planning Processes

3.6.9.1 Planning Scheme for Nebo Shire 2008 and Bowen Shire 2006

The project is located within the IRC and WRC local government areas. Prior to local government amalgamations on 15 March 2008, the project area was formerly within the Nebo Shire local government area (now part of the IRC) and Bowen Shire local government area (now part of the WRC). Until a planning scheme is adopted by the WRC and IRC that applies to the entire WRC and IRC local government areas respectively, the Planning Schemes for Nebo Shire 2008 and Bowen Shire 2006 continue to apply to regulating land use in the former Nebo Shire and Bowen Shire local government areas.

3.6.9.2 Local Laws

A local law is a law adopted by a local government that reflects community needs and ensures the good rule and government of the local government area. Local laws are created via the process set out in the *Local Government Act 1993* (Qld).

Where the proponent is also the landholder of land developed for the project (or any other land), then local laws and planning schemes will apply to the proponent as the landholder.

3.6.10 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 Australia and New Zealand Guidelines for Fresh and Marine Water Quality. Examples of relevant standards include:

- Australian Standard (AS) 1940 The Storage and Handling of Flammable and Combustible Liquids
- AS2187 Explosives Storage, transport and use.

3.6.11 Guidelines for Environmental Management

This section sets out key guidelines for environmental management. It is not an exhaustive list of all guidelines for environmental management. Additional guidelines that are relevant to a specific environmental value(s) are described in the relevant chapter of this EIS.

3.6.11.1 The Australian Water Quality Guidelines for Fresh and Marine Waters

The main objective of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC & ARMCANZ, 2000) (ANZECC 2000 Guidelines) is to provide an authoritative guide for setting water quality objectives required to sustain current, or likely future, environmental values and uses for natural and semi-natural water resources in Australia and New Zealand.

3.6.11.2 Queensland Water Quality Guidelines 2009

The Queensland Water Quality Guidelines (QWQG) (DERM, 2009) are intended to address the need identified in the ANZECC 2000 Guidelines by:

- providing guideline values (numbers) that are tailored to Queensland regions and water types
- providing a process/framework for deriving and applying more locally specific guidelines for waters in Queensland.

3.6.11.3 Regional Vegetation Management Codes

Clearing remnant vegetation shown on a regional ecosystem map or remnant map requires a development approval unless the clearing is for an exempt activity (such as a mining activity under the



EP Act). EHP uses regional vegetation management codes to assess applications for clearing native vegetation. The project is located within the Brigalow Belt Bioregion Vegetation Management Code.

3.6.11.4 National Guidance for the Management of Acid Sulfate Soils in Inland Ecosystems

This guidance document for the management of acid sulfate soils (ASS) in inland aquatic ecosystems is designed to guide the identification and management of inland ASS to reduce or eliminate the risks they pose to the Australian environment and its economy. The document has been developed by the Environment Protection and Heritage Council and the Natural Resource Management Ministerial Council in the context of the National Water Quality Management Strategy (NWQMS).

Where inland aquatic ecosystems are likely to be disturbed by the project the proponent will undertake an investigation and describe the management (if present) of acid sulfate soils in accordance with the guidance document.

The Queensland Acid Sulfate Soil Technical Manual Soil Management Guidelines (DNRM, Dear, et al, 2002) states that ASS occurs naturally over extensive low-lying coastal areas, predominantly below 5 metres Australian Height Datum (AHD). These soils may be found close to the natural ground level but may also be found at depth in the soil profile. All disturbances to the groundwater hydrology or surface drainage patterns in coastal areas below 5 metres AHD, including the subsoil or sediments below 5 metres AHD where the natural ground level of the land exceeds 5 metres AHD, should be investigated, designed and managed to avoid potential adverse effects on the natural and built environment (including infrastructure) and human health from ASS. The project is not located in a low lying coastal area. There is limited information on the management of inland ASS and hence the National Guidance for the Management of Acid Sulfate Soils in Inland Ecosystems is considered to be the most appropriate guidance document for consideration as part of the project.

Chapter 13 - Geology, Topography and Soils provides an assessment of whether acid sulfate soils are present within the project area.