

The Bowen Basin Coal Growth
project—Caval Ridge Mine

Coordinator-General's change report on rail alignment changes

Application for project change, number 5

April 2012

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Synopsis

The Bowen Basin Coal Growth Project: Caval Ridge Mine—Coordinator-General's evaluation report for an environmental impact statement (Coordinator-General's report) was released on 9 August 2010. The report evaluated the environmental impact statement (EIS) and potential impacts of the proposed Caval Ridge Mine (CRM). The evaluation of the project assessed the key elements of the CRM as described in the EIS and supplementary EIS. These elements included the construction of a new rail spur and loop (rail line) from the existing Blair Athol line to the proposed train load-out (TLO) facility on the mining lease (ML).

Two train movements per day on the proposed rail line will transport approximately 240 million tonnes of product coal over the 30-year life of the project from the mine site to either the Port of Hay Point or the Abbot Point Coal Terminal. The alignment of the CRM rail line was identified in Figure 1.3 of the EIS and reproduced in Figure 3 of the Coordinator-General's report.

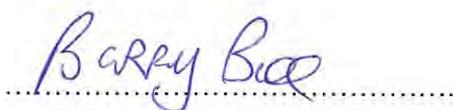
On 16 August 2011, BM Alliance Coal Operations Pty Ltd (BMA), the proponent for the project, applied to the Coordinator-General for a change to the project, being the realignment of the rail line to a location outside the project site, as described in the Coordinator-General's report.

Under the proposed change, the rail line will exit the Blair Athol line at the same point as originally proposed in the EIS, but will run in a more direct south-easterly direction to a new location of the TLO facility on the ML. The proposed alignment is five kilometres shorter than the alignment evaluated in the Coordinator-General's report.

In evaluating the proponent's application for change, I sought comment from advisory agencies. I also sought supplementary information from BMA on:

- the use of land impacted by the proposed change
- greenhouse gas emissions calculations
- mitigation and management measures to be implemented to minimise the impacts of the realignment on flora and fauna species and fauna habitat.

I have evaluated the request for project change and the environmental effects of the proposed change and other related matters, and I recommend that the change be allowed to proceed, subject to the new and amended conditions set out in Appendix 1 of this report and the new recommendations stated in Appendix 2. A list of BMA's commitments involving the rail line realignment is included in Appendix 3 of this report.



Barry Broe
Coordinator-General

3 April 2012

1 Introduction

1.1 The proponent

The proponent for the Caval Ridge Mine (CRM) project is BHP Billiton Mitsubishi Alliance Coal Operations Pty Ltd (BMA) (the proponent).

1.2 The project

The CRM is part of the four-phase Bowen Basin Coal Growth (BBCG) project, involving two new coal mines at Daunia (Phase 1) and Caval Ridge (Phase 2); an expansion of the existing Goonyella Riverside mine (Phase 3) and the relocation of the Moranbah Airport (Phase 4). The Coordinator-General's EIS Evaluation Report for the Daunia Mine was completed on 26 October 2009.

The CRM component proposes a new 5.5 million tonnes per annum (Mtpa) open-cut coal mine, six kilometres south of Moranbah in Central Queensland.

More information on the project is provided in Section 3 of this report (Background and context).

1.3 Prior applications for project change

The proponent has previously requested four changes to the conditions for the project, as follows:

- **Change request number 1**—accommodation village location and capacity for the CRM operational and construction workforce. The request was for 2500 permanent accommodation rooms at Buffel Village. The Coordinator-General did not approve the request in its entirety, supporting only 445 rooms for village operations and maintenance (instead of 500), including 95 rooms (instead of 150) for additional workforce and visitor accommodation, for a recommended period of 30 years. The Coordinator-General's change report was released on 18 February 2011.
- **Change request number 2**—amendment to conditions relating to granting the environmental authority for the project. The Coordinator-General's change report for this change was released on 16 November 2010.
- **Change request number 3**—timing of social impact management plan (SIMP) and administrative arrangements associated with completing the housing study (Condition 18(f)–(j)). The Coordinator-General's change report was released on 8 July 2011.
- **Change request number 4**—amendments to conditions to allow an increase to the proportion of the CRM's non-resident operational workforce, from 70 per cent to up to 100 per cent. The Coordinator-General did not approve the request in its entirety. The Coordinator-General amended conditions 11 and 18 and made one new recommendation. The Coordinator-General imposed a condition requiring BMA to facilitate the provision of permanent residential-style accommodation at the

minimum rate of eight dwellings for every ten new operational workers in the CRM. Based on the figures provided by BMA, the minimum requirement is 400 dwellings. BMA is also required to provide appropriate accommodation for its non-resident workforce. The Coordinator-General's change report was released on 2 September 2011.

1.4 Legislative provisions for project change

The Bowen Basin Coal Growth Project: Caval Ridge Mine—Coordinator-General's evaluation report for an environmental impact statement (Coordinator-General's report) was released on 9 August 2010 (Department of Infrastructure and Planning 2010a).

On 16 August 2011, BMA submitted an application for a project change (APC) to the Coordinator-General, to assess a proposed change to the project, under Division 3A, section 35B, of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act). The application contained a report titled *Caval Ridge Mine Change Request 5 Rail Alignment Changes August 2011* (BHP Billiton Mitsubishi Alliance 2011a). Further information was submitted by BMA on 20 October 2011 in an amended report *Caval Ridge Mine Change Request 5 Rail Alignment Changes October 2011* (BHP Billiton Mitsubishi Alliance 2011b). In accordance with section 35C of the SDPWO Act, the Coordinator-General has evaluated the environmental effects of the proposed change, and other related matters, and prepared this Coordinator-General's change report.

2 Public notification

In accordance with section 35G of the SDPWO Act, the Coordinator-General must decide whether or not the proponent is required to publicly notify the proposed change application and any effects on the project.

The proposed project change relates only to the location of the alignment of the CRM rail line between the existing Blair Athol line and the CRM train load-out (TLO) facility. The Coordinator-General noted that none of the public or agency submissions received during the environmental impact assessment (EIA) process in 2009 directly raised the issue of the location of the rail alignment or its potential impact on sensitive receivers, flora and fauna, cultural heritage matters, transport matters or social impacts.

BMA's APC states that the proposed rail line realignment does not:

- change the number or frequency of train movements
- cross any additional properties not owned by BMA
- impact on any additional sensitive receptors
- change the design or construction method for the rail infrastructure
- introduce any new land uses, visual amenity elements or contaminated land matters beyond those already considered in the environmental impact statement (EIS).

The proposed realignment is also further away from Moranbah and residences, reducing the impact.

The proposed 11.65-kilometre corridor in which the rail infrastructure is to be constructed will require Isaac Regional Council approval for a development application under the *Sustainable Planning Act 2009* (Qld) (SPA) as it is located off mining lease (ML) 70403. In October 2011, BMA submitted a code assessable development application to Council for a reconfiguration of a lot (RoL) over the subject land. The application seeks to create a separate lot with the intended use as a rail corridor. As a RoL is code assessable under the Council's planning scheme, the development application for a RoL is not impact assessable or publicly notifiable under SPA. The Council's planning scheme for this location includes an exemption from a development approval for development involving railway activities in existing rail corridors.

The project change applied for by BMA does not materially affect the specific obligations contained in the relevant existing conditions set out by the Coordinator-General for the CRM project or invoke public notification under SPA. Accordingly, it was the view of the Coordinator-General under section 35G(1) of the SDPWO Act that the nature of the proposed project change did not warrant public consultation.

The Coordinator-General notified BMA on 28 November 2011 of the decision to not publicly notify the proposed change.

Section 35F of the SDPWO Act provides that the Coordinator-General may consult with any parties about a proposed change. To inform the Coordinator-General's considerations, comment on the proposed change was sought from the following advisory agencies:

- Department of Environment and Resource Management (DERM)
- Department of Transport and Main Roads (TMR)
- Powerlink Queensland
- Isaac Regional Council
- Australian Government Department of Sustainability, Environment, Water Population and Communities (SEWPaC).

None of the agencies consulted raised concerns with the proposal proceeding. Specific advice and observations made by agencies are discussed in Section 5: Evaluation of the change request.

3 Background and context

BMA, as the manager and agent on behalf of the Central Queensland Coal Associates Joint Venture, is an unincorporated joint venture between BHP Billiton (50 per cent) and Mitsubishi Corporation (50 per cent).

The CRM is the second component of the four-phase BBCG project. CRM involves a new, open-cut coal mine located six kilometres south of Moranbah in Central Queensland, exporting 5.5 Mtpa of hard coking coal over a life of 30 years, with an additional 2.5 Mtpa of coal to be processed from coal sourced from BMA's adjoining Peak Downs mine.

Estimated capital expenditure for the CRM is \$4 billion over 25 months. Estimated employment is 1200 during construction and 495 during operation. The indicative construction schedule programmed the construction of the rail line during months 4–18 of the 24-month construction schedule (refer to Table 3.7 of the EIS). Mine production is expected to start in 2014.

A former Coordinator-General, Dr Geoff Dickie, completed his evaluation of the EIS for the project under Part 4 of the SDPWO Act, on 9 August 2010, determining that the project could proceed subject to specific conditions and recommendations to manage potential environmental and social impacts.

Key elements of the project were identified in the EIS as the mine and associated mine infrastructure. Associated mine infrastructure described in the EIS and supplementary EIS as included in the project is:

- the coal handling and preparation plant (CHPP)
- the southern run-of-mine (ROM) and conveyor
- a rail spur and loop (rail line) to be constructed from the Blair Athol line to the TLO facility.

The EIS described the proposed rail line alignment as located on the western boundary of ML70403 before turning north-west to connect to the Blair Athol line. The rail line loop will include a TLO facility as shown in Figure 3.2b of the EIS. While the project will not directly impact on the Blair Athol line's location, the construction of the CRM rail line will require works within the Blair Athol line railway easement. Condition 3, Schedule 4 of the Coordinator-General's report recommended conditions for approvals involving the interference with a railway as follows:

- (a) Approval must be obtained from the railway manager prior to any interference with a railway under the *Transport Infrastructure Act 1994*.
- (b) If any project works are likely to interfere with the operation of railway services, consultation must be undertaken with the railway manager to identify and implement actions which will minimise disruption to rail way operations.

The EIS stated that the rail line is to be constructed to QR National standards and requirements. Construction and operation of the rail line will be managed under a number of agreements and undertakings between BMA and QR National including:

- Rail Infrastructure and Construction Deed, which sets out responsibilities for scope of work, terms and conditions for delivery of the infrastructure
- Access Facilities Deed which outlines funding arrangements
- Transfer Facilities licence, which provides a licence for construction and use of the load-out facilities
- Lease Agreement of the land corridor
- Transport charge arrangements under 'above' and 'below' rail QR National categories.

During the EIS process, stakeholders impacted by the rail line were consulted. The EIS stated that a number of arrangements are being incorporated into the rail line to account for potential stakeholder impacts, including occupational crossings of the rail line to account for stock, equipment and vehicular movements. These will be constructed and operated to QR National standards.

The EIS described the proposed train movements and rail infrastructure. Two trains per day or 700 movements per annum will move approximately 240 Mt over the 30-year life of the project. There will be four diesel (4000) class trains for the first two years then three diesel (3700) class trains from year three onwards.

On 1 November 2011, the proponent announced that it would proceed with the development of the CRM. Construction activities commenced in November 2011, with preliminary works associated with the Buffel Park accommodation village.

3.1 Approvals

3.1.1 Local government

The CRM site is located in the Parish of Moranbah, County of Grosvenor and is within the Isaac Regional Council Local Government Area. The Council was formed on 15 March 2008 following the amalgamation of the Belyando, Broadsound and Nebo local governments. Prior to amalgamation, the site was located in the Belyando Shire Council Area. Therefore, the *Belyando Shire Planning Scheme* (adopted 20 January 2009) remains the applicable local government planning scheme for assessing this project until the regional Council's planning scheme is prepared.

The mine site and the proposed off-lease rail line are located within an area zoned as rural under the planning scheme. The CRM accords with the desired environmental outcomes for the *Belyando Shire Planning Scheme*.

The EIS listed the key approvals required for the CRM in Table 1.2. The granting of any development permits for activities off the mining lease was listed as an approval under the then *Integrated Planning Act 1997* (Qld) (now SPA) with the assessment manager as the relevant authority. The planning scheme is relevant to aspects of the project that are not subject to section 319 of the *Mineral Resources Act 1989* (Qld) or Schedule 4 of the Sustainable Planning Regulation 2009 (Qld).

CRM-related activities and infrastructure facilities that are located outside of the ML areas and are not exempt from the provisions of SPA require development approval

under the local government planning scheme. BMA must apply to the Council for approvals relating to construction and operations off the mining lease, including operational works, reconfiguration of a lot, building works and plumbing and drainage works.

As the CRM has been subject to an EIS under the SDPWO Act, the information and referral stage and notification stage of the development application process is deemed to have already been undertaken. Hence, any development applications that are lodged for CRM-related infrastructure assessed during the EIA process and located outside of the ML area will progress from the application stage to the decision stage of the application process.

During finalisation of the EIS evaluation, BMA advised that it may lodge a separate development application for associated infrastructure/rail line on rural land off the MLs adjacent to the CRM. As BMA has proposed a different alignment to that identified in the EIS and evaluated by the Coordinator-General, the change must be evaluated under the SDPWO Act and a Coordinator-General's change report prepared. The Coordinator-General is a concurrence agency under SPA for the development application and the change report must be considered by the Council before deciding on the application.

3.1.2 State government

The EIS listed the key state government approvals required for the project in Table 1.2. The rail line will require approval under SPA, as discussed above.

The issue of an environmental authority (EA) to operate the mine was listed as an approval under the *Environmental Protection Act 1994* (Qld) (EP Act) with the relevant authority being DERM.

The Coordinator-General's report stated numerous conditions in Appendix 1, Schedule 3 that were to attach to the EA. Section 4.2 of the Coordinator-General's report stated that any conditions stated for the EA for ML70403 are intended to apply to the CRM as a whole. As the rail line is defined as a key element of the CRM, the conditions of the EA also apply to the construction and operation of the rail line and the proposed realignment discussed in this change report. DERM granted the EA (Mining Activities) non-code compliant, Permit Number MN101827410 – Caval Ridge Coal Mine on 17 November 2010 for the CRM. The EA and the conditions took effect on 27 September 2011.

Section 319 of the EP Act establishes a general environmental duty for a person to take all reasonable and practicable measures to prevent or minimise environmental harm when carrying out an activity, not just those classified as Environmentally Relevant Activities (ERAs) under an EA. Therefore, the proponent must ensure all environmental matters relating to the project as a whole are adequately addressed to minimise environmental harm.

The Coordinator-General sought comment on state government approvals required for the proposed change from targeted state government advisory agencies as listed

below due to their likely interest in potential impacts of the rail infrastructure during the EIS process:

- DERM
- TMR
- Powerlink.

Specific advice and observations made by agencies are discussed in Section 5: Evaluation of the change request.

3.1.3 Commonwealth

On 23 September 2008, the CRM project was determined to be a controlled action pursuant to section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cwth) (EPBC Act)—reference number 2008/4417. The controlling provisions of the EPBC Act are sections 18 and 18A (listed threatened species and communities). On 9 August 2010, in accordance with section 133 of the EPBC Act, the Coordinator-General's report was given to the Australian Government Minister for the Environment for assessment.

The Australian Government Minister for the Environment approved the CRM project by decision notice dated 18 March 2011, subject to 12 conditions relating to the proposed clearing of endangered ecological communities (EECs) of brigalow and bluegrass and threatened fauna species, listed under the EPBC Act. The conditions require the submission, approval and implementation of an offset management plan and threatened flora and fauna species and ecological communities management plan to offset the impact. The conditions contain requirements for monitoring, record keeping, conditions compliance, independent auditing of condition compliance and publishing reports and plans on public websites.

The Coordinator-General sought comment on Australian Government approvals required for the proposed change from SEWPaC, due to its interest in impacts of the rail infrastructure on listed threatened species and communities during the EIS process. SEWPaC's response is discussed in Section 5: Evaluation of the change request.

3.2 Proponent commitments

The EIS contained a number of proponent commitments regarding the mitigation and minimisation of noise, dust, greenhouse gas emissions and water quality impacts. These commitments are outlined below where relevant to the current change application for the rail line realignment.

3.2.1 Monitoring and mitigation measures—noise and air impact

Section 1.7.1.1 of the EIS addressed the proponent's response to the Queensland Government's environmental protection policies (EPP). With regard to the EPP (Air) 2008, the EIS stated:

A monitoring program is proposed to monitor the impact of mining operations on the air quality in the area. Mitigation measures will be implemented to reduce the potential for air quality impacts at the nearest sensitive receivers. A complaints register for dust will be maintained. Should any complaints be registered, detailed investigations and management strategies will be developed in accordance with the Environmental Protection (Air) Policy 2008.

With regard to EPP (Noise) 2008, Section 1.7.1.1 states:

Nearby residents will be warned when any planned atypical noise is likely to occur. A complaints register will be established and any complaints will be logged and necessary mitigation measures will be developed and implemented.

3.2.2 Earth moving activities

Section 6.2.1.1 of the EIS presented mitigation measures to deal with potentially adverse impacts on water quality within the creek system during the construction phase, including the construction of surface infrastructure, particularly listing the rail spur, rail loop and TLO facilities. The EIS stated that the earthworks contractor will be required to prepare a construction environmental management (EM) plan, which will include a sediment and erosion control plan and water management plan, before commencing construction. The mitigation measures to be incorporated in the plans are listed on page 6-21 of the EIS. These measures will apply to the construction of the rail line off the ML.

3.2.3 Works adjacent to/within drainage lines

Section 6.2.1.2 of the EIS discussed rail line construction works adjacent to drainage lines. Construction activities at drainage lines and vehicle access crossings can mobilise sediment and alter flow and quality characteristics. The mitigation measures listed on page 6-22 of the EIS are to be implemented for the construction of the rail line off the ML.

3.2.4 Contaminant mobilisation

Section 6.2.1.3 of the EIS discussed the impact of possible wastewater streams and contaminated runoff from chemical storage areas and general wash down water. The mitigation measures described on page 6-23 of the EIS are to be implemented at construction sites along the rail line.

3.2.5 Draft environmental management plan

Appendix Q of the EIS contained a draft EM plan. The final EM plan is to reflect the aspects of the project off the ML including the construction and operation of the rail line.

3.2.6 Commitments list

Appendix P of the Supplementary EIS (SEIS) contained a list of all commitments made by BMA in the EIS and the SEIS for the whole project. These commitments apply to the project site, including the CRM rail line off the ML. Several commitments contained in Appendix P of the SEIS are specific to the construction of the rail line off the ML. They are as follows:

Appendix P, Table 1.6: Terrestrial Flora

Standard dust suppression techniques will be used during operation to reduce dust leaving the preparation (ROM and CHPP) and transport (conveyor / rail corridor) areas

During operational phase, a flora monitoring program will be implemented and will include the following:

The distribution of declared and environmental weeds around the perimeter of the open pits, CHPP, ROM, overland conveyor, rail route, new sediment basins, creek diversions and adjacent to new roadways and the dragline transport route.

Appendix P, Table 1.14: Cultural Heritage

Procedures to be implemented to manage and/or mitigate impact on areas containing cultural heritage in the project include the following:

- Impact in the vicinity of the large area of Brigalow and Native Orange trees near the proposed rail extension and the Bower Bird nest will be minimised.
- Topsoil stripping for the rail extension will be monitored by traditional owner representatives.

Both the general project commitments and the specific commitments involving rail line construction and operation are applicable to the proposed realignment of the rail line.

The proponent has not provided a list of additional commitments as part of the change request for the rail alignment. However, the APC contains a number of statements defining activities to be undertaken should the change be approved. The Coordinator-General acknowledges these statements and has listed them in Appendix 3 of this report as adopted commitments to ensure they are undertaken by the proponent.

3.3 Government policies, plans and initiatives

The *Whitsunday Hinterland and Mackay Regional Plan* is a non-strategic planning document endorsed by the Queensland Government in 2005. It provides a framework for guiding the development and management of the region over the next 15–20 years. The plan contains a transport goal, which seeks to ensure an integrated approach to the provision of transport networks including road, rail, air and water. The CRM project

will utilise existing transport infrastructure on the Blair Athol line to transport coal to port. The proposed rail line is new rail infrastructure to connect to this existing transport network infrastructure.

The draft *Mackay, Isaac and Whitsunday regional plan* (Growth Management Queensland 2011) was released for public consultation on 31 May 2011. Its objective is to maximise the opportunities, and plan for and manage the challenges, associated with providing infrastructure; building the economy; providing employment, housing and community services; and protecting the environment. The proposed RoL to construct a rail line is not prohibited development under the plan.

4 The proposed change

BMA has requested the realignment of the CRM rail line between the existing Blair Athol line and the CRM TLO facility. The proposed change to the rail line alignment is outside ML70403. The proposed new alignment traverses land owned by BMA.

The EIS showed the rail line was proposed to run in an easterly direction to ML70403 and then travel south inside the western boundary of ML70403 to the TLO facility. The project change proposes a new route running in a south-easterly direction to the new location of the TLO facility on ML70403. Figure 1 shows the original rail alignment from the EIS and Coordinator-General's report and the proposed new rail alignment shown in the change request. The rail line will still exit the Blair Athol line at the same point as originally proposed in the EIS.

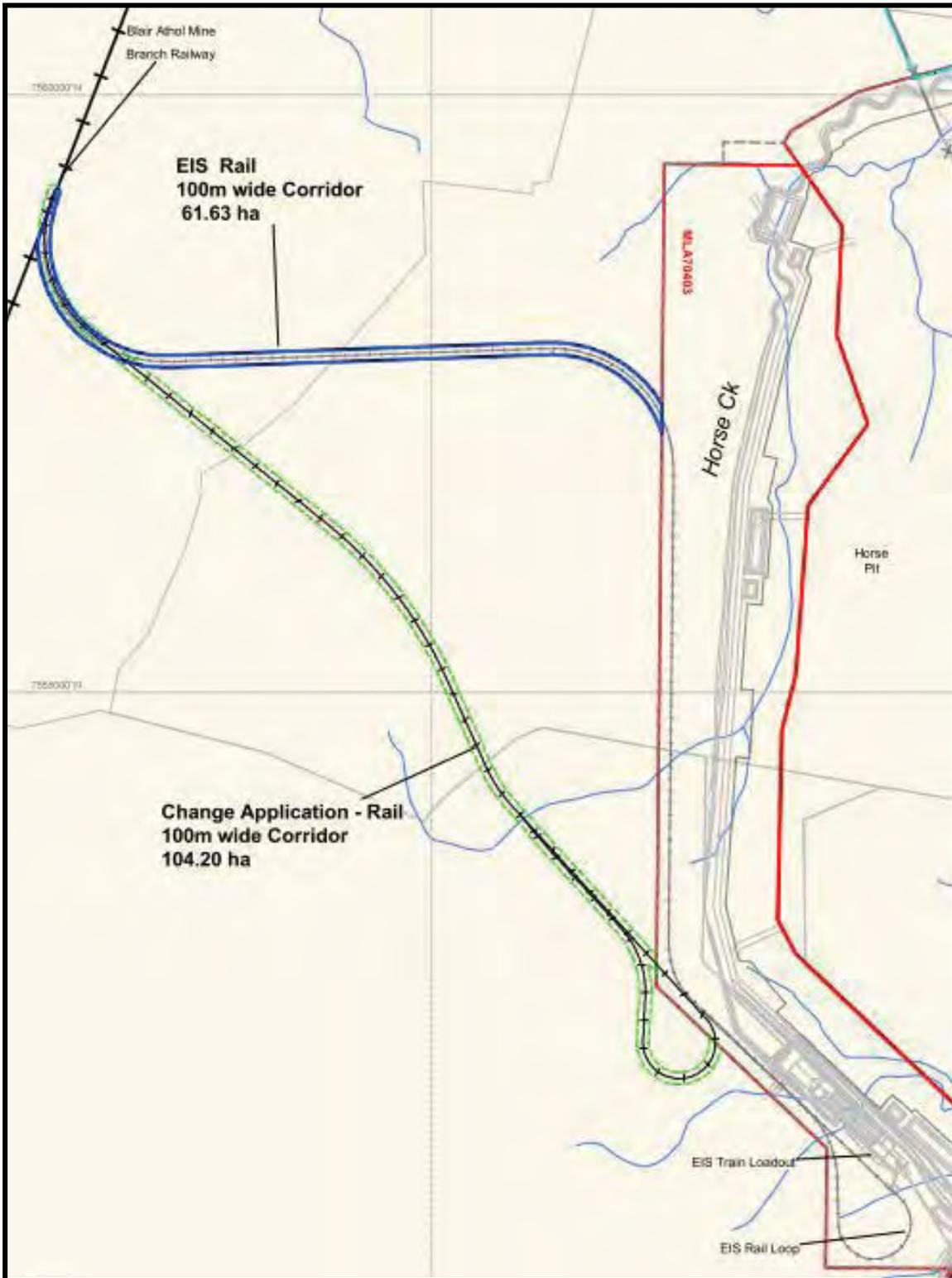
Table 1 outlines the key parameters of the proposed rail line in comparison to the rail line shown in the EIS and evaluated in the Coordinator-General's report.

Table 1: Technical comparison of EIS and change request rail line

Rail line parameter	EIS	Rail proposed change	Difference
Total length (km)	17.08 km	12.5 km	-4.58 km
Corridor width (m)	100.0 m	100.0 m	No difference
Length outside ML70403 (km)	6.35 km	11.65 km	+5.30 km
Length inside ML70403 (km)	10.74 km	0.08 km	-10.66 km
Area, outside ML70403 (ha)	62.38 ha	102.58 ha	+40.20 ha
Area, inside ML70403 (ha)	93.01 ha	8.49 ha	-84.52 ha

Source: BHP Billiton Mitsubishi Alliance, 2011b

Appendix C of the APC (BHP Billiton Mitsubishi Alliance 2011b) contains the project drawings of the horizontal and vertical alignment (Revision 0 Drawing numbers 25578-600-CR-6310-00001 to 25578-600-CR-6310-00005, 25578-600-CR-6310-00011 and 25578-600-CR-6310-00012). This evaluation of the change has been assessed on the basis that QR National has provided approval in principle for these drawings for the proposed alignment (by QR National letter to BMA dated 9 November 2010, Appendix C of the APC). The evaluation has considered the location of the proposed rail corridor boundary fence, TLO, balloon loop, culverts, Powerlink easement boundary and existing towers shown on these drawings.



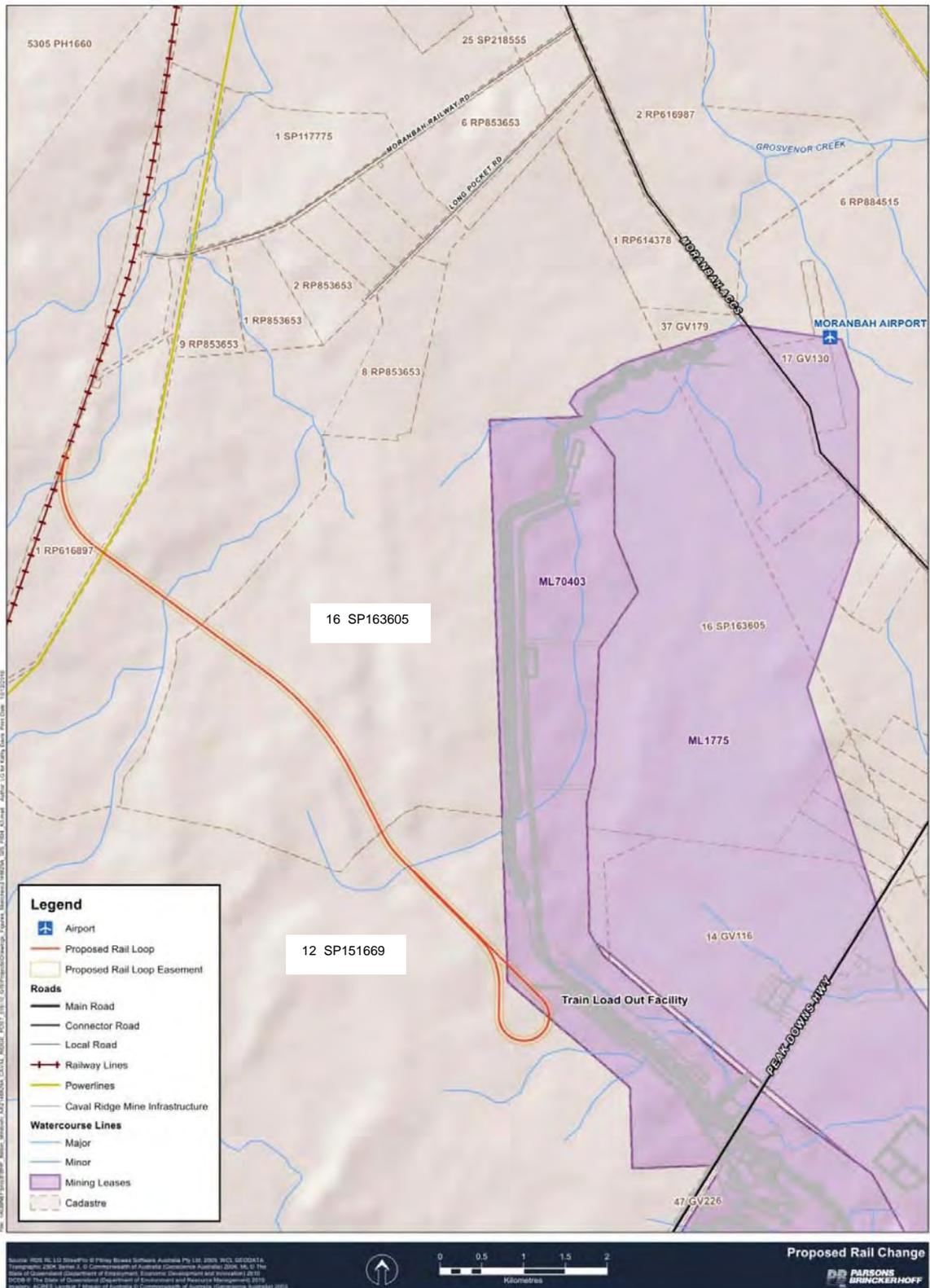
Source: BHP Billiton Mitsubishi Alliance, 2011b

Figure 1: EIS rail alignment (blue) and change to rail alignment (green)

4.1 Proponent's reasons for change

BMA's APC states the reasons for the proposed change as follows:

- Since the preparation of the Caval Ridge Mine EIS and SEIS in 2009 and the release of the Coordinator-General's report in August 2010, BMA has secured ownership of Lot 1 RP616897 and Lot 12 SP151669, which lie to the west of ML70403 (Figure 2). This land acquisition facilitated the proposed change.
- BMA developed a more direct route for the rail line between the existing Blair Athol line and the TLO facility resulting from project value engineering studies conducted after the EIS was completed.
- The proposed route is 4.58 kilometres shorter than the rail route shown in the EIS and Coordinator-General's report.
- BMA considers that the proposed alignment reduces noise impacts upon sensitive receptors as the rail line is up to four kilometres further south of Moranbah.
- The proposed location of the product coal stockpiles has been moved approximately 2.5 kilometres to the west to reduce extensive civil works associated with diversion of Caval Creek. The relocation of the stockpiles has allowed the realignment of the rail line and rail loop, reducing significant earthworks and the number of under-track surface water drainage culverts.



Source: BHP Billiton Mitsubishi Alliance, 2011b

Figure 2: Mining lease and proposed rail alignment

5 Evaluation of the change request

In evaluating the proponent's APC, the Coordinator-General has considered the following:

- the proponent's APC, dated 16 August 2011 (BMA 2011a)
- supplementary information supplied by BMA on 20 October 2011 (BMA 2011b)
- supplementary information supplied by BMA on 18 January 2012 (BMA 2012)
- advisory agency submissions.

In evaluating the APC, BMA's supplementary information and agency comments, the following issues emerged:

- terrestrial flora and fauna and aquatic ecology
- State Bioregional Corridor Values
- reduction of good quality agricultural land (GQAL)
- strategic cropping land (SCL) classification
- dust and noise impacts
- flood modelling of surface water
- cultural heritage.

The following section considers the potential impacts of the rail line realignment proposal and how these issues are intended to be managed.

5.1 Terrestrial flora and fauna and aquatic ecology

The CRM project requires remnant native vegetation to be cleared to construct the rail transport corridor. The clearing may result in the fragmentation of wildlife habitat and the reduction of listed plant or animal populations. Secondary impacts on vegetation may occur as a result of dust, erosion, altered water flows, weed invasion, soil exposure, and increases in herbivory and light penetration.

The proposed alignment contains small areas of regrowth vegetation and weed species. It does not traverse any mapped remnant vegetation or high-value regrowth vegetation areas but this has not been validated with on-ground surveys.

Clearing of vegetation for activities outside the ML is assessable development under SPA; therefore, the Brigalow Belt and New England Tableland Regional Vegetation Management Code (2009) and the Queensland Policy for Vegetation Management Offsets (2009) apply to vegetation clearing off the ML areas. To remove any uncertainty, it is noted that the Queensland Biodiversity Offsets Policy of October 2011 did not apply to the application when submitted on 16 August 2011. A biodiversity offsets strategy is a condition of the original CG Report and will apply to this change as discussed in section 5.2 of this report.

In its submission on the EIS, DERM noted that a permit for removal of protected plants under the *Nature Conservation Act 1992* (Qld) (NC Act) is required for clearing on and off the ML areas.

DERM provided recommendations regarding minimising impacts on native flora and fauna. The proponent must comply with the provisions of the *Nature Conservation Act 1992* particularly in regard to the following:

- Where there is a requirement for clearing of plants under the NC Act:
 - clearing of protected plants must occur in accordance with a clearing permit or an exemption under the NC Act.
 - Offsets must be provided for the permanent loss (take) of near threatened, vulnerable and endangered plants to achieve an equivalent or better overall outcome at a regional scale in accordance with the Queensland Biodiversity Offset Policy 2011.
- Where activities of the proponent may cause disturbance to animal breeding places the prior approval of DERM must be obtained. It is unlawful to tamper with the breeding place of a protected animal without authorisation. Section 332(4) of the Nature Conservation (Wildlife Management) Regulation 2006 identifies that the removal of a breeding place may occur under an approved species management program or a damage mitigation permit.
- Where there is a need to take fauna, the prior approval of DERM must be obtained.
- The proponent must act in accordance with the management principles outlined in Section 73NC Act, especially s73 (a) (i) which states...”protected wildlife is to be managed to conserve the wildlife and its values , and in particular to ensure the survival and natural development of the wildlife in the wild.

In most instances the above approvals will require that comprehensive and recent on-ground flora and fauna surveys are undertaken.

The EIS, SEIS and EM plan describe the management strategies to be implemented during construction and operation of the mine to minimise the impact on remnant vegetation.

These include:

- minimising the area being cleared to what is necessary for the safe construction and operation of the mine
- implementing a ‘permit to disturb’ procedure on site
- identifying go/no-go areas on the CRM site
- dust suppression techniques
- providing offset vegetation similar to the vegetation being cleared as part of a coordinated and managed plan.

In the EIS, SEIS and EM plan, BMA committed to a progressive rehabilitation management plan for disturbed areas to ensure the long-term re-establishment of ecosystems and habitats. The rehabilitation commitments have been included in the CRM EM plan. The EM plan also:

- commits to the implemented of terrestrial flora monitoring during both construction and operation
- includes regular mapping of distribution of declared and environmental weeds, erosion and sedimentation influencing vegetation and stream health, health of downstream riparian habitat, habitat rehabilitation, and dust effects on native vegetation.

The Coordinator-General imposes a condition that requires the EM plan to be updated to account for the rail line realignment, and to ensure that adequate monitoring, mitigation and rehabilitation commitments are conducted along the new corridor (Appendix 1, Schedule 1, Condition 1

5.1.1 Offsets

The Coordinator-General's report required BMA to provide an offsets package to satisfy the State of Queensland's requirement for those areas of regional ecosystems (REs)—classified under the *Vegetation Management Act 1999* (Qld) (VM Act) as endangered or of concern—that do not have existing approval for clearing.

The Coordinator-General's report determined that the total areas of REs to be unavoidably cleared and not already approved were:

- poplar box woodlands—112.8 hectares
- brigalow woodlands—20.6 hectares
- natural grasslands—124.6 hectares.

SEWPaC's approval of 18 March 2011 was subject to further conditions regarding the provision of an offsets management plan for the Norwich Park Nature Reserve and the Gregory Crinum Offset Area.

The report acknowledged BMA's commitment to undertake additional and ongoing management activity to mitigate impacts to native vegetation communities. To confirm these commitments, the report imposed Condition 3(b)–(d) that requires BMA to provide SEWPaC and DERM a threatened flora and fauna species and threatened ecological communities management plan that:

- ensures the impacts to these species and communities are minimised
- contributes to the survival of these species in the wild
- achieves conservation benefits for these species and communities where practicable.

The draft plan was provided to DERM in July 2011.

SEWPaC's approval of the CRM on 18 March 2011 was subject to BMA submitting, to the Minister for Environment, a threatened flora and fauna species and threatened ecological communities' management plan for approval, before commencing any works in relation to the CRM (excluding early works).

DERM raised concerns about the impact on native flora and fauna along the rail line realignment shown in the change request report. The main issue raised was the absence of relevant and recent on-ground surveys to support the desktop studies and

aerial photography interpretation regarding the presence of threatened flora, fauna, aquatic ecology and regional ecosystems along the 102-hectare rail corridor.

5.1.2 Proponent response

In the supplementary information supplied on 18 January 2012, BMA advised that it will engage an ecologist to undertake a ground survey along the proposed rail alignment to confirm the conclusions made in the Change Request report and provide the electronic data and a report to DERM. (BMA 2012)

5.1.3 Coordinator-General's conclusion

The Coordinator-General's report for the CRM discussed the terrestrial and aquatic ecological values of state significance that may be affected by the proposed CRM project. The Coordinator-General noted in section 5.5.1 of that report that the proponent included in the EIS the results of ground surveys of flora, fauna and REs to verify the desktop analysis as requested by the Terms of Reference for the EIS. The results of these ground surveys were used to calculate the areas to be cleared and the areas requiring offsets.

The Coordinator-General agrees with statements made by DERM that the proponent must conduct an on-ground assessment to validate all desktop assessments, and justify its determination of the 'low impact' of the proposed rail line realignment on terrestrial and aquatic ecology.

The Coordinator-General has imposed a condition to ensure BMA undertakes on-ground surveys to verify the desktop analysis (Appendix 1, Schedule 2, Condition 2).

Should the on-ground field surveys along the rail line corridor find any remnant or high-value regrowth vegetation or REs classified under the VM Act as endangered or of concern, this condition also requires the proponent to provide the results of the field survey(s) to DERM before the EM Plan for the railway is finalised and provide an updated offset strategy for approval by DERM before the commencement of early works for construction of the rail line or mining operations. In addition, should threatened flora or fauna species or ecological communities be identified, the proponent is to advise SEWPaC.

5.2 Bioregional corridor

The rail line alignment identified in the EIS traversed part of a State Bioregional Corridor as shown in Biodiversity Planning Assessment mapping information for the Brigalow Belt North (2008). The proposed rail line realignment also traverses the corridor of biodiversity significance, with the length and area of the alignment larger than the original EIS alignment.

The Coordinator-General noted in his report of August 2010 that BMA has committed to develop and implement a biodiversity offset strategy (SEIS Appendix A2) to address the objectives of state and Commonwealth legislation and policy requirements for biodiversity offsets. BMA has committed to develop and implement a biodiversity offset management plan (EIS section 5.4.4; SEIS, Appendix A2) to manage the offsetting of

cleared EECs that could not otherwise be avoided or mitigated. This plan provides for the on-ground management and monitoring of vegetation and wildlife habitats on the offset areas to ensure their long-term ecological viability.

It is considered that this existing condition requiring offsets and Recommendation 5, Schedule 5, Appendix 1 in the Coordinator-General's report will mitigate and/or offset the potential loss of additional areas of biodiversity that may be disturbed by the rail line construction.

DERM advised that insufficient information was supplied with the APC for DERM to assess whether there will be any changed impacts on biodiversity values within the rail line corridor. It is acknowledged that this information is significant and in Recommendation 1 of Appendix 2 of this report requests the proponent to provide the proposal in a digital format to DERM so that a full assessment can be conducted to ensure the realignment does not cause further impacts on biodiversity values that are not mitigated by the biodiversity offset strategy.

5.3 Good quality agricultural land

A review of land suitability and GQAL undertaken for the SEIS for the CRM determined that no GQAL was considered to exist in the original rail line alignment as shown in the EIS in July 2009. Therefore, the Coordinator-General's report contained no conditions on this matter.

The APC contains a technical assessment report prepared by GSS Environmental (2010) assessing the soil types and associated suitability and agricultural land classes (ALCs) within the proposed new rail line realignment corridor. The report identified that 68 per cent (67 hectares) of the new corridor outside ML70403 is GQAL classified as ALC C1, which is the best quality grazing land under the ALC rating.

The assessment report also concluded that in respect of State Planning Policy 1/92: Development and the Conservation of Agricultural Land (SPP 1/92), the development of the rail line on the proposed realignment will not adversely impact on the availability of land suitable for grazing.

DERM did not raise concerns about the rail line infrastructure causing an adverse impact upon the availability of suitable grazing land. BMA has advised in section 3.4.1 of its APC that it shall continue to support active grazing in the adjacent land area, fence off the rail line and construct stock route crossings over the line.

As the site is currently used for cattle grazing purposes, it is recognised that the impact of the proposed realignment will increase the loss of GQAL for grazing from nil to over 60 hectares. Given the relatively small scale of this loss of grazing land, the Coordinator-General accepts BMA's commitment to continue to support grazing on either side of the rail corridor on Lot 16 SP163605 and Lot 12 SP151669 now owned by BMA.

5.4 Strategic cropping land

The strategic cropping trigger map for Lot 1 RP616897 (DERM 2012) indicates that the proposed rail alignment runs across land classified as an area where strategic cropping land (SCL) may exist in the 'Western Cropping Zone Strategic Cropping Management Area'.

The *Strategic Cropping Land Act 2011* (SCL Act) and the Strategic Cropping Land Regulation 2011 commenced on 30 January 2012. The new State Planning Policy 1/12: Protection of Queensland's strategic cropping land (SPP1/12) also commenced on 30 January 2012, requiring development assessment under local government planning schemes to include appropriate consideration of SCL. The SPP operates in tandem with SPP 1/92, which applies to a broader range of agricultural lands.

The SCL Act provides for transitional arrangements for coal developments undergoing an EIS under the EP Act or SDPWO Act for which the Terms of Reference (TOR) was finalised by May 2011. These arrangements apply to mapped SCL on ML1775 as the TOR for the CRM were finalised on 6 November 2008.

To remove any uncertainty, it is noted that, the SCL Act and SPP1/12 did not apply to the APC when submitted on 16 August 2011. In addition, as BMA submitted the development application to Council for a RoL in October 2011, prior to the commencement of the SCL Act and SPP1/12, under the provisions of section 72 of SPA regarding the date of effect State planning instruments, the SCL Act and SPP1/12 did not have effect at the time of the development application.

However, Chapter 6 of SPA provides transitional arrangements for the application of new laws and SPPs to undecided development applications. The arrangements under SPA apply to that section of the rail alignment that is off the mining lease and subject to the RoL application as it was an undecided application when the SCL Act and SPP1/12 commenced.

Under section 317 of SPA, the assessment manager may give the weight it is satisfied is appropriate to a law or policy that came into effect after the development application was made but before the start of the decision stage for the application. The Coordinator-General recommends that the Council, as assessment manager, consider the SCL Act and SPP1/12 when deciding the RoL development application, in particular Item 2.8 (b) and section 4 of SPP1/12 regarding application of the policy to RoL application.

It is also recommended that the proponent review the DERM SCL online mapping, conduct on ground assessment to verify if the alignment of the rail impacts on, or fragments, potential strategic cropping land on Lot 1 RP616897 and submit findings to DERM for assessment against the criteria in the SCL Act before commencement of construction of the rail line over Lot 1 RP616897. If the assessment verifies SCL then it is recommended that the proponent liaise with DERM and work within the SCL Act. (Appendix 2, Recommendation 2).

5.5 Dust and noise

The EIS and SEIS assessed and considered the potential release of dust from the CRM site resulting from construction and operation of the project. Figure 1.1 of the APC (BHP Billiton Mitsubishi Alliance 2011a, p. 8) shows the rail line is shifted further south (up to four kilometres), resulting in a reduction in dust impacts on the closest sensitive receivers (rural-residential properties to the north of CRM on Railway Station Road, south of Moranbah)

A technical assessment report was prepared by Heggies (2010) (Appendix G of BMA's APC), which predicted rail noise levels during operation at sensitive receptor locations. The predicted levels (shown in APC Appendix G, Figure 1) were then compared with the predicted levels for the rail route presented in the EIS. The investigation concluded there was an increase in noise levels at the nearest noise-affected receptor of Buffel Park Homestead. However, BMA has now acquired this property and advised they will manage the occupancy to meet operational and environmental requirements. The Heggies analysis shows a decrease in noise levels at some of the residences north of the CRM as a result of the new alignment.

The Coordinator-General confirms that the existing conditions set out in the Coordinator-General's report regarding noise minimisation, communications with the community and the SIMP apply to the construction and operation of the proposed rail line realignment as part of the CRM project. No additional conditions are proposed.

5.6 Surface water and flood modelling

The EIS examined the impact of CRM on Horse Creek and proposed a creek diversion design. The rail line alignment shown in the EIS crossed Horse Creek and Caval Creek inside ML70403 and was included in the original surface water assessment, but only to the extent inside the defined project site. The proponent also developed a one-dimensional hydraulic model for the major water courses within the CRM site including Horse Creek, with the objective of describing the flood extents for a range of design probability events.

The Coordinator General's report imposed a condition on the proponent that it submits any designs for operational flood protection to DERM before an EA is issued (Appendix 1, Schedule 1, Condition 2(d)). In November 2010, a Coordinator-General's change report amended this condition to read 'prior to the EA taking effect', (Department of Infrastructure and Planning 2010b, p. 5). The proponent submitted the designs and the EA took effect on 27 September 2011, prior to the project change for the rail line realignment being evaluated.

A technical assessment report was prepared by Parsons Brinkerhoff Australia (2010) (Appendix E to the APC), to assess the impacts of the rail line realignment on surface water and groundwater. The proposed rail line will now cross Horse Creek upstream of the crossing identified in the EIS and at a point outside ML70403. The technical report states that the flood modelling does not include the new rail line alignment as it is outside the originally defined CRM site boundary.

BMA's APC states that further work will be undertaken in the detailed design stage to quantify the flood impacts of the new alignment. Redesigned elements would need to consider at least the adequacy of levies and cross drainage structures.

As surface water impacts and flooding were assessed in the Coordinator General's report, with designs to be submitted prior to the EA taking effect, it is conditioned that BMA extend the flood model and submit updated designs to DERM for approval prior to the commencement of construction of works on the rail spur outside of the ML. (Appendix 1, Schedule 2, Condition 1). The boundary for the model is to include the new rail line alignment and determine if any additional cross drainage structures are required due to the additional length of the rail line outside the CRM mine site boundary.

5.7 Cultural heritage

It is noted that the cultural heritage management plan (CHMP) for the CRM was signed by BaradaBarna (BB) Claim Group and BMA in June 2010 and registered with DERM.

The BB conducted an Indigenous cultural heritage inspection of the proposed rail line corridor. Appendix H of the APC contains the technical assessment, noting that some artefacts may not have been identified at eight locations due to low visibility of the area, and future monitoring was recommended. Items of cultural heritage significance found were relocated, except for trees. BMA has advised that these trees will be avoided during construction.

The clearance recommended that, in the event of any cultural material being found during disturbance, the Woorra Consulting Cultural Coordinator should be contacted immediately.

The importance of this issue is recognised by the Coordinator-General and accordingly a recommendation has been included in this report on this matter at Appendix 2, Recommendation 3 .

The technical assessment conducted by Converge in 2010 addressing non-Indigenous cultural heritage along the rail line alignment (refer to Appendix I of the APC). The survey along the corridor identified no sites of non-indigenous cultural heritage significance. Therefore, the Coordinator-General acknowledges that the rail line places no further impacts on known sites of non-indigenous significance. It is noted that the EM plan contains management strategies in the event of an incidental find.

5.8 Matters of national environmental significance

Matters of national environmental significance (MNES) were addressed in the EIS, SEIS and the Coordinator-General's report. Desktop analysis and field surveys conducted for the EIS found six EPBC-Act-listed threatened fauna species and two EECs occurring in the CRM study area. Condition 3(b)–(d) was imposed in the Coordinator-General's report to address potential adverse impacts on these species and communities. It is noted that the rail line alignment shown in the EIS evaluated by

the Coordinator-General contained none of the listed threatened fauna or flora species or EECs.

The Commonwealth approved the CRM project by decision notice dated 18 March 2011, subject to 12 conditions relating to the proposed clearing of brigalow and bluegrass and impacts on threatened fauna species.

The APC contains results of the proponent's examination of the impact of the realignment of the rail line on MNES under the EPBC Act. The APC states that the search of the EPBC Act Protected Matters database and aerial photograph interpretation information indicates that threatened ecological communities may be present within the proposed rail line realignment. The database search also indicated that *Cycas ophiolitica* individuals or habitat may occur along the alignment. This a small cycad plant listed as a threatened flora species under the EPBC Act and subject to the National Multi-species Recovery Plan for cycads (Queensland Herbarium 2007) under the EPBS Act). In addition, the proponent concluded that other threatened fauna species of conservation significance under the EPBC Act may occur in the proposed alignment due to the occurrence of woodland, open forest and grasslands along the alignment.

BMA concluded in its APC that the realigned rail corridor will not have a net negative impact MNES, as the mitigation and compensatory measures outlined in the EIS, SEIS and project conditions for flora and fauna species and habitat will still be implemented to ensure any potential impacts are identified and managed during development and operation of the proposed alignment.

On 3 November 2011, BMA provided SEWPaC with relevant information on the requested change to the project. BMA considers that the proposed rail line alignment does not require a variation to the existing Commonwealth approval or a separate referral under the EPBC Act.

The Coordinator-General referred the APC to the Commonwealth as part of this decision-making process. The Coordinator-General requested comment from SEWPaC as an advisory agency, due to its interest in the rail infrastructure's impacts on MNES. SEWPaC did not raise concerns with the proposal proceeding and advised that it had no comment on the requested change as it relates to MNES and the EPBC Act conditions of approval for the project dated 18 March 2011.

5.8.1 Coordinator-General's conclusion

The Coordinator-General has evaluated the information provided by the proponent and SEWPaC regarding MNES and acknowledges that the existing conditions contained in the Commonwealth's decision notice dated 18 March 2011 are applicable to the project change.

This report requires the proponent to conduct on-ground field surveys to confirm desk top studies and aerial photograph (Appendix 1, Schedule 1, Condition 2). Should these investigations identify the presence of threatened flora and/or fauna species or EPBC-Act-listed threatened ecological communities, it is recommended that the proponent should advise SEWPaC of the location to update the database and mapping.

Condition 1 of the Commonwealth's approval limited the clearing of brigalow to 25.2 hectares and bluegrass to 124.6 hectares for the entire CRM project. Should these communities be found in the new alignment and require clearing resulting in an exceedance of the project's stated limits, the proponent is required to advise SEWPaC before commencing operations (including early works) and request a variation to the areas in Condition 1 of SEWPaC's existing condition.

5.9 Other approvals

The change proposed by BMA requires an evaluation and decision by the Coordinator-General under the project change process in the SDPWO Act. The change requires amendments to the conditions in the Coordinator-General's report for CRM. The conditions set out in Appendix 1, Schedule 1 and Schedule 4, and recommendations in Schedule 5 of the Coordinator-General's report apply to the CRM project and to remove any uncertainty, it is clarified that any conditions and recommendations for the CRM in these Schedules of the Coordinator-General's report are to apply to the proposed rail line component of the project.

Section 4.5 of the Coordinator General's report outlined a number of state government approvals, which may be required for CRM activities off the MLs. It is confirmed that any approvals for the CRM listed in the Coordinator-General's report are to apply to the proposed new rail line component of the project. They are as follows:

- permit to interfere with native wildlife (flora and fauna)—NC Act
- development permit for waterway barrier works (off ML)—SPA and *Fisheries Act 1994* (Qld)
- taking or interfering with artesian or sub-artesian water (i.e. construction of groundwater bores) (off ML)—SPA and *Water Act 2000* (Qld)
- permit to work in or interfere with a state-controlled road—*Transport Infrastructure Act 1994* (Qld)
- CHMP—*Aboriginal Cultural Heritage Act 2003* (Qld).

TMR has no further approvals for the proposed change to the project. The proponent is to take note of the comments on the SEIS provided by TMR in December 2009 in relation to this change. The Coordinator-General is satisfied that the existing conditions in the Coordinator-General's report relating to transport and traffic issues are applicable to the proposed change to the project.

DERM has recommended that the proponent comply with the provisions of the NC Act for the clearing of protected plants, and the Nature Conservation (Wildlife Management) Regulation 2006 for the disturbance or removal of a breeding place. Condition 3 (Appendix 1, Schedule 1, Part 1 of the Coordinator-General's report), requiring a threatened flora and fauna species and ecological communities management plan, deals with these matters sufficiently. In addition, Condition H1 (Appendix 1, Schedule 3 of the Coordinator-General's report) required a person qualified as a fauna/flora spotter and catcher to work ahead of site clearing works during vegetation clearing activities. This condition has now been attached to the issued EA.

Existing power supply infrastructure will be affected by the project. The rail line will cross a Powerlink easement containing and existing 132 kV transmission line contained in a corridor, which runs between Moranbah and Mount McLaren. The rail line crosses the easement 1.5 kilometres east of the point where the rail line is proposed to join the Blair Athol line at the location shown on the plans in Appendix C of the APC. Assessment of the impact on existing power supply infrastructure must be undertaken in consultation with the infrastructure owner Powerlink Queensland.

Powerlink has informed the Coordinator-General that while there is no objection to the rail line alignment across the easement, BMA is required to supply Powerlink with design documentation electronically (3D DXF or equivalent of RLs AHD and MGA GDA94) to allow Powerlink to undertake a full technical assessment of the proposed rail line alignment to address issues including vertical clearances to conductors, horizontal clearances to towers and access and maintenance regimes for both the transmission line corridor and proposed rail line.

The proponent has been supplied with generic requirements for undertaking work within the vicinity of high-voltage electrical installations and infrastructure owned by Powerlink. Design and construction of the rail line through the Powerlink easement is to occur in accordance with these conditions as well as the provisions of the *Electricity Act 1994* (Qld), *Electrical Safety Act 2002* (Qld), Electrical Safety Regulations 2002 (Qld) and the terms and conditions of the registered easement.

In the supplementary information supplied on 18 January 2012, BMA advised that it is preparing information for an application to be submitted to Powerlink for the co-use of the registered easement. (BMA 2012). Consequently, the Coordinator-General is satisfied that processes are in place to appropriately manage the interactions in the construction and operation of the new rail spur and the existing transmission line. Therefore, no additional or changed conditions or recommendations on this matter are required.

6 Conclusion

Pursuant to section 35I of the SDPWO Act, the evaluation of the BMA APC, dated 16 August 2011, concludes the following.

On 16 August 2011, BMA, the proponent for the project, applied to the Coordinator-General for a change to the project, being the realignment of the CRM rail line to a location outside the project site, as described by the EIS and Coordinator-General's report.

BMA applied in October 2011 to the Isaac Regional Council for a RoL over Lot 1 on RP616897, Lot 16 on SP163605 and Lot 12 on SP 151669 to create a separate allotment to contain the CRM rail line in its own allotment and create a rail corridor over land owned by BMA. The Council, in considering the development application for RoL, will assess the application and, should it be approved the Council, will condition the RoL development approval.

It is concluded that, on the whole, the nature of impacts that may result from the proposed change to the project are limited to the range of impacts as assessed in the Coordinator-General's report of August 2010. It is determined that the revised and new conditions described in Appendix 1 and general recommendations in Appendix 2 of this report will suitably mitigate impacts relating to construction and operation of the rail line along the new alignment should the RoL be approved by the Council.

The rail line component of the CRM project must be constructed and operated in accordance with existing conditions as made in the Coordinator-General's report, and new and revised conditions contained in subsequent change reports, including this document.

6.1 Revised conditions and recommendations

Conditions and general recommendations made in this report are made pursuant to section 35I(2) of the SDPWO Act.

The Coordinator-General concludes that two conditions should be reworded, new conditions stated and imposed, and new general recommendations made.

New and revised conditions are provided in Appendix 1 of this change report, and new recommendations are provided in Appendix 2.

6.2 Distribution of change report

Pursuant to section 35J of the SDPWO Act, a copy of this report will be given to the proponent, and be made publicly available on the Department of Employment, Economic Development and Innovation's website at:

<http://projects.industry.qld.gov.au>

As per section 35K of the SDPWO Act, the Coordinator-General's report on the EIS for the project, and the Coordinator-General's change reports, both have effect for the project. However, if the reports conflict, this Coordinator-General's change report prevails to the extent of the inconsistency.

Appendix 1. New/amended conditions

SCHEDULE 1: IMPOSED CONDITIONS

This schedule includes conditions imposed by the Coordinator-General under section 35I(2)(d) of the SDPWO Act. The conditions are relevant to applications for development approvals for those parts of the project where there is no relevant approval applicable under other legislation.

All of the conditions imposed in this schedule take effect from the date of this Coordinator-General's change report.

These conditions do not relieve the proponent of the obligation to obtain all approvals and licences from all relevant authorities required under any other Act.

In accordance with section 54B(3) of the SDPWO Act, the Coordinator-General has nominated entities as having jurisdiction for the conditions in this schedule.

Pursuant to section 54D of the SDPWO Act, these conditions apply to anyone who undertakes the project, such as the proponent and an agent, contractor, subcontractor or licensee of the proponent, and any public utility providers undertaking public utility works as a result of the project.

Condition 1– Environmental Management (EM) Plan

- a) The Construction EM Plan for the Caval Ridge Mine (CRM) is to be updated to account for the rail line realignment.
- b) Any updates of the EM plan in a) are to be certified by the environmental management representative (EMR) as being in accordance with conditions made on the project.
- c) A copy of the updated EM plan certified in b) by the EMR, is to be provided to the Department of Environment and Resource Management (DERM) at least five business days before construction works (including early works) for the rail line and drainage culverts over the two mapped drainage lines commence.
- d) DERM is nominated as the entity with jurisdiction for this condition.

Condition 2 - Field surveys

- a) The proponent must:
 - i. conduct on-ground field survey(s) of the new rail alignment, applying the methodology and scope consistent with the flora and fauna surveys for a single season required in sections 3.5.1, 3.5.2.1 and 3.5.4.1 of the '*Terms of Reference for an EIS for the Bowen Basin Coal Growth Project*', dated November 2008
 - ii. provide the results of the field survey(s) to DERM before the construction works on the rail line commence, including early works
 - iii. amend both the EM Plan and the '*Threatened Flora and Fauna Species and Ecological Communities Management Plan*' in accordance with any recommendations made by DERM following review of the field surveys

- iv. confirm to DERM any net changes to areas of listed regional ecosystems (REs) to be cleared for the proposed realignment
 - v. update Table 4 in the Coordinator General's report showing estimates of REs to be cleared for the CRM
 - vi. update the 'Offset Strategy' in accordance with the area adjustments made under a) v. for approval by DERM before the commencement of early works for construction of the rail line or mining operations
 - vii. report to the Australian Government department responsible for the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) any flora or fauna species or ecological communities listed under the EPBC Act that are identified by the surveys conducted under a) i. .
- b) Should the proponent receive no recommendations from DERM in accordance with a)iii. within 30 days of lodgement of the field surveys, then no further DERM recommendations will be deemed to apply to the proponent's finalisation of the EM Plan and Threatened Flora and Fauna Species and Ecological Communities Management Plan.
 - c) Should the proponent receive no recommendations from DERM about the update of the 'Offset Strategy' in accordance with a)vi. within 30 days of lodgement of the revised 'Offset Strategy', then the 'Offset Strategy' will be deemed to be approved.
 - d) DERM is nominated as the entity for this condition with the Australian Government department responsible for the EPBC Act as a consultative agency.

Condition 3– Project commitments

- a) The proponent commitments documented in Appendix 3 of this Change Report must be adhered to by the proponent in the undertaking of the project activities.
- b) The Coordinator-General is responsible for this condition in consultation with DERM, the Isaac Regional Council and Woorra Consulting's Cultural Coordinator for the CRM.

Condition 4 – General condition regarding project scope

- a) Replace the Coordinator-General's Report Appendix 1, Schedule 1, Condition 1(a) with:
 - i. *'The project must be carried out generally in accordance with the Caval Ridge Coal Mine Project Environmental Impact Statement (EIS) (July 2009) for the project; the Caval Ridge Coal Mine Project EIS Supplementary Report (SEIS) for the project (November 2009); the Bowen Basin Coal Growth Project: Caval Ridge Mine Coordinator-General's Evaluation Report for an environmental impact statement (August 2010); the Coordinator-General Change Application Evaluation Report (November 2010), the Coordinator-General Change Application Evaluation Report (February 2011), the Coordinator-General Change Application Evaluation Report (July 2011), the Coordinator-General Change Application Evaluation Report (September 2011), and the Coordinator-General Change Application Evaluation Report (April 2012).*

- ii. *To the extent that there are any inconsistencies between the documents in i., the later document will prevail.”*

b) The Coordinator-General has jurisdiction for this condition.

SCHEDULE 2: STATED CONDITIONS

This schedule includes the Coordinator-General’s stated conditions, stated under section 351(2)(a) of the SDPWO Act.

Condition 1- Flood model

a) Add to Appendix 1 Schedule 1, Condition 2:

‘(e) The proponent must:

- i. *extend the flood model of Horse Creek to include the proposed rail alignment*
- ii. *on the basis of the revised and extended flood model for Horse Creek, submit to DERM for approval any plans required for redesigned levies or additional cross drainage structures, prior to commencement of construction works on the railway outside of the mining lease boundary.*

(f) Should the proponent receive no recommendations from DERM about the redesign of levies or cross drainage in accordance with (e)ii. within 30 days of lodgement of the revised plans, then the new plans will be deemed to be approved.’

b) DERM is nominated as the concurrence agency for this condition.

Appendix 2. New general recommendations

This appendix includes general recommendations. The recommendations relate to the applications for development approvals for the project.

While the recommendations guide the assessment managers¹ in assessing the development applications, they do not limit their ability to seek additional information or state conditions on any development approval required for the project.

Recommendation 1 – Biodiversity values mapping

The proponent is to provide the proposed rail alignment in a digital format to DERM so that DERM can conduct a full assessment to ensure that there will be no net negative impacts on biodiversity values as a result of the realignment. This digital information should be provided to DERM prior to the commencement of any early works for the rail line.

Recommendation 2– Strategic Cropping Land

The Strategic Cropping Land Trigger Map for Lot 1 RP616897 shows that the proposed rail alignment impacts and fragments an area where SCL may exist, subject to on-ground assessment, within the 'Western Cropping Zone Strategic Cropping Management Area'.

It is recommended that the proponent review the DERM SCL online mapping, conduct an on-ground assessment to verify if the alignment of the rail impacts potential strategic cropping land and submit findings to DERM for assessment against the criteria in the SCL Act. It is recommended that this occur before commencement of construction of the rail line over the potential SCL on Lot 1 RP616897. If the assessment verifies SCL then it is recommended that the proponent liaise with DERM and work within the SCL Act.

Recommendation 3– Indigenous cultural heritage

It is recommended that if unexpected cultural heritage material or sites are found during early works, the construction works or maintenance task during operation of the rail line, the strategies detailed in the EIS, SEIS, EM plan and the CHMP are to be followed.

¹ For a definition of 'assessment manager' refer to the Glossary of this report.

Appendix 3. Proponent commitments

The following statements were made by BMA in its application for project change and in supplementary information provided on 20 October 2011. Condition 1(c) of Appendix 1, Schedule 1, Part 1 of the Coordinator-General's report has been amended in Appendix 1, Schedule 1, Condition 3 of this change report to recognise these statements as additional commitments:

- (1) BMA will continue to support grazing on either side of the rail corridor on Lot 16 SP163605 and Lot 12 SP151669 now owned by BMA.
- (2) Impact mechanisms (namely clearing, construction activities and project operation) as identified in the EIS, will also apply to the proposed rail line alignment. Mitigation and compensatory measures outlined in the EIS and SEIS will still be implemented to ensure any potential impacts are identified and managed appropriately. (source: Section 3.4.5 Ecology)
- (3) BMA will manage the occupancy of noise affected receptors acquired on Lot 1 RP616897 and Lot 12 SP151669 to meet operational and environmental requirements. (source: Table 3-7 Potential Noise impacts)
- (4) Where any cultural heritage material is found during disturbance, Woorra Consulting's cultural coordinator will be contacted immediately. This procedure will be documented in the construction environmental management plan. (source: Table 3.8 Potential cultural heritage impacts)
- (5) BMA continues its commitment to implement a greenhouse gas management plan in accordance with Condition 12, Schedule 1, Appendix 1 of the Coordinator-General's report. (source: Section 3.4.14 Greenhouse gas emissions)

Acronyms and abbreviations

The following acronyms and abbreviations have been used in this report:

Acronym/abbreviation	Definition
ALC	Agricultural Land Class
APC	application for project change
BB	BaradaBarna (Native Title claimants)
BBCG	Bowen Basin Coal Growth project—defined in section 2.2.1 of the Coordinator-General's report August 2010
BMA	BHP Billiton Mitsubishi Alliance Coal Operations Pty Ltd—the proponent, as manager and agent on behalf of the Central Queensland Coal Associates Joint Venture
CHMP	cultural heritage management plan
CHPP	coal handling and preparation plant
CRM	Caval Ridge Mine – as defined in the EIS, SEIS and section 2.2.2 of the Coordinator-General's report August 2010, part of BMA's Bowen Basin Coal Growth project.
DEEDI	Department of Employment, Economic Development and Innovation
DERM	Department of Environment and Resource Management
EA	environmental authority (under the EP Act)
EEC	endangered ecological communities (EPBC Act, MNES)
EIA	environmental impact assessment
EIS	environmental impact statement—for the Bowen Basin Coal Growth Project, Caval Ridge Mine (July 2009) prepared by BMA
EM plan	environmental management plan—under the EP Act
EP Act	<i>Environmental Protection Act 1994</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cwth)
EPP	Environmental Protection Policy
GQAL	good quality agricultural land
MNES	matters of national environmental significance (under the EPBC Act)
ML	Mining Lease under the MRA
MRA	<i>Mineral Resources Act 1989</i>
Mt	million tonnes
Mtpa	million tonnes per annum
NC Act	<i>Nature Conservation Act 1992</i>
RE	regional ecosystem – under the VM Act
RoL	reconfiguration of a lot (under SPA)
ROM	run-of-mine
SCL	strategic cropping land
SCL Act	<i>Strategic Cropping Land Act 2011</i>
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i> (Qld)

SEIS	supplementary environmental impact statement—for the Caval Ridge Mine of the Bowen Basin Coal Growth Project (November 2009) prepared by BMA
SEWPaC	Australian Government Department of Sustainability, Environment, Water, Population and Communities
SIMP	Social Impact Management Plan
SPA	<i>Sustainable Planning Act 2009</i> (Qld)
SPP	State Planning Policy
TLO	train load out
TMR	Department of Transport and Main Roads
VM Act	<i>Vegetation Management Act 1999</i> (Qld)

Glossary

The following terms have been used in this report:

‘assessment manager’ for an application for a development approval, means the assessment manager under the *Sustainable Planning Act 2009* (Qld)

‘Commencement of Operations’ means any works required to be undertaken in relation to the Caval Ridge Mine Project

‘Commonwealth Minister’ means the Minister responsible for the *Environment and Protection and Biodiversity Conservation Act 1999*

‘Construction Works’ means all works necessary for the construction of the Project, including demolition of existing buildings and structures, site preparation, Public Utility Works and associated road works.

‘EM plan’ means an environmental management plan or plans, including any sub-plans, for the Project.

‘Coordinator-General’ means the corporation sole constituted under section 8A of the *State Development and Public Works Organisation Act 1938* and preserved, continued in existence and constituted under section 8 of the SDPWO Act.

‘Early Works’ includes:

- Vegetation clearing and construction activities related to the rail line
- Vegetation clearing and construction activities related to construction site offices, laydown areas, and ablution facilities
- Road construction and intersection upgrades for the rail line and mine site
- Installation of environmental monitoring equipment and services.

‘Proponent’ means the entity responsible for the procurement, construction and operation of the BBCG project and Caval Ridge Mine, i.e. BMA.

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