

Approval

Red Hill Mining Project (EPBC 2013/6865)

This decision is made under sections 130(1) and 133 of the Environment Protection and Biodiversity Conservation Act 1999.

Proposed action

person to whom the approval is granted	BM Coal Alliance Operations Pty Ltd
proponent's ABN	67 096 412 752
proposed action	to extend three longwall panels (14, 15 and 16) of the existing Broadmeadow underground mine, expand the existing Goonyella Riverside Mine and develop a future Red Hill Mine underground expansion, approximately 20 kilometres north of Moranbah, Queensland [See EPBC Act referral 2013/6865]

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 and 18A)	Approved
A water resource in relation to coal seam gas development and large coal mining development (sections 24D and 24E)	Approved

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 December 2052

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name and position

Deb Callister

Assistant Secretary

Assessment and Policy Implementation Branch

signature

date of decision

| 3 August 2015

Conditions attached to the approval

Disturbance limits

1. For the purposes of the action, the approval must not take any action outside the areas designated as the **project stages** in **Annexure 1**.

EPBC Species Impact Management Plan

- 2. Prior to the **commencement** of the **action**, the **approval holder** must prepare and submit an EPBC Act Species Impact Management Plan (SIMP) for the **Minister's** written approval. The SIMP must include:
 - a. measures that will be taken to avoid, mitigate and manage impacts to **EPBC Act listed threatened species** and their habitat during clearance of vegetation, including the involvement of a **suitably qualified person** at all times;
 - b. measures that will be taken to avoid, mitigate and manage impacts to EPBC Act listed threatened species and communities and their habitat during construction, operation and decommissioning of the action; including, but not limited to, changes in hydrology as a result of subsidence;
 - c. a monitoring program to determine the success of mitigation and management measures to ensure adaptive management for the duration of this approval. The monitoring program must provide sufficient baseline data to quantify likely impacts on EPBC Act listed threatened species and communities and their habitat resulting from the action; including, but not limited to, changes in hydrology as a result of subsidence. In order to set habitat management goals, baseline data collection and monitoring must be undertaken by suitably qualified experts.
 - d. a schedule of regular reporting to the Department of the details and outcomes of the monitoring programs, including the actual **impacts** on **EPBC Act listed threatened species and communities** and their habitat resulting from the **action**; including, but not limited to, **changes in hydrology** as a result of **subsidence**; and
 - e. details of how measures proposed in the SIMP are consistent with the measures in relevant **conservation advice**, **recovery plans** and **threat abatement plans**.
- 3. The approval holder must not **commence** the **action** until the SIMP has been approved by the **Minister** in writing. The approved SIMP must be implemented by the **approval holder**.

Pre-clearance surveys

- 4. The approval holder must undertake pre-clearance surveys of proposed disturbance areas. A report of pre-clearance surveys for each project stage must be submitted to the Department prior to the commencement of each project stage.
- 5. **Pre-clearance surveys** must be supervised by a **suitably qualified person** and undertaken in accordance with the **Department's survey guidelines** in effect at the time of the survey or other survey methodology endorsed by the **Department** in writing.

6. If EPBC Act listed threatened species and communities and/or habitat of an EPBC Act listed threatened species and communities not previously identified and reported to the Department is found in the project area, the approval holder must notify the Department in writing within five business days of finding any EPBC Act listed threatened species and communities and/or habitat, and within 20 business days of finding this EPBC Act listed threatened species and communities and/or habitat, describe in writing how the approval holder will avoid, mitigate and offset impacts, including but not limited to impacts from clearing and subsidence, to the EPBC Act listed threatened species and communities and/or habitat.

Offsets

7. The **approval holder** must provide environmental offsets for authorised unavoidable **impacts** on **EPBC Act threatened species and communities** and their habitat for individual **project stages** of mine development as detailed in Table 1 including, but not limited to, impacts from clearing and **subsidence**. The **approval holder** must ensure that environmental offsets comply with the **EPBC Act Environmental Offsets Policy**.

Table 1 – Authorised unavoidable impacts for each project stage

Project Stage	MNES	Impact
Stage 1 – Broadmeadow underground mine extension	Threatened Species	(ha of habitat)
	Ornamental Snake (Denisonia maculata)	25.76
	Koala (Phascolarctos cinereus)	72.43
Stage 2 – Red Hill Accommodation village, the expansion of Goonyella Riverside Mine and initial works (including the extraction of coal on Mining Lease 1763) for the Red Hill Mine underground	Threatened Species	(ha of habitat)
	Squatter Pigeon (Geophaps scripta scripta)	239.23
	Ornamental Snake (Denisonia maculata)	360.5
	Koala (Phascolarctos cinereus)	545.75
expansion	Threatened Communities	(ha)
	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	298.14
	Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin	117.54
Stage 3 – Red Hill Mine underground expansion (including the extraction of coal on Mining Lease 70421)	Threatened Species	(ha of habitat)
	Squatter Pigeon (Geophaps scripta scripta)	12.77
	Bluegrass (Dichanthium setosum)	117.54
	Ornamental Snake (Denisonia maculata)	803.04
	Koala (Phascolarctos cinereus)	898.26
	Threatened Community	(ha)
	Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	70.62

- 8. Prior to the **commencement** of the **action**, the **approval holder** must submit a Biodiversity Offset Plan (BOP) to the **Minister** for approval which must demonstrate how the impacts associated with **Stage 1**, as identified in Table 1, have been addressed. The action must not **commence** until the BOP for **Stage 1**, as identified in Table 1, has been approved in writing by the **Minister**.
- 9. Prior to the commencement of each subsequent project stage, the approval holder must submit a revised BOP to the Minister for approval which must demonstrate how the impacts required for the particular project stage on EPBC Act listed threatened species and communities and their habitat, as identified in Table 1, have been provided. The approval holder must not commence a project stage until the revised BOP for that stage has been approved in writing by the Minister.
- 10. The BOP, and any revised version of the BOP to address a subsequent **project stage**, must include the following:
 - a. detailed baseline description of offset areas, including surveys undertaken, condition of existing EPBC Act threatened species and communities and their habitat, relevant environmental values, area of habitat for each EPBC Act listed threatened species and communities including maps in electronic Geographic Information System (GIS) format;
 - b. how the offset areas provide connectivity with other habitat areas and biodiversity corridors;
 - c. conservation and management measures for long term protection;
 - d. a weed management plan;
 - e. a monitoring program for the offset site/s suitable to measure the success of the management measures against stated performance criteria including monitoring locations, parameters and timing;
 - f. a description of the potential risks to the successful implementation of the BOP, and details of contingency measures that will be implemented to mitigate these risks and the triggers for implementing contingency measures;
 - g. a table setting out how the BOP is consistent with relevant **recovery plans**, **threat abatement plans**, **conservation advices** and the SIMP:
 - h. detail of how the BOP will be revised and provided to the **Minister** for approval prior to **commencement** of each remaining **project stage** including timeframes for revision that allow three months for review and approval of the plan; and
 - i. demonstration as to how offsets for any subsequent project stage(s) are additional to the offsets already secured for any previous project stage(s), and how this contributes to a larger strategic offset to compensate for impacts from the action on EPBC Act threatened species and communities.

Note 1: An approved Biodiversity Offset Plan is also required by the State government. If a combined document to address both State and **EPBC** Act approval conditions is submitted it must include a table setting out where in the BOP the relevant EPBC conditions are addressed.

11. The approval holder must implement the BOP most recently approved by the Minister.

- 12. The approval holder must deliver environmental offsets compensating for impacts to project stages as reflected in Table 1 prior to the commencement of that project stage. The approval holder must legally secure these offset areas in accordance with Queensland legislation within two years of the commencement of that project stage and prior to the commencement any subsequent project stage.
- 13. Where the approval holder has demonstrated to the Minister's written approval through long-term monitoring, comparison with baseline data (as required under Condition 2c of this approval) and peer-review that changes in hydrology as a result of subsidence has not resulted in impacts on EPBC Act listed threatened species and communities and their habitat as outlined in Table 1, offsets may be recalculated to reflect these changes to impacts as outlined Table 1 and the resulting balance made available as an advanced offset for another project approved under the EPBC Act, as determined by the approval holder and with the written agreement of the Minister.

Water management and monitoring

- 14. The approval holder must manage impacts to water resources in accordance with the requirements of any conditions to be imposed by the authority responsible for administering the Water Act 2000 (Qld) and in accordance with Conditions 9, 10 and 11 imposed by the Queensland Coordinator-General under Section 54B of the State Development and Public Works Organisation Act 1971 (Qld) as outlined in Appendix 1 of the Coordinator-General's evaluation report on the environmental impact assessment for the Red Hill Mining Lease project.
- 15. The **approval holder** must make monitoring data available to the **Department** and **Queensland Government authorities** (if requested) for inclusion in any cumulative impact assessment, regional water balance model, bioregional assessment or relevant research.

Standard conditions

- 16. Within 30 days after the **commencement** of the action, the **approval holder** must advise the **Department** in writing of the actual date of commencement.
- 17. The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of this approval, including measures taken to implement the plans required by this approval, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions of this approval. Summaries of audits may be posted on the **Department**'s website. The results of audits may also be publicised through the general media.
- 18. By 1 October of each year after the **commencement** of the **action**, the **approval holder** must publish a report on its website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management plans as specified in the conditions. The **approval holder** may discontinue publishing annual compliance reports with the written agreement of the **Minister**.
- 19. Non-compliance with any of the conditions of this approval must be reported to the **Department** within 48 hours of discovery by the **approval holder**.
- 20. If the **approval holder** wishes to carry out any activity otherwise than in accordance with the plans specified in the conditions, the **approval holder** must submit to the **Department** for the

Minister's written approval a revised version of that plan. The **approval holder** must not commence the varied activity until the **Minister** has approved the varied plan in writing. The **Minister** will not approve a varied plan unless the revised plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised plan, the **approval holder** must implement that plan in place of the plan previously approved.

- 21. If the Minister believes that it is necessary or convenient for the protection of the environment to do so, the Minister may request that the person taking the action make specified revisions to the plans specified in the conditions and submit the revised plan or strategy for the Minister's written approval. The person taking the action must comply with any such request. The approval holder must implement the revised approved plan. Unless the Minister has approved the revised plan, then the approval holder must continue to implement the plan previously approved, as specified in the conditions.
- 22. If, at any time after 7 years from the date of this approval, the **approval holder** has not substantially **commenced** the **action**, then the **approval holder** must not **commence** the **action** without the written agreement of the **Minister**.
- 23. Unless otherwise agreed to in writing by the **Minister**, the **approval holder** must publish all plans, reports and **pre-clearance surveys** referred to in these conditions of approval on its website. Each plan must be published on the website within 1 month of being approved each report must be published on the website within 1 month of being submitted to the **Department** and each **pre-clearance survey** must be published on the website within 1 month of being undertaken. All must remain published for the life of the approval.
- 24. Unless otherwise agreed to in writing by the **Minister**, the **approval holder** must provide a copy of any approved plan, report or **pre-clearance survey** referred to in these conditions of approval to members of the public upon request. Copies must be provided within a reasonable time of the request.

Definitions

Action: The construction and operation of the Red Hill Mining Lease Project, declared a Coordinated Project under the *State Development and Public Works Organisation Act 1971* and as referred under the **EPBC Act** (EPBC 2013/6865).

Approval holder: The person to whom the approval is granted or any person acting on their behalf, or to whom the approval is transferred under section 145B of the **EPBC Act**.

Bluegrass: Bluegrass (*Dichanthium spp.*) listed as a threatened species under the **EPBC Act**.

Bluegrass Habitat: Habitat associated with heavy basaltic black soils and stony red-brown hard-setting loam with clay subsoil that is identified on the site as **Regional Ecosystem** (RE) 11.8.11.

Note: This species forms part of the Natural grasslands of the QLD Central Highlands and the northern Fitzroy Basin TEC.

Brigalow: Brigalow (*Acacia harpophylla* dominant and co-dominant), the threatened ecological community listed under the **EPBC Act**.

Changes in hydrology: means changes in the movement, distribution or quality of water including but not limited to changes to surface water flows, changes to groundwater levels and changes to groundwater-surface water connectivity.

Commence/Commenced/commencement: the first instance of any specified activity. Unless the activity is specifically defined for the purposes of these conditions, commencement of an activity includes any physical disturbance including clearing of vegetation, earthworks, new road works, new rail works, construction of new camps, development of mining associated infrastructure and **mining operations**. Commencement does not include:

- (a) erection of signage or fencing;
- (b) minor physical disturbance necessary to undertake pre-clearance surveys or establish monitoring programs or associated with the mobilisation of the plant, equipment, materials, machinery and personnel prior to the start of construction;
- (c) weed and fire management activities if such activities will have no adverse impact on MNES; or
- (d) activities that are critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel prior to the start of railway or road development or construction only if such activities will have no adverse impact on MNES.

Conservation advice: a conservation advice approved by the Minister under the EPBC Act.

Department: the Australian Government Department administering the EPBC Act.

Department's survey guidelines:

Matters of National Environmental Significance, Significant Impact Guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999 - http://www.environment.gov.au/epbc/publications/nes-guidelines.html.

Survey Guidelines for Australia's Threatened Frogs, Threatened Birds, Threatened Fish, Threatened Mammals, Threatened Reptiles and Threatened Bats: http://www.environment.gov.au/epbc/guidelines-policies.html.

EPBC Act: the Environment Protection and Biodiversity Conservation Act 1999 (Cth).

EPBC Act Environmental Offsets Policy: the *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy (October 2012), or subsequent revision, including the Offsets Assessment Guide.

EPBC Act listed community: an ecological community listed under the EPBC Act.

EPBC Act listed threatened species: a flora or fauna species listed under the EPBC Act.

EPBC Act listed threatened species and communities: an EPBC listed threatened species and/or EPBC Act listed community.

Impact/s/ed: has the definition assigned to it in section 527E of the EPBC Act.

Koala: the Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) listed as a threatened species under the **EPBC Act**.

Koala Habitat: any forest or woodland containing species that are **koala food trees**, or any shrubland with emergent **koala food trees**.

koala food trees: trees of any of the following genera: (a) *Angophora*; (b) *Corymbia*; (c) *Eucalyptus*; (d) *Lophostemon*; (e) *Melaleuca*.

Legally secure: to secure a covenant or similar legal agreement in relation to a site, to provide enduring protection for the site against developments incompatible with conservation.

Mining operations: the extraction of coal from the ground as well as any immediately associated activities, including initial clearing of vegetation, removal and storage of overburden, storage of ore and dewatering, but not including exploratory surveys or the construction or operation of transport, accommodation or power generation infrastructure.

Minister: the Minister administering the EPBC Act and includes a delegate of the Minister.

Natural Grasslands of the Queensland Central Highlands and the northern Fitzroy Basin: the threatened ecological community listed under the EPBC Act.

Ornamental Snake: the Ornamental Snake (*Denisonia maculata*), listed as a threatened species under the EPBC Act.

Ornamental Snake Habitat means:

- Woodland or open forest habitat which is included within any QLD Regional Ecosystem on Land Zone 4 and supports gilgai (melon-hole) mounds and depressions; or
- Woodland or open forest habitat which is included within any QLD Regional Ecosystem on Land Zone 3 or 4, or an area of mapped regrowth on Land Zone 3 or 4, which is within 200m of a mapped wetland or a ≥4th order stream (as mapped by the QLD Govt.) and supports an abundance of fallen logs (>30cm in diameter) of >10 per 100m x 100m sample plot.

Peer review: evaluation of scientific, academic, or professional work, studies or data by independent **suitably qualified persons** working in the relevant field or subject matter.

Pre-clearance survey/s: surveys that are undertaken to locate EPBC listed threatened species and communities and habitat of EPBC listed threatened species in all areas of each project stage that could be disturbed by project activities.

Project stage/s: the Red Hill Mining Lease Project declared a Coordinated Project under the *State Development and Public Works Organisation Act 1971* consisting of the following stages:

- (a) Stage 1: the long wall Broadmeadow Mine extension to panels 14, 15 and 16;
- (b) Stage 2: Red Hill Accommodation village, the expansion of Goonyella Riverside Mine and initial works (including the extraction of coal on Mining Lease 1763) for the Red Hill Mine underground expansion; and
- (c) **Stage 3**: completion of Red Hill Mine underground expansion (including the extraction of coal on Mining Lease 70421).

The areas of these project stages are designated in **Annexure 1**.

Queensland Government authorities: Queensland Government authorities which have a role in regulating activities relating to water resources.

Regional ecosystem/s: A vegetation community in a bioregion that is consistently associated with a particular combination of geology, landform and soil. The Queensland Herbarium publishes a map of the regional ecosystems in Queensland and the map is available on the website of the department which administers Queensland's *Vegetation Management Act 1999*.

Recovery plan: a recovery plan made or adopted by the Minister under the EPBC Act.

Squatter Pigeon: the Squatter Pigeon (Southern) (*Geophaps scripta scripta*), listed as a threatened species under the **EPBC Act**.

Squatter Pigeon Habitat: Grassy woodland habitat which is included within any QLD Regional Ecosystem on Land Zone 3, 5, or 7, which is either:

- within 1km of a permanent water body; or
- within 1km of a wetland or a $\ge 3^{rd}$ order stream (as mapped by the Queensland Government).

Subsidence: The totality of subsidence effects and subsidence impacts, as well as any clearing undertaken to manage subsidence effects and subsidence impacts, where:

- 'subsidence effects': means deformation of the ground mass due to mining, including all
 mining induced ground movements, such as vertical and horizontal displacement, tilt, strain
 and curvature; and
- 'subsidence impacts': means physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs.

Suitably qualified person/s: a person who has professional qualifications, training or skills and at least five years experience relevant to the nominated subject matters and can give reliable assessment, advice and analysis relevant to the subject matter using relevant protocols, standards, methods and/or literature.

Threat abatement plan: a threat abatement plan made or adopted by the **Minister** under the **EPBC Act**.

Annexure 1: Project stages

