



Australian Government
Department of the Environment

Approval

South Galilee Coal Project, South West of Alpha, Queensland (EPBC 2010/5496)

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 AMCI (Alpha) Pty Ltd

proponent's ACN 133 072 661

proposed project To construct and operate an open cut and underground mining operation and associated infrastructure including: coal handling and preparation plant, stockpile facilities, train load out facilities, service roads, haulage roads, rail loop, reject dam, settling ponds, accommodation village [See EPBC Act referral 2010/5496].

Proposed Approval decision

| Controlling Provision | Decision |
|---------------------------------------------------------------------------------------------------------------|-----------------|
| Listed threatened species and communities (sections 18 & 18A) | Approved |
| Listed migratory species (sections 20 & 20A) | Approved |
| A water resource, in relation to a coal seam gas development and large coal mining development (ss 24D & 24E) | Approved |

proposed conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval This approval has effect until 30 June 2055

Decision-maker

name and position Deb Callister
Assistant Secretary
Assessment and Policy Implementation Branch

signature

date of decision

15 July 2015

Conditions attached to the approval

Project area

1. For the purpose of the **action**, the **approval holder** must not take any action outside the areas identified as the South Galilee Coal Project mine footprint and MLA 70453 at Attachment A.

Habitat assessment

2. Prior to **commencement** of the **action**, the **approval holder** must undertake a Black-throated Finch (*Poephila cincta cincta*) **habitat assessment** of the **project area**. The Black-throated Finch **habitat assessment** must identify and map areas of Black-throated Finch **primary habitat** that will be **impacted** by the project.
3. The outcomes of the Black-throated Finch **habitat assessment** must be used to inform the Matters of National Environmental Significance Management Plan and the Offset Management Plan.

Management of impacts to listed threatened species and communities

4. The **approval holder** must prepare and submit a Matters of National Environmental Significance Management Plan (MNESMP) for the written approval of the **Minister**. The MNESMP must include:
 - (a) measures that will be taken to avoid, mitigate and manage **impacts to EPBC Act listed threatened species and communities** and their habitat during clearance of vegetation, including the use of a **suitably qualified independent expert** during clearance of vegetation;
 - (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 Project, including impacts associated with **subsidence** and changes in hydrology;
 - (c) details of how measures proposed in the MNESMP are consistent with the measures contained in relevant **conservation advice, recovery plans and threat abatement plans**;
 - (d) a program for monitoring the outcomes of mitigation and management measures to minimise **impacts to EPBC Act listed threatened species and communities** and their habitat to ensure **adaptive management** for the duration of the **approval**; and
 - (e) a schedule of regular reporting to the Department of the details and outcomes of the monitoring programs, including the actual **impacts** of the project on **EPBC Act listed threatened species and communities** and their habitat resulting from the effects of **subsidence** and changes in hydrology.
5. The **approval holder** must not **commence** the **action** until the MNESMP has been approved by the **Minister** in writing. The approved MNESMP must be implemented.

6. If an **EPBC Act listed threatened species and/or community/ies** and/or habitat of an **EPBC Act listed threatened species and/or community/ies** 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 this **EPBC Act listed threatened species and/or community/ies** and/or habitat, and within 20 business days of finding this **EPBC Act listed threatened species and/or community/ies** and/or habitat, describe in writing how the **approval holder** will avoid, mitigate and offset **impacts** to the **EPBC Act listed threatened species and/or community/ies** and/or habitat.

Offsets

7. The **approval holder** must provide environmental offsets for the project impacts set out in Table 1 and for the areas of Black-throated Finch habitat determined to be impacted through the assessment at condition 2.
8. The **approval holder** must ensure that the environmental offsets that it provides under this approval comply with the **EPBC Act Environmental Offsets Policy (2012)**.
9. Offsets must also be provided for impacts associated with **subsidence** determined through monitoring and impacts to aquifers and natural springs of the Great Artesian Basin (GAB) determined by the Groundwater Management and Monitoring Plan at condition 22 and 23.
10. The provision of environmental offsets may be staged to offset the impact of each successive **stage of mine development**.

Table 1. Minimum areas of habitat for EPBC Act listed threatened species and communities to be offset.

| | Area of high quality habitat to be cleared (ha) | Area of high quality habitat potentially impacted by subsidence (ha) |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Black-throated finch (<i>Poephila cincta cincta</i>) | To be confirmed through the Black-throated Finch habitat assessment as at condition 2 | To be confirmed through the Black-throated Finch habitat assessment as at condition 2 |
| Dunmall's Snake (<i>Furina dunmalli</i>) | 800 | 1080 |
| Ornamental Snake (<i>Denisonia maculata</i>) | 26 | 2 |
| Squatter Pigeon (<i>Geophaps scripta scripta</i>) | 593 | 1080 |
| Yakka Skink (<i>Egernia rugosa</i>) | 800 | 1080 |
| Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant) ecological community | 9 | 2 |

11. The **approval holder** must submit an Offset Management Plan (OMP) for the written approval of the **Minister**. The Offset Management Plan must provide details of:
- (a) relevant baseline information regarding the proposed offset area/s, including surveys undertaken, and the condition of **EPBC Act listed threatened species and communities** and their habitat currently in the proposed offset area/s;
 - (b) how the proposed offset area/s will provide connectivity with other habitats and biodiversity corridors;
 - (c) how the offset area/s will contribute to a larger strategic offset for whole of project impacts;
 - (d) the management measures that will be implemented for the protection of the **EPBC Act listed threatened species and communities** listed in Table 1 and their habitat, including a discussion of how the measures proposed are consistent with the **Galilee Basin Strategic Offset Strategy** and measures contained in relevant **conservation advice, recovery plans and threat abatement plans**;
 - (e) offsets for impacts to groundwater, if required, must achieve a measurable outcome in accordance with one or more of the following principles:
 - i. reduce current extraction rates from the Great Artesian Basin (GAB) to increase hydraulic pressure
 - ii. increase pressure in the GAB
 - iii. protect and rehabilitate the GAB springs
 - iv. other measures consistent with government policies and strategies to protect and manage the GAB

These offset measures are to be developed and delivered in consultation with the QLD government department administering the authorisation of the water take;

- (f) a program to monitor and report on the effectiveness of management measures, and progress against performance and completion criteria;
- (g) criteria for triggering remedial action and the proposed remedial actions or process for determining these; and
- (h) the proposed legal mechanism for securing the offset area/s and when actions identified in the Offset Management Plan will be implemented for the offset area/s.

The **approval holder** must not **commence** the **action** until the OMP is approved by the **Minister** in writing. The approved OMP must be implemented.

12. The **approval holder** must prepare and submit a revised OMP prior to the **commencement** of each subsequent **stage of mine development**, for written approval of the **Minister**. The updated OMP must, for each subsequent **stage of mine development**, include the information required at conditions 11a) to 11g) and the outcomes of monitoring programs required at condition 4(e). The **approval holder** must not **commence** the subsequent **stage of mine development** until the OMP is approved by the **Minister** in writing. The approved revised OMP must be implemented.
13. The **approval holder** must register and **legally secure**, in accordance with **Queensland legislation**, offsets for authorised unavoidable **impacts** for **Epsilon Stage** within three (3) years of the date of this approval.
14. The **approval holder** must not **commence** any subsequent **stage of mine development** until the offset for **impacts** set out in Table 1 and determined through the Black-throated Finch habitat assessment as at condition 2 for that subsequent **stage of mine development** has been **legally secured** in accordance with **Queensland legislation**.
15. Additional offsets for impacts associated with **subsidence**, identified in the monitoring programs at condition 4(e), must be **legally secured** within two (2) years of a report identifying the impact.

Biodiversity funding

16. The **approval holder** must establish and/or contribute to a pool of funds established for the better protection and long-term conservation of the **EPBC Act listed threatened species and communities** listed in Table 1.
17. The mechanism to establish and/or contribute to a pool of funds, including terms of reference to support a regional approach, funding mechanisms and an initial work plan, must be provided to the **Minister** for approval prior to **commencement of mining activities**. The mechanism may be in the form of a trust fund or other mechanism/s as agreed by the **Minister** in writing. The **approval holder** must not **commence** the **action** until the mechanism to establish and/or contribute to a pool of funds is approved by the **Minister** in writing.
18. The **approval holder** must contribute \$25, 000 p.a. in years 1 to 3 and \$50, 000 p.a. in subsequent years (GST exclusive indexed each year in line with **CPI**) (or as otherwise determined by the **Minister**) per annum, with the first contribution to be made prior to the **commencement of mining activities**, for ten (10) consecutive years to the pool of funds beginning from the **commencement of mining activities**. The **approval holder** must provide notice of the establishment of and/or contribution to the pool of funds to the **Department** in writing prior to **commencement of mining activities**. Documentary evidence must be provided to the Department showing that the annual financial contributions to the pool of funds have been provided within thirty (30) calendar days of each payment.

19. The **approval holder** must facilitate the development and implementation of research programs funded from the above pool of funds, that implement the priorities identified in relevant **recovery plans, threat abatement plans** and/or **conservation advices** to manage development **impacts** on **EPBC Act listed threatened species and/or community/ies** listed in Table 1. The approval holder must ensure that research programs are not funded from the pool of funds unless they specify:
- (a) methodologies for a baseline survey that will report on each species' life history, movement patterns, habitat requirements and population dynamics. Survey methodologies must be in accordance with the **Department's survey guidelines** or alternative best practice methodologies that are agreed to in writing by the **Minister** prior to **commencement** of the **action** and endorsed by a **suitably qualified independent expert**. The baseline survey must begin within twelve months of the date of this approval;
 - (b) an ongoing monitoring program (developed from the baseline monitoring) for each species, to continue for the duration of the project approval, with annual reporting to the **Department**;
 - (c) commitments, including financial commitments and associated timeframes, that will be implemented by the **approval holder** to support the undertaking of research;
 - (d) the timeframes for undertaking each research component;
 - (e) timing and methods of reporting research outcomes to the **Minister**, the scientific community and the public; and
 - (f) consultation with the **Department** on how the proposed research programs align with other studies for the **EPBC Act listed threatened species and communities** listed in Table 1.
20. Identification of priority projects for funding must be decided in consultation with the **Queensland Department of Environment and Heritage Protection** and members of relevant Recovery Teams.
21. A review of funding must be undertaken five years after the establishment of the pool of funds or as otherwise agreed by the **Minister** in writing. This review must take into account progress of the research programs and any subsequent on-ground actions, as well as the involvement of other holders of approvals under the **EPBC Act** in funding and administrative arrangements. A full report of the review must be provided to the **Department** within six months of the review's commencement.

Groundwater management and monitoring

22. The **approval holder** must submit a Groundwater Management and Monitoring Plan (GMMP) for the written approval of the **Minister**. The GMMP must:

- (a) contain details of a groundwater monitoring network that includes:
 - i. control monitoring sites;
 - ii. the methods, including data and evidentiary standards, to be used to establish a baseline condition from time-series data at each of the monitoring bores;
 - iii. sufficient bores to monitor **impacts** on hydrogeological units including Great Artesian Basin (GAB) aquifers (whether inside or outside the Project Area);
 - iv. the ability to provide for the early detection of any changes in the groundwater regime in terms of amplitude and frequency of fluctuations in water pressure, water level and water quality in groundwater systems and changes in connectivity with surface water. This includes drawdown of water resources in the GAB (whether inside or outside the Project Area);
 - v. the ability to monitor relevant formations to determine hydraulic connectivity and provide for early detection of **impacts** prior to reaching migration pathways to other formations (eg faults and areas of unconformities known to connect two or more formations); and
 - vi. the ability to monitor potential **impacts** on groundwater dependent ecosystems, and provide for the early detection of **impacts**;
- (b) include a rationale for the design of the monitoring network with respect to the nature of potential **impacts**;
- (c) include details of a schedule for regular monitoring, including the establishment of baseline time-series data;
- (d) include baseline monitoring data for individual hydrogeological units including a detailed bore census and investigation of registered bores in the area predicted to be impacted. This includes the water resources in the GAB;
- (e) include maps for each hydrogeological unit, which identify monitoring sites, highlight nested sites and display the extent of predicted drawdown to be informed by the most recent iteration of the groundwater flow model;
- (f) for each monitoring location provide details of and rationale for proposed early warning indicators, trigger thresholds and limits for groundwater levels, groundwater quality and amplitude and frequency of fluctuations in groundwater pressure;
- (g) details of a risk based exceedance response plan for the actions the **approval holder** will take, and the timeframes in which these actions will be undertaken, if early warning indicators and trigger threshold values are exceeded;

- (h) details of offsets for **impacts** to aquifers and natural springs of the GAB, where these are identified by the groundwater flow model at condition 25 and groundwater monitoring network at 22(a)iii;
- (i) details of how offsets for impacts to groundwater resources, if required, will achieve a measurable outcome in accordance with condition 11(e) and will be secured within two (2) years of being identified; and
- (j) a timeframe for when the offsets for **impacts** to aquifers and natural springs of the GAB will be implemented;
- (k) a timeframe for review of offset adequacy, if required, to ensure the offsets are commensurate with actual impacts; and
- (l) details of the timeframe for a regular review of the GMMP. The GMMP review timelines must be consistent with the groundwater flow model review timelines required by condition 25(g) to ensure that these reviews can feedback information to each other to ensure any changes to the timing, distribution or magnitude of predicted impacts will be addressed in the GMMP.

The **approval holder** must not **commence mining activities** until the GMMP has been approved by the **Minister** in writing. The **approval holder** must implement the approved GMMP.

- 23. The GMMP, including any revised plans, must be peer reviewed by a **suitably qualified independent water resources expert/s** and approved by the **Minister** in writing. A peer review must be submitted to the **Minister** together with the GMMP and a report from the **suitably qualified independent water resources expert/s** stating that they carried out the peer review and endorse the findings and the content of the GMMP.
- 24. Monitoring data must be made 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 required by the **Bioregional Assessment of the Galilee Basin sub-region and the Lake Eyre Basin and any subsequent iterations**.

Groundwater flow model

- 25. Within two (2) years of **commencement** of the **action**, the **approval holder** must update the groundwater flow model to:
 - (a) adopt episodic recharge as opposed to the current fixed recharge term based on percentage annual rainfall. Accordingly, recalibrate the groundwater model with the addition of the new episodic recharge parameter;
 - (b) provide an assessment of the quality of, and risk and uncertainty inherent in, the data used in the background data and modelling, particularly with respect to predicted potential **impacts**. Undertake sensitivity and uncertainty analysis on the model. This analysis must include, but is not limited to, the following parameters: recharge rates; vertical and horizontal hydraulic conductivity; storage coefficients; and the confining layer of the Rewan Formation and the resulting drawdown impacts;

- (c) review and justify the following parameters used in the current model, and modify if required:
 - i. general head boundary conditions, including the identical values used for any depth at any given location;
 - ii. specific yield value;
 - iii. anisotropy ratio of horizontal and vertical hydraulic conductivity values;
 - iv. layer structure, with the view to splitting hydrogeological units according to their observed and modelled properties;
 - v. the predicted **impacts** of fracturing caused by longwall mining;
 - vi. recharge parameters for the Clematis Sandstone to represent the flux into recharge beds of the GAB;
 - vii. represent the 20:80 split of layer 2 in the model and modify if required; and
 - viii. inform modelling of drawdown in layers 7 and 8, and modify if required.
 - (d) review and refine the hydrogeological conceptualisation between the **project area** and Alpha town to identify, understand, manage and mitigate potential impacts to groundwater from mining activity. This is to be demonstrated via a detailed smaller scale model with the refinements identified with cross sections if necessary;
 - (e) document and incorporate known licensed groundwater extractions within the model domain including Alpha town;
 - (f) document and justify any other changes made as part of the model re-runs that are not outlined above;
 - (g) outline a process to update the model with monitoring and management data arising from the Groundwater Management and Monitoring Plan; and
 - (h) details of the timeframe for a regular internal review of the groundwater flow model.
26. The groundwater flow model, including any revised models, must be peer reviewed by a **suitably qualified independent water resources expert/s** approved by the **Minister** in writing. A peer review must be submitted to the **Minister** together with the groundwater flow model and a report from the **suitably qualified independent water resources expert/s** stating that they carried out the peer review and endorse the groundwater flow model.
27. The outcomes of the groundwater flow model must inform the revisions of the Groundwater Management and Monitoring Plan (GMMP) at condition 22 and the Rewan Formation Connectivity Research Plan at condition 28.

Rewan Formation Connectivity Research Plan

28. In order to understand the connectivity of the Rewan hydrogeological formation, prior to the **commencement of Stage 2**, the **approval holder** must submit for the approval of the **Minister** a Rewan Formation Connectivity Research Plan ('Rewan Research Plan') that describes the characteristics of the Rewan Formation within the area impacted by the mine. The Research Plan must include but not be limited to the following:
- (a) research aims;
 - (b) personnel responsible for conducting research and their qualifications;
 - (c) timeframes for research and reporting;
 - (d) methods, including, but not limited to,
 - i. seismic surveys to determine the type, extent and location of fracturing, faulting and preferential pathways (including any fracturing induced by longwall mining subsidence);
 - ii. and an examination of the hydraulic properties (including but not limited to petrophysical analysis and facies mapping and other appropriate geological, hydrogeological and hydrogeochemical methods) to broaden the scope of approaches used to investigate the Rewan Formation;
 - iii. including a description of how research will be undertaken in a manner that does not cause **impacts on MNES** (unless the activities will be undertaken in accordance with a plan approved pursuant to conditions of this approval).
 - (e) an explanation of how research will inform the Groundwater Management and Monitoring Plan (GMMP), any regional groundwater and surface water monitoring and assessment program, or **Bioregional Assessment for the Galilee Basin sub-region and the Lake Eyre Basin** and any subsequent iterations;
 - (f) a peer review of the Rewan Research Plan, by a **suitably qualified independent water resource expert** and a table of changes made in response to the peer review.
29. Prior to **commencement of Stage 2**, the **approval holder** must submit the Rewan Research Plan to the **Minister** for written approval. The **approval holder** must not **commence mining activities** until the Rewan Research Plan has been approved by the **Minister** in writing. The approved Rewan Research Plan must be implemented.

Note 1: The **Minister** may determine that a plan, strategy or program approved by the Queensland Government satisfies a plan, strategy or program required under these conditions.

General

30. Within 20 business days after the **commencement** of the **action**, the **approval holder** must advise the **Department** in writing of the actual date of **commencement**.
31. The **approval holder** must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports or strategies 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 approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.
32. Within three months of every 12 month anniversary of the **commencement** of the **action**, the **approval holder** must publish a report on its website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions for the life of the approval outlining how they have been compliant with the conditions of this approval over the previous 12 months, including the implementation of any management plans, strategies or programs as specified in the conditions. Documentary evidence providing proof of the date of publication must be provided to the **Department** at the same time as the compliance report is published.
33. The **approval holder** must provide documentary evidence to the **Department** providing proof of the date of publication of any non-compliance with any of the conditions of this approval at the same time as the report required at condition 32 is published.
34. The **approval holder** must notify the **Department** in writing of potential non-compliance with any condition of this approval as soon as practical and in any event within ten (10) business days of becoming aware of the potential non-compliance. The notice provided to the **Department** under this condition must specify:
 - (a) the condition which the **approval holder** has potentially breached;
 - (b) the nature of the potential non-compliance;
 - (c) when and how the **approval holder** became aware of the non-compliance;
 - (d) how the non-compliance will affect the anticipated **impacts** of the approved **action**, in particular how the non-compliance will affect the **impacts** on the matters of national environmental significance;
 - (e) the measures the **approval holder** will take to address the **impacts** of the non-compliance on the matters of national environmental significance and rectify the non-compliance; and
 - (f) the time by when the **approval holder** will rectify the non-compliance.

All contraventions must also be included in the compliance reports.

35. Upon the direction of the **Minister**, the **approval holder** must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The audit must not commence unless and until the **Minister** has approved the independent auditor and audit criteria. The audit report must address the criteria to the satisfaction of the **Minister**.
36. If the **approval holder** wishes to carry out any activity other than in accordance with the management plans as specified in the conditions, the **approval holder** must submit to the **Department** for the **Minister's** written approval a revised version of that management plan. The **approval holder** must not **commence** the varied activity until the **Minister** has approved the varied management plan. The **Minister** will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised management plan, that management plan must be implemented in place of the management plan previously approved.
37. If the **Minister** believes that it is necessary or convenient for the better protection of **MNES**, the **Minister** may request that the **approval holder** make specified revisions to the management plans specified in the conditions and submit the revised management plan for the **Minister's** written approval. The **approval holder** must comply with any such request within the timeframe specified by the **Minister**. The revised approved management plan must be implemented. Unless the **Minister** has approved the revised management plan, then the person taking the **action** must continue to implement the management plan previously approved, as specified in the conditions.
38. If, at any time after five years from the date of this approval, the **approval holder** has not **commenced** the **action**, then the **approval holder** must not **commence** the **action** without the written agreement of the **Minister**.
39. Unless otherwise agreed to in writing by the **Minister**, the **approval holder** must publish all management plans referred to in these conditions of approval on its website. Each management plan must be published on the website within 1 month of being approved by the **Minister** and remain available on that website for the life of the approval.

Definitions

Action: the South Galilee Coal project, declared a Coordinated Project under the *State Development and Public Works Organisation Act 1971* and as referred under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC 2010/5496).

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.

Bioregional Assessment for the Galilee Basin sub-region and the Lake Eyre Basin and any subsequent iterations: will be conducted in conjunction with relevant state and territory government agencies and natural resource management bodies and entails a scientific analysis of the ecology, hydrology and geology for the purpose of assessing the potential risks to water resources in the area as a result of the direct and indirect impacts of coal seam gas development and large coal mining development.

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 railway and road development or 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 include, but are not limited to the following:

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>.

Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta). Department of the Environment, Water, Heritage and the Arts, 2009. <http://www.environment.gov.au/resource/significant-impact-guidelines-endangered-black-throated-finch-southern-poephila-cincta>

Survey guidelines for Australia's threatened birds: Guidelines for detecting birds listed as threatened under the EPBC Act. Department of the Environment, Water, Heritage and the Arts, 2010. <http://www.environment.gov.au/system/files/resources/107052eb-2041-45b9-9296-b5f514493ae0/files/survey-guidelines-birds.pdf>

EPBC Act - Draft Referral guidelines for the nationally listed Brigalow Belt reptiles. Department of Sustainability, Environment, Water, Population and Communities, 2011. <http://www.environment.gov.au/resource/epbc-act-draft-referral-guidelines-nationally-listed-brigalow-belt-reptiles>

Survey guidelines for Australia's threatened reptiles: Guidelines for detecting reptiles listed as threatened under the EPBC Act. Department of Sustainability, Environment, Water, Population and Communities, 2011.

<http://www.environment.gov.au/system/files/resources/eba674a5-b220-4ef1-9f3a-b9ff3f08a959/files/survey-guidelines-reptiles.pdf>

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 threatened species and/or community/ies flora or fauna species listed under the EPBC Act and/or an ecological community/ies listed under the EPBC Act.

Epsilon Stage: the initial development phase as described in the sections 2.2.2 and 5.6 of *South Galilee Coal project: Coordinator-General's evaluation report on the environmental impact statement*, December 2014. Epsilon stage is years 1 and 2 of the South Galilee Coal Project.

Galilee Basin Strategic Offset Strategy: the Queensland Government Department's Galilee Basin Strategic Offset Strategy (2013) or any future updated version.

Habitat Assessment means analyse the habitat features on site using the **primary habitat** for the Black-throated Finch. The habitat assessment may be undertaken through desktop mapping of Regional Ecosystems and using the definition of **primary habitat** for the species as defined in this approval.

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

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 activities: the commercial extraction of coal from the ground.

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

Primary habitat:

Black-throated Finch Primary Habitat Values means:

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

- within 600m of a permanent water body; or
- within 3km of a wetland or $\geq 3^{\text{rd}}$ order stream (as mapped by the QLD Govt.).

Project area: means the South Galilee Coal Project Infrastructure Corridor and MLA 70453 at Attachment A

Queensland Department of Environment and Heritage Protection: the Queensland Department of Environment and Heritage Protection or any department that succeeds the Queensland Department of Environment and Heritage Protection that is responsible for administering environmental offsets in relation to the Galilee Basin.

Queensland Government authority/ies: authorities who have a role in regulating activities relating to listed threatened species, threatened ecological communities, migratory species and/or water resources.

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

Stage of mine development: refers to the mine stages described as Epsilon stage and Entire project (South Galilee Stage 1, 2 and 3) as described in the sections 2.2.2 and 5.6 of *South Galilee Coal project: Coordinator-General's evaluation report on the environmental impact statement*, December 2014.

Stage 2 refers to the commencement of underground mining as described in the sections 2.2.2 of *South Galilee Coal project: Coordinator-General's evaluation report on the environmental impact statement*, December 2014.

Subsidence: The totality of 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 independent expert: a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Suitably qualified independent water resource expert/s: a person with at least a postgraduate degree (or equivalent) in a suitable area (such as hydrology or hydrogeology) and a minimum of 10 (ten) years relevant experience in water resources assessment, including at least one year of experience in Australia.

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

Attachment A

