

## STATEMENT OF REASONS

### Decision about an application for a site-specific environmental authority under the *Environmental Protection Act 1994*

<b>Date:</b>	<b>29 March 2016</b>
<b>Decision:</b>	On the 2 <sup>nd</sup> February 2016 under section 194 of the <i>Environmental Protection Act 1994 (the EP Act)</i> to approve an application made by Adani Mining Pty Ltd for a site-specific Environmental Authority (EA) EPML01470513 for the Carmichael Mine.
<b>Decision-maker:</b>	<b>Kate Bennink Manager – Assessment (Coal) Business Centre (Coal), Coal and Central Queensland Compliance Department of Environment and Heritage Protection (EHP) Authorised Delegate of the Chief Executive under Environmental Protection Delegation (No. 2) made on 4 December 2014</b>

### BACKGROUND

Adani Mining Pty Ltd applied for three mining leases (ML), ML70441, ML70505 and ML 70506, under the provisions of the *Mineral Resources Act 1989 (MRA)*, and an associated EA under the EP Act in connection with its proposed Carmichael Mine. Mining Lease 70441 was applied for on **8 November 2010** and ML70505 and ML70506 were both applied for on **9 July 2013**.

The administering authority for the EA application under the EP Act is the chief executive of EHP. At all relevant times, the relevant powers of the chief executive as the administering authority under the EP Act had been delegated to EHP officers under section 518 of the EP Act.

### RELEVANT CHRONOLOGY

On **26 November 2010**, the mine and rail aspects of the Carmichael mine were gazetted as a coordinated project under the *State Development and Public Works Organisation Act 1971 (SDPWOA)* for which an environmental impact statement (EIS) was required. As such the project was subject to an environmental impact assessment process under the SDPWOA.

On **6 January 2011**, the Commonwealth Government determined that the Carmichael mine and rail project constituted a controlled action pursuant to the *Environment Protection and Biodiversity Conservation Act 1999 (EPBCA)*.

On **25 May 2011**, the terms of reference for the EIS were finalised by the Coordinator-General.

In November 2012, Adani Mining submitted the EIS for the coordinated project and public notification occurred from **15 November 2012** until **11 February 2013**.

On **7 May 2013**, the Coordinator-General requested additional information from the applicant to address matters raised about the EIS. This information was incorporated into a supplementary environmental impact statement (**SEIS**) which was made available for public and agency comment from **25 November 2013** to **20 December 2013**. Adani subsequently prepared additional information for the EIS (the amended EIS) and supplied this to the Coordinator-General.

On **9 July 2013**, the applicant submitted an application for a site-specific EA for ML70441, ML70505 and ML70506.

On **7 May 2014**, the Coordinator-General's assessment report evaluating the EIS was released. The Coordinator-General recommended approvals for the Carmichael Mine project subject to the conditions and recommendations set out in the report.

On **24 July 2014**, the Federal Minister for the Environment granted approval for the Carmichael Coal Mine and Rail Infrastructure Project pursuant with the EPBCA, subject to conditions. This approval was subsequently withdrawn and a new approval, with conditions, was granted on the **14 October 2015**.

On **28 August 2014**, the delegate for the administering authority under the EP Act issued a draft EA to Adani Mining for ML70441, ML70505 and ML70506. The draft EA included a number of conditions including the relevant conditions required by the Coordinator-General. The EHP considered the conditions proposed in the draft EA were reasonable, necessary and desirable to deal with the impact of the mining activities.

Following public notification of the mining lease applications and the associated draft EA from **21 May 2014** to **17 June 2014**, two objections were lodged with the Department of Natural Resources and Mines for MLs and with EHP for the draft EA. These objections were referred to the Land Court on **1 October 2014**.

Land Court proceedings took place over five weeks from **31 March 2015** and concluded on **14 May 2015**.

On **15 December 2015**, the Land Court recommended approval of ML70441, ML70505 and ML70506, subject to extra conditions to protect the Black-throated Finch (**BTF**) (the objections decision). The Land Court's order for the objections decision was made final on **17 December 2015**. A copy of the objections decision was given to the Minister for Natural Resources and Mines (**MRA Minister**) and Minister for State Development (**SD Minister**) on **17 December 2015**.

Under section 193 of the EPA, the MRA Minister or SD Minister had 10 business days to give the administering authority advice about any matter that they consider may help with making a final

decision about the application. On **15 January 2016**, EHP received a letter from the MRA Minister which stated that he had no further advice to offer that could assist with the decision of the application. No advice was received from the SD Minister.

On **2 February 2016**, I made the decision to approve the site-specific application by Adani Mining for the Carmichael Mine, as the authorised delegate under the EP Act.

## **LEGISLATIVE FRAMEWORK**

Section 190 of the EP Act requires the Land Court objection decision to recommend to the administering authority to decide whether to approve the application on the basis of the draft EA, approve the application on stated conditions that are different from the draft EA or refuse the application. Under section 190(2) of the EP Act, any stated conditions in the EA must include the Coordinator-General conditions and must not be inconsistent with the Coordinator-General conditions.

Section 191 of the EP Act provides the matters that the Land Court must consider in making the objections decision. The Land Court must consider;-

- (a) the application,
- (b) any response given for an information request,
- (c) any standard conditions for the relevant activity or authority,
- (d) any draft environmental authority for the application,
- (e) any objection notice for the application,
- (f) any relevant regulatory requirement,
- (g) the standard criteria, and
- (h) the status of any application under the MRA for each relevant mining tenure.

Section 192 of the EP Act requires that the Land Court give a copy of the 'objections decision' to the MRA Minister and the State Development Minister as soon as practicable after it is made.

Section 193 of the EP Act requires the MRA Minister or State Development Minister to provide the administering authority advice about any matter that they consider may help with making a final decision about the application within 10 business days.

Section 194 of the EP Act requires the administering authority to make a final decision on the application within 10 business days of the end of the period for the MRA Minister of State Development Minister to give advice.

Under section 194(2), the administering authority must decide, if a draft EA was given for the application:

- (i) that the application be approved on the basis of the draft environmental authority for the application; or

- (ii) that the application be approved, but on stated conditions that are different to the conditions in the draft environmental authority; or
- (iii) that the application be refused.

Under section 194(4), in making the final decision, the administering authority must have regard to:

- (i) the objections decision, if any; and
- (ii) all advice, if any, given by the MRA Minister or the State Development Minister to the administering authority under section 193; and
- (iii) if a draft environmental authority was given for the application – the draft environmental authority.

### **MATERIAL AND OTHER EVIDENCE THAT I CONSIDERED**

In accordance with section 194(4) of the EP Act, I considered the following documents in making a final decision on the application for EA EPML01470513:

1. The draft EA EPML01470513 dated 28 August 2014; and
2. The Land Court objections decision dated 15 December 2015.

Advice from the MRA Minister or State Development Minister was not considered as no advice was provided.

The draft EA EPML01470513 was considered in the context of the Land Court objections decision.

The Land Court objection decision was made under section 190(1)(a)(ii) of the EP Act, and recommended that the EA be approved on stated conditions that are different to the conditions in the draft EA issued in the draft EA issued on **28 August 2014**, by issuing the EA in the terms of the draft EA, subject to the insertion of the following conditions into the BTF Species Management Plan referred to in Condition I6 of the EA:

- (a)
  - i. monitoring of water bodies should be conducted over at least a six hour period commencing from dawn in order to accurately capture utilization of the watering points;
  - ii. detailed botanical assessment should be focussed on all BTF siting locations to record habitat values within those locations;
  - iii. more effort should be place into actively locating BTF and collecting information on their movements across the project and offset areas;
  - iv. call playback should be used when BTF are encountered to assist in gaining a more complete identification of birds present in the local areas;
  - v. specific surveys targeting breeding be undertaken to provide details on locations and habitat values in breeding areas;

- vi. persons undertaking the survey/monitoring should be experienced ecologists with sound understanding of the BTF and its habitats;
  - vii. any future revision of the current survey and monitoring programs should be developed in consultation with researchers from the BTF recovery team and independently peer review.
- (b) The research management plan include provision for funding a research project to determine the correlation between water source, woody habitat and *Poaceae* food resources across the ML areas and the proposed offset areas, to determine the interrelationships between these factors.
- (c) The research management plan include a provision that the Ten Mile Bore and its surrounds be investigated to determine whether that area maintains an important function in sustaining the BTF population.

Two significant issues were addressed by the Land Court objection decision. The first is with respect to the uncertainty of the source of the aquifer of the Doongmabulla Springs Complex (DSC), and second is with respect to the serious or irreversible environmental damage to the continued survival of any BTF in the mining lease area.

In the Land Court, it was agreed that the Doongmabulla Springs Complex has exceptional ecological values. The extent of the threat to the ecological community depends on the extent to which the spring flow of the DSC will be affected by the mining operations. All land court experts acknowledged that if the DSC dry up then the ecological community will be lost. The Land Court President concluded that, on balance, the DSC are not fed by the Colinlea Sandstone and if that is correct, the reduction in wetland would be no greater than 0.7ha, which was not substantial and no endemic species would be lost and the persistence of viable populations would almost certainly be maintained. The President concluded that the precautionary principle should be applied as a result of some uncertainty about some issues surrounding the identification of the source aquifer of the DSC and the ecological issues. The President stated that there are extensive conditions in the draft EA and the EPBCA approval relevant to managing any threat to the ecological community. In addition to the water management provisions, the draft EA requires a Biodiversity Offset Strategy and a Groundwater Dependent Ecosystem Management Plan to be developed in relation to the springs' complex. Also the EPBCA approval requires that a Biodiversity Offset Strategy to be developed and a peer reviewed GAB Springs Research Plan to be developed and approved by the Minister prior to excavation of the first box cut. The Land Court President concluded that the conditions in both the draft EA and EPBCA approval are elements of an adaptive management framework which she considered to be appropriate for mitigating the risk of threat to the ecological value of the springs.

The BTF is an endangered species and court evidence established that the population in the ML area and surrounds is the most significant in Australian and globally. The Land Court President was satisfied from the evidence that there will be serious or irreversible environmental damage to the continued survival of any BTF in the mining lease area from the proposed mine because of the complete loss of any BTF habitat within the open cut pit area and related infrastructure areas. The

president did not consider it a case for the application of the precautionary principle, however, she did consider it necessary that preventative measures be taken to control or regulate the certain threat of environmental damage, should the mine proceed.

The draft EA proposed measures include the provision of an offset area and preparation of a BTF management plan which must incorporate a baseline research program, a description of how the results of research are to be used to determine any changes of classification of and/or impact on BTF habitat; details of proposed impacts to BTF habitat from each project stage and mitigation measures to be undertaken. The EPBCA approval also requires the applicant to set aside a minimum offset area of approximately 31,000ha for the impacts to BTF.

The Land Court President considered that there was a great deal of uncertainty as to whether the proposed measures to deal with the impact on the BTF would be adequate for that purpose. The uncertainty arises primarily from the lack of scientific knowledge as to the environmental conditions necessary to ensure that any proposed alternative sites include areas of habitat suitable for the continued survival of significant numbers of BTF. The Land Court established that little or no information has been gathered as to the breeding habitat values or dietary preferences of the BTF. While it appears that *Poaceae* are critical to BTF feeding requirements, little else is known about the necessary patterning of grasses for the survival of the BTF. The paucity of information about these issues inevitably makes the assessment of the suitability of proposed offset areas uncertain. The above-mentioned conditions were recommended to be inserted into the draft EA and the president did not consider these proposed conditions to be inconsistent with the Coordinator-General's conditions.

In order to minimise the risk of the uncertainty as to whether, assuming that the proposed offset are found to be suitable for the BTF, the birds will be relocated successfully to those areas. Additionally, because of the importance of preserving the habitat of an endangered species, the President considered recommending that an area around Ten Mile Bore be excised from the proposed ML area, with the intent that the habitat in the area be preserved, but she didn't consider the evidence was sufficient as to the importance of the Ten Mile Bore Area to warrant such a recommendation. Mr Caneris and Mr Lezar (the head of open cut mining operations of the applicant), both gave evidence to the Land Court that consideration had been given to changing the mine design by increasing the area of underground mining to replace open cut mining in the northern part of the lease area. This suggestion may provide a method of reducing the impact of the mine on the BTF habitat in the vicinity of the Ten Mile Bore.

## **FINDINGS OF FACT**

### **Criteria for decision – specific issues considered when deciding a site-specific application for environmental authority**

Under section 200 of the EP Act, an EA for a resource activity cannot take effect before the day the relevant tenure is granted to the applicant. Therefore, I decided that the EA would take effect from the date of grant of Mining Leases 70505, 70506 and 70441.

Having regard to the Land Court objection decision, I decided that if the EA was to be approved in accordance with the Land Court's recommendation, all of the conditions recommended by the Land Court should be imposed, but additional conditions recommended for condition I6 should have with more definitive wording (by the use of the word "must" rather than "should"), to ensure the conservation of the species across the ML area and approved offset areas. The EHP expert advice sought advised that the BTF is possible locally nomadic with its movements changing according to spatial and temporal variation in resources. Therefore EHP ecologists recommended that multiple years of surveys would be required to develop management actions to account for this variation. Expert advice recommended effort of three times the generation time of the BTF (approximately 3.5 years), which equates to 10 years (as per Garnett et. al. 2010).

As such, I considered it would be appropriate to adopt the Land Court objection decision recommendations for the insertion of conditions in condition I6 for the BTF species management plan, with revised wording as follows;-

I6(f) monitoring of watering points that must be conducted for a minimum six hour period commencing from dawn, to accurately capture BTF utilisation of watering points.

I6 (g) detailed botanical assessment that must occur at all BTF sighting locations in the project area to record habitat values at these locations.

I6 (h) detailed surveys that must occur across the mining lease area and approved offset areas and must include information on BTF movements. The survey method and effort must be sufficient to accurately describe the BTF home range and detail BTF resource usage patterns between seasons and years (for up to 10 years) and that allow robust management actions to be developed for the maintenance of a viable local BTF population.

I6 (i) survey work that should incorporate the usage of call playback and identify all birds present when BTF are encountered.

I6 (j) specific surveys that must be undertaken during the BTF breeding season and include nest location and assessment of the habitat attributes associated with the breeding locations. The survey method and effort must be sufficient to accurately describe the BTF breeding requirements with consideration to spatial and temporal variation of resources for up to 10 years.

I6 (k) survey and monitoring must be undertaken by experienced ecologists.

I7 (d) all revisions of the survey and monitoring program must be carried out in consultation with the BTF recovery team; and

I7 (e) any revision must be independently peer reviewed.

18 The baseline research program must fund a research project to determine the relationship between water sources, woody habitat and the BTF food sources within the mining lease area and approved offset areas to determine the inter-relationships among these factors.

19 The baseline research plan under I6 must:

- (a) Establish whether Ten Mile Bore and surrounds are high value habitat for the species;  
and
- (b) Establish management actions that maintain the BTF population at Ten Mile Bore and surrounds.

## **REASONS FOR DECISION**

After careful consideration of the material and other evidence identified above, and having made the above findings of fact, I decided to approve the application for a site-specific EA – EPML01470513 for Carmichael Mine, on stated conditions that are different to the conditions in the draft EA, under section 194(2)(a)(ii) of the EP Act.

I consider that the monitoring, research, plans, recording, reporting and mitigation measures required by the conditions of the EA will ensure there are sufficient measures in place to manage the environmental issues and impacts resulting from mining activities proposed as part of the Carmichael Mine.



**Kate Bennink**

**Department of Environment and Heritage Protection**

**Authorised Delegate of the Chief Executive under Environmental Protection Delegation (No.2)  
made on 4 December 2014**