



www.jemrok.com.au

HEAD OFFICE

Level 1, 10 Mount St  
Burnie TAS 7320

PO Box 89  
Burnie TAS 7320

Phone 03 6431 7074

WYNYARD

10 Tom Moores Road  
Wynyard TAS 7325

PO Box 89  
Burnie TAS 7320

Phone 03 6431 7074

Lic. No. RTA: AU40813

LATROBE

21 Faulkner Drive  
Latrobe TAS 7307

Phone 03 6431 7074

BROKEN HILL

13 Kanadah Road  
Broken Hill NSW 2880

Phone 08 8088 7086

Lic. No. MVRL: 53193

RTA: AU40813

COBAR

5 Lewis Street  
Cobar NSW 2835

Phone 02 6836 4011

Lic. No. MVRL: 53193

RTA: AU40813



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10\07\2018

Assessment Officer  
Environment Protection Authority  
GPO Box 1550  
Hobart, 7001  
TAS

Re: Far West Deposit, Blackwater Rd, Request for Further Information

Following the receipt of your letter dated 21 June 2018 and email on 02\07\2018 requesting further information for the proposed Tasmanian Advanced Minerals Far West Deposit, below is the responses to the further information requests.

The requests are addressed in the order they appear in *Table 1: Additional Information Required by the EPA Board (issues #1-#4)*. No responses were requested by the information in Table 2, subsequently there is no further discussion on Table 2 matters.

The questions asked via email are answered in section "Issue #5" and "Issue #6".

Issue #1 EER Section 4.1:

Comments and Issues

*White-bellied sea eagle (Haliaeetus leucogaster) - WBSE The internal access road to be used by the 40 t dump truck comes within 500 m of a WBSE nest. The activity should be prohibited between July and January to prevent nest abandonment.*

Additional Information Required:

*Describe management mitigation measures that will be implemented to reduce the potential for nest abandonment during the eagle breeding season due to use of the internal access road.*

Jemrok\TAM Response:

A flora and fauna survey was undertaken by North Barker Ecosystem Services (NBES) and included in the EER (4 April 2018). The EER (Section 4.2 page 15) states:

*At the distance of the FWD from the nest (950m) best practice management prescriptions aim to minimise potential disturbance to the nest during the breeding season (July to January inclusive), where a clear line of sight can be established to exist.*

*Work activities that occur within the white-bellied sea-eagle nesting season (July to January inclusive) and that occur within 1km line of sight of a nest can also lead to nest abandonment.*

At the commencement of operations at Blackwater, TAM established an exclusion zone on the northern edge of the access road. No works are permitted within this zone. There is a minor intrusion of the existing road alignment into this zone, however there is no clear line of sight at this minor intrusion.

The potential for nest abandonment can occur where a clear line of sight can be established. Analysis of contours and location of the nest location and proposed Far West Deposit\internal road (Figures 3 and 4 in the EER) of the indicates there is no *clear line of sight* between the operations or internal and the nest, despite the minor intrusion of the existing access road to within the established exclusion zone.

Further, section 4.3 of the NBES report (provided in Appendix B of the EER) states

*Given the location of the nest on flats adjacent to the Arthur River and the presence of a small ridgeline between the study area and the nest it is very unlikely that there will be a clear line of site to edge of the proposed mine expansion area. Allowing for a tree\ height of 20m on the ridge between the nest and the mine edge makes the mine even less likely to be visible from the nest.*

*Assuming previous permit conditions continue to be applied (see separate DPEMP Permit Condition Report, Condition FF5), no impacts are anticipated to this species. A nest exclusion zone was implemented to meet the permit condition.*

The NBES indicates that because there is no clear line of sight to the nest, abandonment is unlikely to be caused by the operations. No further mitigation is deemed necessary.

Further, shifting the alignment of the existing road outside the exclusion zone would result in a net loss of vegetation and it is deemed more appropriate to use the existing alignment. Given the tree height along this intrusion (minimum 20 m ), there is no clear line of sight, so TAM operations on the road are consistent with best practice management prescriptions.

#### Issue #2 EER Section 4.1:

##### *Grey Goshawk (Accipiter novaehollandiae)*

*Given the cumulative loss of hunting habitat as a result of logging activities and the existing activity at Blackwater site, greater consideration should be given to the impact of further loss of hunting habitat as a result of the proposal.*

##### Additional Information Required:

*Describe the potential cumulative impact from the proposed activity on the grey goshawk, including any mitigation measures to reduce the impact of further loss of hunting habitat, as relevant.*

##### Jemrok\TAM Response:

##### Section 4.3 of the NBES Report states:

The study area occurs within a key site area for this species. However, prime nesting habitat (mature blackwood and rainforest in gullies) does not occur, and no nests were recorded within the study area. The study area could however be utilised for foraging, and the species is likely to be seen flying over the site. The small loss of potential foraging habitat is considered to be insignificant to this species. No impacts are anticipated to this species.

No further management prescriptions were deemed necessary to be included in the EER based on the NBES report. The cumulative impacts are considered to be insignificant given the small area of disturbance compared to the larger foraging corridors present in the North West.

Given the staged approach to operations, vegetation disturbance will be minor in nature and the staged rehabilitation aims to return the site to pre works conditions as soon as practicable after extraction has finished re-establishing habitat.

No further management prescriptions are deemed necessary.

### Issue #3 EER Section 4.1:

Tasmanian devil (*Sarcophilus harrisii*) and Spotted-tailed quoll (*Dasyurus maculatus*)

- Concern in relation to hours and speed
- A dusk to dawn prohibition should apply rather than the proponents 7 am to 7
- The transport route should include the full route to the processing facility.
- A speed limit would be appropriate

#### Additional Information Required:

Describe management mitigation measures that will be implemented to reduce the potential for roadkill for the Tasmanian devil and spotted-tailed quoll.

#### Jemrok\TAM Response:

This response is limited to the operations at Far West Deposit, no discussion is made about the transport route to the processing facility, because this is already approved and outside scope of the Far West Deposit approval.

The key risk for roadkill occurs if works occur between dusk and dawn, when the Tasmanian devil and spotted-tailed quoll are likely to be more active. It is not proposed to transport material from Far West Deposit to Blackwater between dusk and dawn due to the safety issues for drivers this presents. This greatly reduces the potential for operations to cause roadkill.

Trucks are only likely to travel at 40-45 kmh on the internal access road due to the narrow alignment, steep grades in sections, heavy loads, the trucks high centre of gravity and to ensure driver safety. At this speed and the height the driver sits in the cab, the driver will have good visibility of the road, allowing them to stop and allow any Tasmanian devil or spotted-tailed quoll to safely transit the internal road before the drive proceeds.

In summary, the mitigation measures are:

- No heavy vehicle driving on the internal road from dusk to dawn
- All traffic to give way to all animals on the internal road
- Vehicle speeds will be limited to 40-45 kmh

### Issue #4 EER Section 4.1:

*Tasmanian devil and spotted-tailed quoll*

*Stockpiling of vegetation material for rehabilitation is known to create artificial denning spaces for Tasmanian devils and spotted-tailed quolls. The removal of material from stockpiles can therefore create risk of collapse and burial of animals within these Stockpiles.*

#### Additional Information Required

Describe the potential impact to Tasmanian devils and quolls, including any mitigation measures to reduce the impact of fauna utilising stockpiles of vegetation material, as relevant.

#### Jemrok\TAM Response:

Section 4.3 of the NBES report states

#### ***Spotted-tailed quoll***

*The project will involve the loss of up to six hectares of foraging habitat for the spotted tailed quoll. No high quality denning habitat was considered present. Given the extent of habitat in the region (large tracts of continuous native vegetation) it is unlikely that the loss of a few hectares is significant.*

## **Tasmanian devil**

*The project will involve the loss of six hectares of foraging habitat for the Tasmanian devil. No high quality denning habitat was considered present. Given the extent of habitat in the region (large tracts of continuous native vegetation) it is unlikely that the*

Section 5.3 of the NBES report states:

### **Tasmanian devil and spotted-tailed quoll**

*The loss of habitat is considered to be insignificant to these species due to the large amount of habitat available in the region. Possible impacts to den sites are considered highly unlikely. Consequently mitigation measures are not required.*

The NBES report clearly indicates impacts from operations are negligible. The risk of the stockpile material becoming denning habitat is low as both of the above species would not tend to take habitat near the operations due to the noise associated with normal operations, however to manage this risk, TAM will undertake a site walk over by a suitably qualified person to confirm no denning activity has been established in the stockpile prior to the stockpile being used for rehabilitation material. If a den is identified, guidance will be sought from the person on the appropriate response.

### Issue #5 Use of Burnie Rainfall Data Instead of Roger River

The Burnie rainfall data is deemed to be a more robust rainfall record, through a well maintained weather station and valid data that is relied upon for many other projects. Experience by TAM and those involved in the approval prefer to rely on the robust data generated through the Burnie port weather station. A review of the total rainfall data record from Roger River at <http://www.bom.gov.au/climate/data/stations/> indicates the record is intermittent and the record ends in 1977. I understand the weather station is currently closed and therefore unlikely to provide sufficient and appropriate data. Burnie weather data at Roundhill has records from 1944 to present, this is deemed more useful to the project.

Our experience from mines at Blackwater, Hawkes Creek and Corinna indicates the Burnie record is an accurate tool to appropriately size ponds to capture and treat runoff to an acceptable standard to comply with regulatory conditions and expectations. Further experience working with Silica (both in situ at the current mining activities and ex situ at the inert waste dump sites) and associated approvals since 2008 indicates that the silica is very free draining and rainfall predominantly soaks into and through the silica due to its porous nature, rather than accumulating on the surface and creating sheetflow – often leading to sediment laden water ending up in drainage lines.

TAM has a sufficiently sized lease and mine plan\operations and staff to manage FWD and quickly respond to site conditions if a larger sediment pond is needed, if they are non-complaint with any regulatory conditions regarding discharge quality. TAM can use existing staff and machinery (on site each working day) to construct a new pond or initiate a rehabilitation program to reduce the exposed working area and reduce the risk of reduce water quality in adjacent drainage lines.

Based on the above information, it is not deemed necessary to update the rainfall calculations or resize the sediment ponds.

### Issue #6 Freshwater Crayfish and or Hydrobiid snails

The flora and fauna report states:

*A. gouldi are found in flowing and still waters and are believed to occur in all sizes of stream, with adults living in still, deep pools, sheltered beneath submerged and decaying logs and undercut banks, and also moving through shallow riffle zones. Smaller juveniles also inhabit shallow fast-flowing stream habitats and favour habitats with large rocks or logs that are big enough to be stable, not embedded in finer substrates, overlying coarser substrates and/or with a distinct cavity underneath.*

*This species occurs across northern Tasmania, including the Arthur River catchment within which the study area occurs. It has been recorded nearby in the Arthur River.*

*The one stream within the study area was assessed for characteristics deemed favourable to this species. The habitat was considered to be of low suitability.*

The risk to the Freshwater Crayfish is not deemed significant above that which already naturally occurs in the catchment during rain events and with the drainage line not being on the CFEV database and the low suitability of the habitat, indicates the risk is low to negligible.

#### Conclusion

TAM has provided suitable responses and mitigation measures to the issues raised. No further commitments are deemed necessary. Please contact me on 0458 710 098 or [douglas.tangney@jemrok.com.au](mailto:douglas.tangney@jemrok.com.au) to discuss further.

Douglas Tangney  
Environmental Scientist  
Jemrok Pty Ltd