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Enquiries to: Tom Ewers-Reilly

Date: 10 October 2016

Marc Morris
HSE Manager
MZI Resources Limited
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Re: Summary report – EPBC Inspection with Department of the Environment (Federal Government)

Dear Marc,

This letter provides a summary of events from a one day site inspection with the (Federal) Department of the Environment (DoE) of MZI Resources projects on the Tiwi Islands, Northern Territory. The site visit occurred on the 5 October 2016 via Helicopter (Jayrow; pilot = Tommy). Participants were Alex Taylor (DOE, Assistant Director), Diana Bannerman (DOE, Compliance Monitoring Officer), Kate Hadden (Tiwi Land Council, Ranger Coordinator), and Tom Ewers-Reilly (EcOz, Ecologist, present on behalf of MZI Resources). Marc Morris (MZI, Health Safety Environment Officer) could not be present due to other commitments.

The site visit was organised by DoE and also included inspection of other projects on the Tiwi Islands that were referred under the EPBC Act. This report only covers inspection and discussions related to MZI. Figure 1 shows the inspection route (for all sites). Photographs from the assessment are provided in Table 1 (selection only, not many taken during inspection).

Andranangoo

The mine rehabilitation was aerially inspected. Tom explained the site has been in rehabilitation phase for 7 to 9 years (began in 2007 and completed in 2009 – progressive rehabilitation). Turtle buffer zones of 200m from high tide line were observed and noted to be compliant under EPBC controls. The helicopter was landed at the former process facility to allow a ground inspection of rehabilitation progress. A short walk was conducted to the closest mined zone.

Rehabilitation progress of the mined area was considered reasonable with some areas showing high vegetation cover and presence of target species (*Melaleuca*), and the areas with low cover were not showing signs of erosion or weed infestation.

Kate explained the Tiwi Land Council rangers will be conducting erosion control and weed management in the former process / camp area. She did a brief weed check of the site and only found one small Mission Grass (*Pennisetum polystachion*) (declared weed under the Weeds Management Act), which she subsequently removed. Kate suggested planting Turkey Bush (*Calytrix exstipulata*) (local native species) within the gravelly pad in order to stabilise surface and protect from erosion. Turkey Bush is not one of the target species for eventual rehabilitation criteria; however, it may be a good species to encourage early in rehabilitation. Planting this species should be discussed with DME as an option to help combat erosion issues at the site.

Tom explained and showed typical habitat for Tiwi Masked Owls (*Tyto novaehollandiae melvillensis*) and Butlers Dunnart (*Sminthopsis butleri*), and mentioned that long-term revegetation goal would be for the former camp area to provide habitat for these species, however the short to medium term goal is to establish a cover of native vegetation and stable soil surface.

No major issues were highlighted by DOE representatives.



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Lethbridge West

The mine rehabilitation was aerially inspected. Tom explained the site has been in rehabilitation phase for 5 years (since 2011). Turtle buffer zones of 200m from high tide line were observed. The helicopter was landed at the former process facility to allow a ground inspection of rehabilitation progress. A short walk was conducted to the mined zone.

Rehabilitation progress of the mined area was considered reasonable with some areas showing high vegetation cover and presence of target species (*Melaleuca*), and the areas with low cover were not showing signs of erosion or weed infestation. It was noted that this site will require supplementary nursery plantings to expedite rehabilitation.

All infrastructure has now been removed (transported to Pickataramoor).

Kate mentioned that they will be coordinating erosion control along road and will conduct nursery plantings in the mine zone. The cleared pad for process area and camp site will also be rehabilitated shortly.

No major issues were highlighted by DOE representatives.

Lethbridge Barge Landing

No landing occurred, only a brief fly over inspection. Tom explained that the barge landing was positioned near the mouth of Jesse River to provide shelter and avoid turtle nesting area. Turtle monitoring occurred prior and during mining operations and the beach adjacent to barge and Lethbridge West has a much lower nesting frequency than Andranangoo.

No issues were highlighted by DOE representatives.

Lethbridge South

No formal investigation occurred during the site visit as this project was not referred under the EPBC Act. From memory, the NTG passed this project under an extension of the Lethbridge West environmental approvals after completion of a comprehensive Mining Management Plan (which included detailed flora fauna studies of EPBC matters).

An opportunistic flyover occurred on the way back to Pickataramoor and Tom discussed that the site was managed under same level of commitments as EPBC, and was considered to have low risk of impact to EPBC species as no target habitat for EPBC species was being disturbed by the operations (i.e. Eucalyptus woodlands/forests for Masked Owls and Bulter's Dunnart, and there were no turtle beaches adjacent to the deposit as it was positioned on the banks of Jesse River. Tom mentioned the site was in operation for a 10 month period and has been in rehabilitation phase since 2013 (therefore rehabilitation age of 3 years).

DoE did not query any further in regards to reasons why Lethbridge South was not referred under the EPBC Act. However, I did get the feeling that they consider all projects that occurred/planned on the island need to be referred under the EPBC Act – as they mentioned penalties are high for projects not referred and resulted in impact to EPBC matters. This statement was brought up during discussion of non-MZI projects during lunchtime – therefore was not necessarily targeting Lethbridge South.

Kilimiraka (proposed mine project on Bathurst Island)

Aerial inspection was conducted of the dunes (mine area), adjacent lakes, monsoon forest, beach, and Eucalyptus woodland. No landing was requested, and we were short of time anyway at this stage and there were no impacts/rehabilitation to observe at the site. Tom discussed initial survey results in terms of EPBC species, and specifically mentioned:

- The beach adjacent to the deposit has very low turtle nesting frequency due to beach morphology and exposure to prevailing winds and storms.
- The monsoon forest support populations of *Hoya australis* (threatened species), therefore MZI would be required to survey and provide management protocols to reduce impacts to the species

- Threatened mammals were caught in the adjacent Eucalyptus woodlands, however habitat disturbance in Eucalyptus woodlands would be fairly flexible and will be position to avoid significant impact to EPBC species.
- Dune rehabilitation will be difficult and MZI plan to conduct trials to ensure that rehabilitation of the dune environment is possible.

We also flew over existing airstrip (located near Barra Base) and the general areas selected for a proposed new airstrip (because the existing airstrip is too small and cannot be extended due to land type restriction, also potential safety issues with airstrip direction), accommodation, process area, and bore field. I said all locations will be flexible and selected in areas to avoid significant impact to EPBC species.

DoE mentioned that the Kilimiraka EPBC Referral is getting old, and MZI should consider formerly 'suspending' – especially as it was considered to be a Controlled Action. I mentioned that MZI suspended/postponed the NT EPA Terms of Reference for similar reasons, and it is likely that not cancelling EPBC Referral document was an oversight by EcOz / MZI. DoE mentioned that if the project plans to start-up in a few years they will probably require another referral document anyway, due to species status reviews and updated Federal assessment processes.

Puwanapi (relinquished ML on Bathurst Island)

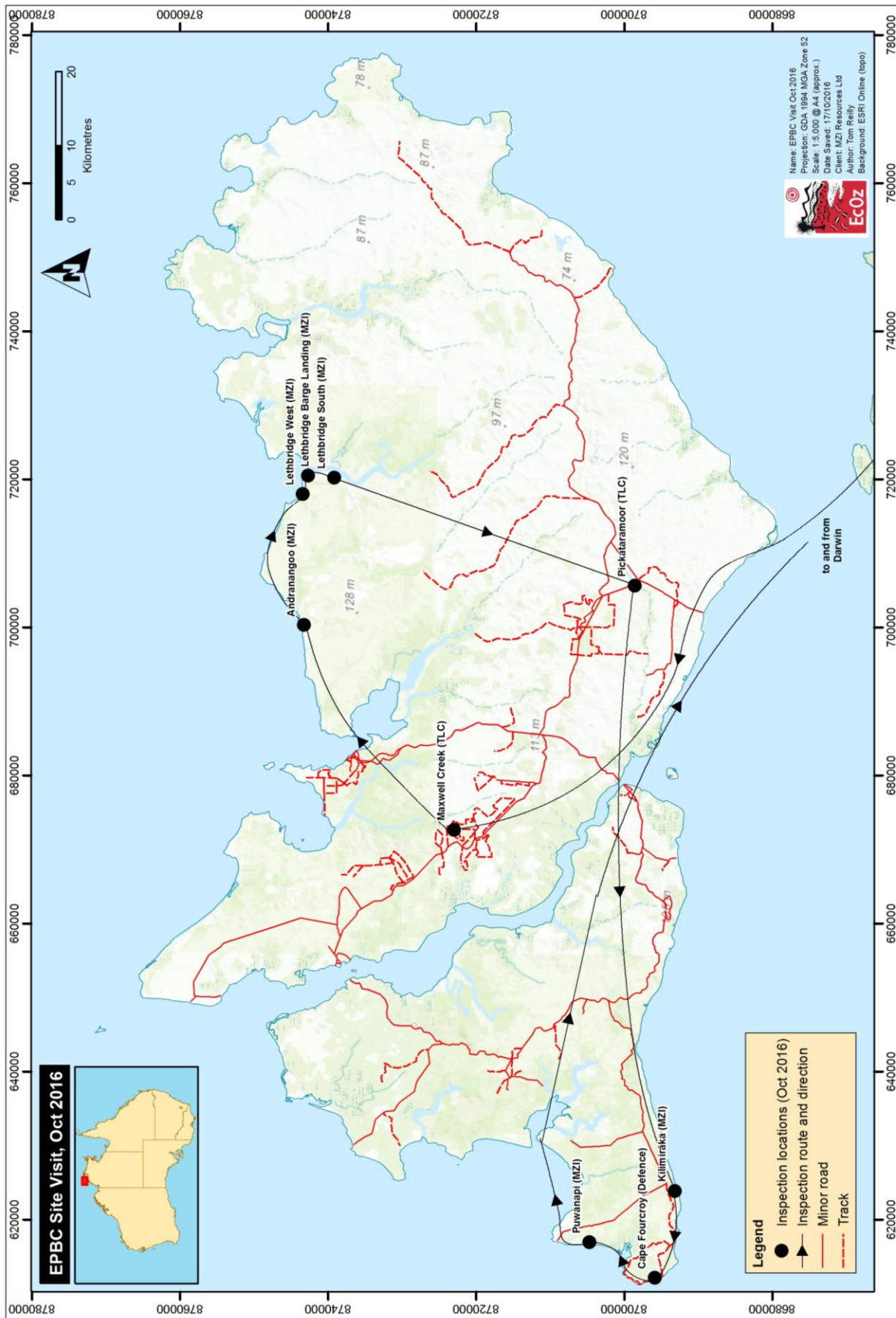
Aerial inspection was conducted. We all looked for potential disturbance from drilling but couldn't spot any subsidence or land clearing evidence. A very quick and rapid assessment, but indicates that no significant rehabilitation issues are present. Numerous fresh turtle tracks were observed on that beach, and as there is presently high tidal movement that suggests the beach is likely to have a high frequency of turtle nesting (as tracks will be readily removed over by tidal waters). The deposit at that site was deemed (by Matilda, and environmental advice from EcOz) not economic because it occurred within the turtle buffer zone and the beach had a high incidence of turtle nesting.

Please do not hesitate to contact me if you have any further queries regarding the site visit.

Yours sincerely,








Tom Ewers-Reilly
Managing Consultant - Ecology
EcOz Environmental Consultants



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Figure 1. Map of inspection route conducted as part of inspections with the (Federal) Department of Environment, October 2016

Table 1. Photographs from the inspection, October 2016 (taken by Tom Ewers-Reilly)

 <p>05.10.2016 10:17</p>	 <p>05.10.2016 10:20</p>
<p><i>Andranangoo mine rehabilitation example</i></p>	<p><i>Andranangoo camp/process area rehabilitation</i></p>
 <p>05.10.2016 12:06</p>	 <p>05.10.2016 11:39</p>
<p><i>Lethbridge West camp/process area rehabilitation</i></p>	<p><i>Lethbridge West mine rehabilitation</i></p>
 <p>05.10.2016 12:07</p>	 <p>05.10.2016 12:09</p>
<p><i>Lethbridge West mine rehabilitation</i></p>	<p><i>Lethbridge barge landing (mouth of Jesse Creek)</i></p>
 <p>05.10.2016 14:56</p>	 <p>05.10.2016 15:05</p>
<p><i>Kilimiraka dunes in the distance</i></p>	<p><i>Puwanapi Prospect (relinquished due to turtle nesting)</i></p>