

23 May 2017

Dr Tom Hatton  
Chairman  
Environmental Protection Authority  
Locked Bag 33, Cloisters Square  
PERTH WA 6850

Dear Dr Hatton,

**JACKSON 5 AND BUNGALBIN EAST IRON ORE PROPOSAL**  
**ASSESSMENT NO: 2031**  
**FURTHER INFORMATION RE OFFSETS AND REHABILITATION**

Thank you for the opportunity to present MRL's J5 and Bungalbin East Iron Ore Proposal (the **Proposal**) to the EPA at the board meeting on 18 May 2017. MRL looks forward to the opportunity to comment on the OEPA's draft assessment advice ahead of the EPA report being promptly finalised in the coming weeks.

At the conclusion of MRL's presentation you remarked that MRL's proposal to relinquish its exploration tenements over the Helena Aurora Range (**HAR**) may not be suitable as an offset as the EPA is unable to recommend conditions of approval requiring subsequent conservation measures that would be outside of MRL's or the EPA's control to deliver.

This letter clarifies the benefit of such an offset, despite the inherent administrative challenge associated with implementation. The offset ultimately offers the opportunity to realise a secure and valuable conservation benefit, whilst facilitating the clear economic and social benefits of the Proposal to the State of Western Australia.

Should the EPA prefer to consider an offset in the form of species translocation, this letter also provides further consideration and additional evidence regarding the feasibility of returning conservation significant flora taxa during rehabilitation.

Tenure relinquishment

MRL has proposed the surrender of exploration tenure as an offset for significant residual impacts of the Proposal on several conservation significant flora species and vegetation communities. The exploration tenure that hosts the conservation values of the HAR Priority Ecological Community (**HAR PEC**) is E77/842, E77/2318, E77/1942, and E77/1943 (the **Offset Tenure**) (Attachment 1).

MRL considers this is an excellent offset proposal for the following reasons:

- The presence of environmental values within the HAR PEC on tenement E77/842 alone far exceeds the impacts of the Proposal in most cases, as detailed in our response to issue 51 in the Response to Submissions.
- In contrast to most other areas in Western Australia, once mining tenure over this part of the HAR is removed there is no other competing underlying tenure such as a pastoral lease or Native Title claim. This will likely significantly streamline the subsequent steps necessary by Government to secure this area for conservation purposes in perpetuity.

MRL acknowledges that achieving more secure protection of the relinquished area in perpetuity is reliant on subsequent actions of government and that this is outside of MRL's and the EPA's direct control. Tenement relinquishment is however an important first and necessary step for a positive conservation outcome. That subsequent actions are required should not totally diminish the inherent value of the offset proposed. It will take time to secure permanent protection, such as through a Class

A Reserve; however, existing *Environmental Protection Act 1986* (WA) and *Mining Act 1978* (WA) provisions will effectively ensure adequate protection of this area in the interim period.

Available EPA and non-EPA guidance material and offset calculators expressly provide for an analysis of the likelihood of an offset being successful. This guidance material has been closely considered by MRL in developing the offset proposal. Therefore the risk that subsequent government actions do not eventuate in respect of the area of tenement relinquishment by MRL is accounted for within the proposed offset.

In light of the above, MRL requests that the EPA further consider the value of the offset proposal. In this regard, it would be open to the EPA to recommend conditions relating to the aspects that are within MRL's control, such as prohibition of mining, exploration or development within the Offset Tenure and relinquishment of these tenements. The EPA could also provide its recommendations to Government that the conservation values of the area be secured in perpetuity through creation of a Class A Reserve in the 'Other Advice' part of its report. In this regard, MRL's support of and commitment to achieving this outcome could also be included in this part.

#### Utility of returning plants

MRL has recorded 87,921 *T. aphylla* subsp. *aphylla* plants at the HAR and has quantified the impact of the Proposal on this taxon as 17,320 plants or 19.7% of all recorded individuals. It is essential to acknowledge that more than 70,000 plants of this taxon will remain. In all of the consultation on the project, not one stakeholder or community representative has asserted that the residual population of this taxon would be unsustainable. Nor do the investigations completed by MRL to date suggest this level of impact presents unacceptable risk to the continuance of the residual population.

MRL acknowledges that genetic studies by Curtin University identified that there could be a significant loss of genetic variability in the form of private alleles as a result of the Proposal. It is not known whether this loss of genetic variability would have a positive or negative effect on the viability of the species but, regardless, this genetic material can be salvaged prior to mining and specifically catered for as part of rehabilitation activities.

MRL proposed in the PER to use its best endeavours to establish 1,700 plants (10% of the potential impact) as part of its rehabilitation efforts. However, MRL advises that in no way does the evidence suggest regrowing the rare plants of the HAR, including the full impact of 17,320 *T. aphylla* subsp. *aphylla*, to be unachievable. For example, the PER included reference to the Botanic Gardens and Parks Authority's research into seedling production of *T. aphylla* subsp. *aphylla* (BGPA 2010). In this study, 1,300 plants were generated from a combination of seeds and cuttings. Cuttings in particular were found to strike with relative ease. This provides evidence of the potential to achieve such an outcome.

While MRL has been forthright in its advocacy for a pragmatic approach to species translocation, we recognise that the contemporary approach to offsets for significant residual impacts on conservation significant flora has focused on species translocation. MRL is open to such an approach by the EPA. To this end, MRL would like to present the EPA with some additional information that provides additional confidence in the feasibility of regrowing these plants.

#### Additional Information on rehabilitation populations

In 2013 MRL commissioned a targeted threatened and priority flora survey of the existing drill pads and tracks at Bungalbin East (Attachment 2). This report was not previously provided to the EPA, on the basis that the results were superseded by more recent surveys of the HAR by ecologia Environment.

The intent of the earlier targeted survey was to support an application for a low impact drilling program at Bungalbin East utilising the existing pads and tracks cleared by BHP in 1960 and 1971. This drilling program was never pursued by MRL after a strategic decision was taken to seek mining and exploration approvals at both J5 and Bungalbin East together.

While the report was never used for its intended purpose, the results of the survey provide evidence of the return of threatened and priority plants to previously disturbed areas, with no active rehabilitation effort on the part of the proponent. This provides additional confidence that threatened species are capable of reestablishment in this area.

In the 42 years between the last disturbance and the date of the survey, significant numbers of threatened and priority plants have self-propagated on disturbed land (Table 1).

Table 1: Results of flora survey of drill pads and access tracks at Bungalbin East (MCPL, 2013)

<b>Flora Species</b>	<b>Plants regrown</b>	<b>Including 5m buffer</b>
<i>Tetradlea apylla</i> subsp. <i>apylla</i> (T)	51	151
<i>Acacia adinophylla</i> (P1)	133	370
<i>Lepidosperma bungalbin</i> (P1)	86	317
<i>Grevillea Georgiana</i> (P3)	39	93
<i>Hibbertia lepidocalya</i> subsp. <i>tubercalata</i> (P3)	267	876
<i>Mirbelia ferricola</i> (P3)	6	24
<i>Neurachne annularis</i> (P3)	2,917	4,086
<i>Stenanthemum newbeyi</i> (P3)	921	1,915
<i>Banksia arborea</i> (P4)	197	357

The large number of threatened and priority plants within 5m of the pads indicates the absence of adverse indirect impacts from drilling operations. Typical of the day, it is unlikely that there would have been specific controls in place to manage indirect impacts arising from aspects such as dust emissions and unstable landforms. This differs substantially to the contemporary management and mitigation measures that are implemented to limit impacts.

For illustrative purposes, please refer to the attached annotated photographs taken in 2013 as part of drill program planning (Attachment 3). These photos illustrate the occurrence of the rehabilitation populations of threatened and priority listed plants.

#### Conclusion

MRL understands that the EPA will make the recommendations it sees fit in respect of the Proposal, including the conditions that implementation should be subject to should Government be of a mind to approve the Proposal.

MRL understands the basis for the EPA's concern regarding the tenure relinquishment offset proposal and uncertainty in respect to whether other government agencies will take subsequent actions to achieve the desired conservation outcome. That said, this uncertainty should not totally diminish the overall value of the offset proposal.

In the event that the EPA does not support the offset proposal to surrender exploration tenure, MRL would not oppose the recommendation of approval conditions relating to the regrowing of plants that are potentially significantly affected by the Proposal. If this is the course that the EPA intends to take following further consideration of the offset proposal, MRL would welcome the opportunity to work with the OEPA to further develop an offset of this nature.

MRL trusts that the EPA will consider this new information as part of the assessment of the Proposal and preparation of its report and recommendations to the Minister for Environment.

Yours sincerely



**Sean Gregory**  
**Project Manager**

### **Attachments**

1. Figure illustrating the occurrence of significant environmental values over MRL tenure available for offset.
2. Matiske Consulting Pty Ltd, 2013, *Threatened and Priority Flora Survey of Drill Hole Locations within Mining Tenement M77/1097 Bungalbin East*, Perth, Western Australia: Unpublished Report Prepared for Polaris Metals Pty Ltd.
3. Annotated photographs of threatened and priority plants growing on drill pads and tracks at Bungalbin East

### **References**

Botanic Gardens and Parks Authority, 2010, *Seedling Production of Tetratheca aphylla* subsp. *aphylla* for Restoration, Perth, Western Australia: BGPA.