



Report and recommendations of the Environmental Protection Authority



**Spinifex Ridge Molybdenum Project,
50 km north-east of Marble Bar,
Shire of East Pilbara –
Section 46 amendment to condition 3
of Ministerial Statement 772 –
extension of time limit of authorisation**

Moly Metals Australia Pty Ltd

Report 1482

June 2013

EPA R&R No: 1482

ENVIRONMENTAL PROTECTION AUTHORITY REPORT AND RECOMMENDATIONS TO THE MINISTER FOR ENVIRONMENT

SPINIFEX RIDGE MOLYBDENUM PROJECT, 50 KM NORTH-EAST OF MARBLE BAR, SHIRE OF EAST PILBARA – SECTION 46 AMENDMENT TO CONDITION 3 OF MINISTERIAL STATEMENT 772 – EXTENSION OF TIME LIMIT OF AUTHORISATION (ASSESSMENT NO. 1971)

The Minister for Environment has requested (23 April 2013) that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing condition 3 of Ministerial Statement 772 to extend the Time Limit of Authorisation for the substantial commencement of the above proposal.

The following is the EPA's Report and Recommendations (No. 1482) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986*.

INTRODUCTION

The proposal is to develop an open pit mine approximately 50 km north-east of Marble Bar and 200 km south-east of Port Hedland that will process 20 million tonnes per annum (Mtpa) of ore to produce approximately 23,000 tonnes per annum (tpa) of molybdenum concentrate and approximately 48,000 tpa of copper concentrate.

The proposal was referred to the EPA in October 2006 and assessed by the EPA at the level of Public Environmental Review, (PER).

In assessing the Spinifex Ridge Molybdenum Project, the EPA considered the following environmental issues as relevant to the proposal and requiring detailed evaluation in its Report and Recommendations (Bulletin 1285):

- (a) Groundwater – impact from dry stack tailings and waste dumps;
- (b) Surface water and drainage – impact from diversion channel, tailings and waste dumps;
- (c) Terrestrial fauna – impact from clearing;
- (d) Closure and rehabilitation; and
- (e) Amenity values.

The EPA considered a number of other factors were relevant to the proposal, but did not require detailed evaluation in its Report and Recommendations.

A full list of environmental factors considered relevant to the proposal is given in Appendix 3 of Bulletin 1285.

The EPA concluded that it is unlikely that the EPA's objectives would be compromised, provided there is satisfactory implementation by the proponent of the recommended conditions. The Minister for Environment approved the proposal for implementation, subject to the conditions of Ministerial Statement 772. Ministerial Statement 772 was published on 5 August 2008.

PROPOSED CHANGE TO CONDITION 3 OF MINISTERIAL STATEMENT 772

Condition 3 of Ministerial Statement 772 defines the Time Limit of Authorisation which requires that the proponent demonstrate substantial commencement on or before the expiration of five years from the date of the Statement (i.e. prior to 5 August 2013). The proposal has not yet substantially commenced due to a number of commercial reasons.

On 18 March 2013, the proponent, Moly Metals Australia Pty Ltd (Moly Metals) submitted an application to the Office of the Environmental Protection Authority (OEPA) requesting an extension of the Time Limit of Authorisation for substantial commencement by three years, to 5 August 2016. If the Minister approves an extension it will be necessary to change condition 3 of Ministerial Statement 772 under section 46 of the *Environmental Protection Act 1986*.

ASSESSMENT OF PROPOSED CHANGE

The proponent is not proposing any changes to the proposal as described in the PER and as assessed by the EPA in EPA Report 1285. However, as the PER was submitted in October 2006, additional information on the site has been provided that was not available during the time of the original assessment. In addition, a number of aspects of the original proposal have the potential to change within the intervening time period. The major factor of relevance is considered to be terrestrial fauna, including subterranean fauna.

The proposal has the potential to impact terrestrial fauna by direct loss or disturbance of habitat, alteration to hydrology, reduced hydraulic connectivity and vehicle impacts.

Terrestrial Fauna

Two vertebrate fauna surveys were conducted over the project area during August 2005 and April 2006. A reconnaissance survey and assessment of vertebrate fauna and fauna habitats was conducted over water supply areas and associated service corridors during April and May 2007.

The only change in listing since the initial assessment has been the Grey Falcon (*Falco hypoleucos*), which in 2012 was elevated from a Priority 4 ranking to Schedule 1 - *Fauna that is rare or likely to become extinct, are declared to be fauna that is in need of special protection*.

The Grey Falcon has not been recorded at Spinifex Ridge, but was 'predicted' to occur during the assessment, and the impact assessment presented in the original PER is still valid. Based on the management approach and strategies

presented in the associated Environmental Management Plans, EPA objectives for terrestrial fauna are unlikely to be compromised.

Short Range Endemic - Invertebrates

The proponent committed to undertake an autumn 2008 Short Range Endemic (SRE) survey to ensure that impacts to SRE are avoided. The EPA recommended that condition 7, requiring the proponent to report the findings of the autumn 2008 SRE survey to the Department of Environment and Conservation (DEC), be implemented to inform project design so that adequate protection of SRE can be achieved.

Results of the survey expanded the distributions of taxa potentially exhibiting short-range endemism at Spinifex Ridge. Three taxa potentially exhibiting short-range endemism had previously been identified: a land snail (Family Camaenidae), a mygalomorph spider (*Missulena* sp), and a pseudoscorpion (*Synsphyronus* sp. Spinifex Ridge). The survey identified Family Camaenidae and *Missulena* sp at sites other than Spinifex Ridge, and concluded:

- habitat suitable for *Missulena* sp. and the land snail Family Camaenidae, and comparable with that occurring at Spinifex Ridge, can be found within 32 km;
- the distribution of *Missulena* sp. has been extended 24.25 km to the west of Spinifex Ridge; and
- the distribution of Family Camaenidae has been extended 32 km to the west, and 2.25 km to the east, of Spinifex Ridge.

An additional Regional Fauna Habitat Assessment has also been undertaken since the initial assessment. This study quantifies the three 'key habitats' identified at Spinifex Ridge within an 80 km radius, and found that these habitats were widely represented in the region.

Condition 7 requires the proponent to submit a report detailing management measures to protect the conservation status of any SRE species located in the proposal area, to the Chief Executive Officer.

The SRE management strategies developed by the proponent including those presented in a number of associated individual Environmental Management Plans (Terrestrial Fauna, Flora and Vegetation, Groundwater, Surface Water and Conceptual Mine Rehabilitation and Closure Plan) provide a thorough methodology to maintain potential short-range endemic invertebrate populations at the regional level.

Subterranean fauna

After Statement 772 was published, a final report was prepared by Outback Ecology Services that updated and summarised several previous individual reports prepared for four areas relevant to the project: the Spinifex Ridge Project Area, DeGrey Borefield, Canning A Borefield, and an aquifer associated with the

Woodie Woodie mining void. This combined and updated information, incorporating additional surveys, was not available at the time of assessment.

Results of the final report indicate that:

- no troglifauna were identified during the study; and
- stygofauna were present in all four study areas.

The results of the surveys indicate that stygofauna communities occurring over the Project Area and the associated borefields do not appear to be at risk from potential groundwater impacts associated with the project. This includes water abstraction from borefields and pit dewatering at the Project Area, as long as appropriate groundwater management strategies are implemented.

CONSULTATION

The proponent has not sought comment on the proposed extension of Time Limit of Authorisation from relevant authorities as there are no changes to the proposal as originally proposed by the proponent in the PER and as assessed by the EPA in Bulletin 1285.

The EPA is satisfied that relevant government agencies do not require prior consultation.

CONCLUSION

The EPA is satisfied that the environmental factors of the proposal have not changed significantly from those presented in the PER and as assessed by the EPA in Bulletin 1285, and that no new significant environmental factors have arisen since the EPA's original assessment of the proposal. In fact, additional survey information provided by the proponent indicates that the risk posed by the project to stygofauna and short-range endemics is likely to be less than originally assessed.

The EPA considers that its objectives would not be compromised through the extension of the Time Limit of Authorisation and if there is satisfactory implementation of the conditions contained within Statement 772.

The EPA is also satisfied that the grounds of appeal are not affected by the proposed extension to the Time Limit of Authorisation.

The EPA concludes that the Time Limit of Authorisation for substantial commencement of the Spinifex Ridge Molybdenum Project proposal may be extended until 5 August 2016.

EPA RECOMMENDATION

The EPA recommends that condition 3 be amended to read as follows:

3 Time Limit of Authorisation

- 3-1 The proponent shall not commence implementation of the proposal after 5 August 2016, and any commencement, prior to this date, must be substantial.
- 3-2 Any commencement of implementation of the proposal, on or before 5 August 2016, must be demonstrated as substantial by providing the CEO with written evidence, on or before 5 August 2016.

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

SPINIFEX RIDGE MOLYBDENUM PROJECT, 50 KM NORTH-EAST OF MARBLE
BAR, SHIRE OF EAST PILBARA

Proposal: Spinifex Ridge Molybdenum Project, 50km north-east of
Marble Bar, Shire of East Pilbara, as described in
Statement No. 772.

Proponent: Moly Metals Australia Pty Ltd (ABN - 19 108 503 331)

Proponent Address: 46–50 Kings Park Road, West Perth, Western Australia,
6005

Assessment Number: 1971

Previous Assessment Number: 1657

Report of the Environmental Protection Authority: 1482

Previous Reports of the Environmental Protection Authority: 1285

Previous Ministerial Statement Numbers: 772

The implementation of the proposal to which the above report of the Environmental Protection Authority relates, is subject to the conditions and procedures contained in Statement 772, as amended by the following:

Condition 3 of Statement 772 is deleted, and replaced with:

3 Time Limit of Authorisation

3-1 The proponent shall not commence implementation of the proposal after the 5 August 2016, and any commencement, prior to this date, must be substantial.

3-2 Any commencement of implementation of the proposal, on or before 5 August 2016, must be demonstrated as substantial by providing the Chief Executive Officer* with written evidence, on or before 5 August 2016.

* The Chief Executive Officer of the Department of the Public Service which is responsible for the administration of section 48 of the *Environmental Protection Act* 1986, or his delegate.

**ALBERT JACOB MLA
MINISTER FOR ENVIRONMENT; HERITAGE**