



27 December 2021

Ms Joanne Townsend  
Controller of Water Resources  
Department of Environment, Parks and Water Security

By email: [water.licensing@nt.gov.au](mailto:water.licensing@nt.gov.au)

Dear Ms Townsend,

## **McArthur River Mining Pty Ltd – application for a groundwater licence - comments**

We refer to the above groundwater extraction licence application for 1600ML per annum, lodged by McArthur River Mining Pty Ltd (**Application**).

ECNT is concerned that the Application is deficient in a number of key respects.

Firstly, ECNT notes that the “Annual Site Water Balance” referred to in the covering letter from the proponent dated 20 August 2021 does not appear to be appended to the documents publicly exhibited with the Application (it is described as enclosure 5a-c in the covering letter). ECNT notes that Erias’ 2017-2018 Independent Monitor report identified a number of significant issues with the proponent’s site water balance at that time, including but not limited to errors in the water balance model parameter estimation, inadequate allowance for contingencies, and unpredicted changes in mine site runoff/seepage water quality. It is not clear whether or how these issues have been resolved. In any case, the Annual Site Water Balance is not publicly available for scrutiny as part of the Application.

Secondly, the “Adaptive Management Plan” referred to in the covering letter dated 20 August 2021 (which includes the Water Management Plan) does not appear to be appended to the documents publicly exhibited with this licence (it is described as enclosure 4 in the covering letter). While part of the Adaptive Management Plan appears on the DITT website, the Water Management Plan does not appear to be available here

([https://industry.nt.gov.au/\\_data/assets/pdf\\_file/0016/931210/mcarthur-river-mine-adaptive-mining-management-plan-appendix-b.pdf](https://industry.nt.gov.au/_data/assets/pdf_file/0016/931210/mcarthur-river-mine-adaptive-mining-management-plan-appendix-b.pdf)). ECNT notes that a number of issues were raised by Erias in its 2017-2018 Independent Monitor report with respect to the proponent’s water management plan, including the lack of site specific trigger values, the lack of information about environmental values and how they would be ascertained, what monitoring programs will be developed for assessing impacts on cultural and environmental values. It is not clear how or whether these issues have been resolved. In any case, the Water Management Plan is not publicly available for scrutiny as part of the Application.



In ECNT's view, the Application does not therefore contain sufficient information for the public to be able to provide a meaningful comment on the Application in accordance with common law rules of procedural fairness.

ECNT is also concerned about the accuracy of the information provided by the proponent in the Application, particularly with respect to the volume of groundwater sought to be licensed by the proponent. The Application is for extraction from 5 borefields located on the mine site. However, very little information is provided to verify the volume sought, or for what purposes the water is to be used beyond cross referencing documents which are not publicly available. ECNT notes that without the Annual Site Water Balance, and Water Management Plan, it is not possible to verify the volume sought.

In addition, an examination of the proponent's most recent EIS for its Overburden Management Project and associated documentation indicates that the volume of groundwater actually extracted on the mine site may be significantly greater than the volume applied for in the Application. For example, ECNT is aware that three evase pumps have been installed on the mine site with capacity to extract 180l/s for dewatering the disused underground mine pit. If these pumps operated 24 hours a day and 7 days a week, then the extraction from these pumps alone could be as high as 15,000ML per year (nearly 10 times the volume sought in the Application). It is imperative that the proponent's groundwater extraction licence reflect the actual water extracted by the proponent (as well as information about how any impacts from this extraction are to be managed and mitigated). Otherwise, the proponent is at risk of breaching s59 of the Water Act.

Furthermore, ECNT that dewatering of the open pit may significantly impact environmental and cultural values, including sacred sites and GDEs (principally due to drawdown of the aquifer). The UNSW Global Water Institute (in a report co-authored with ECNT) found that Djirrinmini waterhole was at significant risk from the mine's dewatering at the open pit ([https://www.globalwaterinstitute.unsw.edu.au/sites/water/files/u982/GWI\\_ECNT\\_MRM\\_Report%20%281%29.pdf](https://www.globalwaterinstitute.unsw.edu.au/sites/water/files/u982/GWI_ECNT_MRM_Report%20%281%29.pdf)). Erias's 2017-2018 Independent Monitor report found that drawdown from mine dewatering could lower groundwater causing impacts on groundwater-dependent ecosystems (p 4-94). However, while potential drawdown impacts on Wurrini waterhole are mentioned in the Application, there is no mention of impacts to other GDEs/sacred sites in the vicinity of the open pit, including how these would be managed (eg Djirrinmini, the Garbula tree and Coolibah tree). The Application refers to management plans to manage impacts to GDEs, however, these do not appear to be publicly available. The trigger values/performance indicators for Wurrini waterhole given in the Application are not easily decipherable. There are no similar performance indicators given for Djirrinmini or other GDEs/sacred sites. It is not possible to ascertain from the Application how environmental and cultural values associated with dewatering of both the open pit and underground pit will be ascertained, and impacts on them monitored.



In ECNT's view, the application should be withdrawn by the proponent or rejected by the Controller, and resubmitted and publicly exhibited with the correct information provided (including relevant documentation, and with an accurate and verifiable volumetric description of proposed groundwater extraction).

Yours faithfully,



Kirsty Howey  
Co-Director  
Environment Centre NT



Shar Molloy  
Co-Director  
Environment Centre NT