

ASSESSMENT REPORT

Snapper Mineral Sands Mine Production and Haulage Modification (MP 06_0168 Mod 6)

1. BACKGROUND

Cristal Mining Australia Limited (Cristal) owns and operates the Snapper Mineral Sands Mine located approximately 40 kilometres (km) west of Pooncarie and 170 km south of Broken Hill in far western New South Wales (see **Figure 1**).

Cristal also owns and operates two other mineral sands mines in the region, the nearby Ginkgo Mine (about 10 km northeast of Snapper) and the approved but not yet commenced Atlas-Campaspe Mine (about 120 km southeast of Snapper), as well as a Mineral Separation Plant (MSP) in Broken Hill, which has approval to process the mineral sands concentrate from these three mining operations.

The Snapper mine was approved by the Minister for Planning on 28 August 2007 under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), with operations commencing in late 2010. This approval has been subsequently modified on four occasions and currently allows for the extraction of 9.1 million tonnes per annum (Mtpa) of mineral sands ore to produce a maximum of 621,000 tonnes per annum of mineral concentrate until 2026.

2. PROPOSED MODIFICATION

Cristal is seeking approval for a modification to the project approval for the Snapper Mineral Sands Project, to allow for minor increases to its annual ore production and haulage limits (see **Appendix B**). These additional limits are required to address current restrictions on the production schedule for the Snapper mine and provide for the continuity of mining operations in 2014.

The modification would increase the currently approved ore extraction rate for the Snapper mine from 9.1 Mtpa to 9.2 Mtpa and the cumulative limit for mineral concentrate haulage from the Snapper and Ginkgo mines to the Broken Hill MSP, from 735,000 tonnes per annum to 780,000 tonnes per annum.

All other aspects of the approved mining operations at the Snapper mine would remain the same, including the number of trucks transporting concentrate from the site to the Broken Hill MSP.

3. STATUTORY CONTEXT

Under schedule 6A of the EP&A Act, the Snapper Mineral Sands Project is classified as a “transitional Part 3A project” and may be modified under the former section 75W of the Act.

The Department is satisfied the proposal should be characterised as a modification to the existing project approval as it only involves minor changes to the approved ore extraction rate (1%) and haulage to the Broken Hill MSP (6%), which can be achieved with negligible environmental impacts (see below).

The Minister for Planning is the approval authority for the application. However, the Executive Director, Resource Assessments may determine the application under the Minister’s delegation of 10 November 2014.

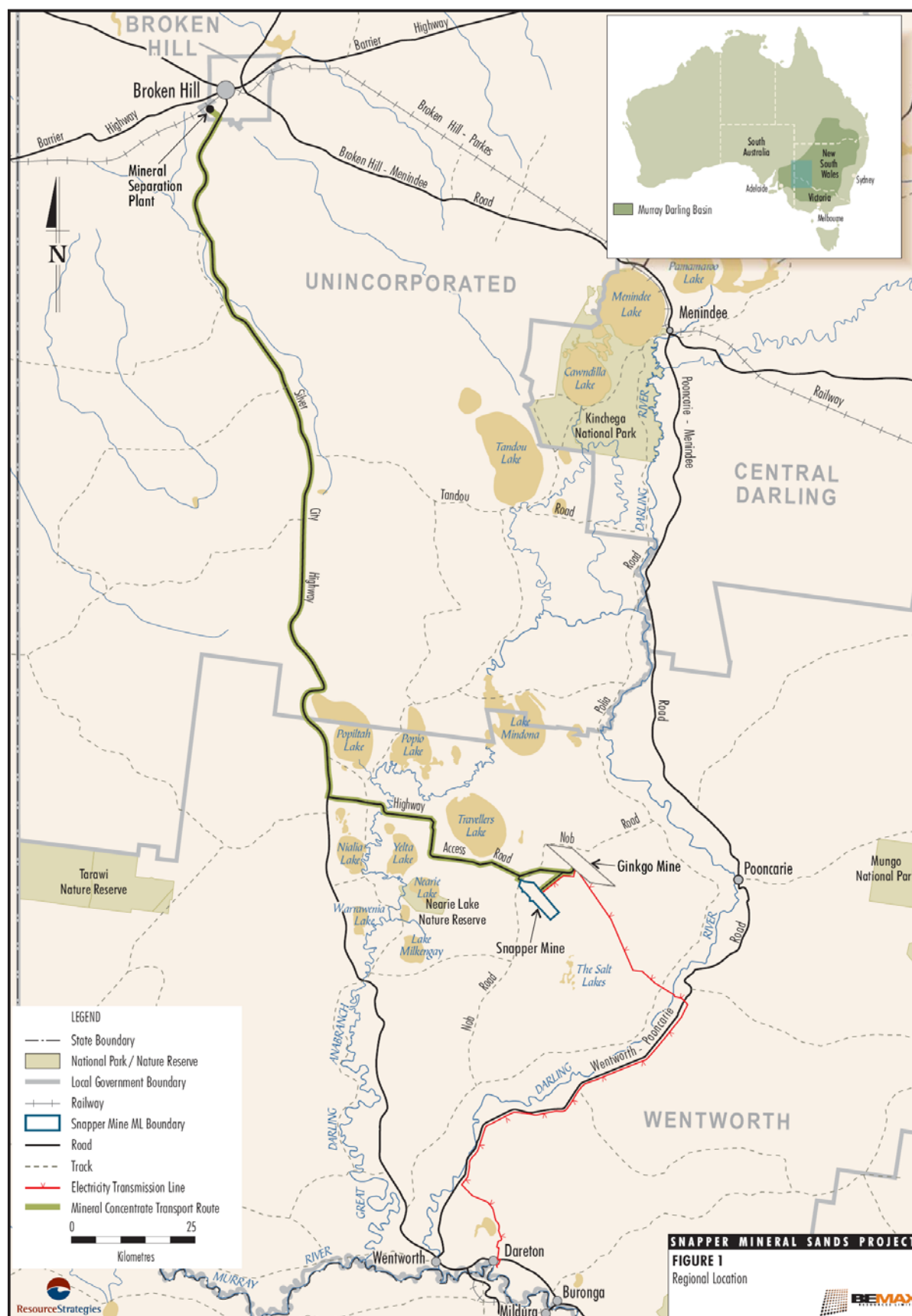


Figure 1: Regional Location

4. ASSESSMENT

The Department has assessed the merits of the application in accordance with the requirements of the EP&A Act, and summarised the findings of this assessment in Table 1 below.

Table 1: Assessment of key issues

Issue	Consideration and Assessment	Recommendation
<i>Transport</i>	- Under the existing approval, Cristal is allowed to transport mineral concentrate to the MSP in Broken Hill and return waste materials from the MSP back to the mine for disposal. - At present, these transport arrangements involve 37 truck trips per day (i.e. either direction) along the approved haulage route (see Figure 1). - The modification would not change the approved transport route, or the existing haulage fleet (i.e. double and AB-triple road trains). - The number of truck movements would also not change because the increase in production is so minor that it can be spread across the haulage truck fleet without increasing the number of truck trips required. - While the modification is unlikely to result in any additional road capacity or safety issues, Cristal has committed to undertake a safety audit of the existing Highway Access Road, and to implement any recommendations from the audit, to ensure that this road continues to meet suitable safety standards. - The Department is satisfied that the modification would not result in any increase in the traffic impacts of the approved project, and that haulage could continue to be adequately managed in accordance with the existing Transport Management Plan, Transport of Hazardous Materials Plan and Traffic Code of Conduct.	No additional conditions necessary.
<i>Water Resources</i>	- Water demand at the MSP would marginally increase under the modification, in line with the increased production rate. - However, Cristal has identified that the majority of this water would be recycled from its mining operations and that its existing water supplies are sufficient to accommodate the predicted increase in water use at the MSP. - In this regard, the current approved maximum water requirement is 270 L/s, and current operations use around 130 L/s. - The modification would not change the existing water management systems and could be managed to meet the requirements of the environment protection licence for the site.	No additional conditions necessary.
<i>Waste Material</i>	- The increased throughput at the MSP would result in a marginal increase in waste product. - However, process waste from the MSP would continue to be disposed of under existing arrangements at the Snapper and Gingko mines, and would not result in any changes to the final landform as the total volume of waste would remain the same.	No additional conditions necessary.
<i>Air Quality & Noise</i>	The modification would not result in any material changes to off-site air or noise impacts at nearby receivers.	No additional conditions necessary.

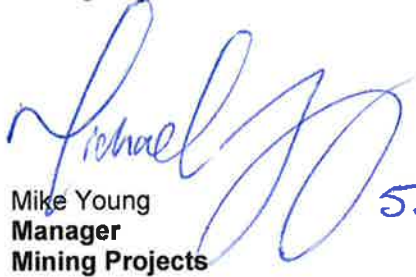
5. CONCLUSION

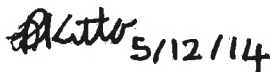
The Department considers the proposed modification to be in the public interest as it would allow Cristal to maintain production at the Snapper mine without any appreciable additional environmental impacts. Consequently, the Department recommends that the application be approved, subject to some minor amendments to the existing conditions to facilitate the increased production and transportation rates.

6. RECOMMENDATION

It is recommended that the Executive Director, Resource Assessments, as delegate of the Minister:

- **consider** the findings and recommendations of this report;
- **determine** that the proposed modification falls within the scope of section 75W of the EP&A Act;
- **approve** the modification application under section 75W, subject to conditions; and
- **sign** the notice of modification in **Appendix A**.


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Mining Projects 5.12.14


David Kitto
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Resources Assessments 5/12/14