

Summary of reasons for decision – request to amend a referred proposal under s. 38C of the *Environmental Protection Act 1986*

Proposal title: Lucky Bay Garnet Mine

Proponent: Australian Garnet Pty Ltd

Proposal referral date: 07-09-2021 (third-party referral)

Date request to amend referred proposal under s. 38C received: 14-06-2022

Environment Online Reference Number: N/A (Ref no. CMS18069)

Existing referred proposal:

Australian Garnet Pty Ltd is seeking to develop a greenfields mineral sands mine located 35 kilometres south of Kalbarri, in the Mid-West region of Western Australia, within the Shire of Northampton.

The proposal would include the progressive development of above-groundwater mine pits, and associated processing facilities and infrastructure.

The proposal would require the clearing of 161 hectares of native vegetation and mined sections would be progressively backfilled and rehabilitated. The proposal would require up to 1.7 Gigalitres per annum (GLpa) of groundwater.

Short description of amendment sought:

Since the initial document supplied to the EPA in November 2021, there have been minor changes to the proposal as follows:

- Non-magnetic material (referred to as 'fine mineral concentrate') will be stored onsite for sale to third party processors.
- Plant stack height has been reduced from 15 meters (m) to 3 m, which may reduce noise emissions.
- A revised groundwater licence (GWL170860(6)) was approved under Section 5C of the *Rights in Water and Irrigation Act 1914* on 20 December 2021 which allows for abstraction of up to 2.015 GLpa.

Decision:

Amendment to proposal as set out in Attachment 1 is approved.

Environmental factors relevant to amendment(s):

- Human Health
- Social Surroundings
- Flora and Vegetation
- Inland Waters.

Summary of likely changes to environmental impacts from proposed amendment

Amendment sought	Changes to environmental impacts
Storage of fine mineral concentrate	<p>The proponent originally reported that monazite was intended to be mixed in with the clean sand tails and slimes and reburied in the mining pit.</p> <p>The proponent has now advised that non-magnetic material intended for backfill into the mining void will now be mixed with magnetic concentrate and stored before being sold to a third-party and taken off site.</p> <p>The fine mineral concentrate will be regulated under the <i>Radiation Safety Act 1975</i>. A Radiation Management Plan has been prepared and submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) / Radiological Council WA.</p>
Shortening of the baghouse and diesel rotary dryer stack	<p>The proponent will install a baghouse and diesel rotary dryer that differs in design from that originally proposed (this has been approved in the Works Approval W6214/2019/1). This updated design has the benefit of lowering noise emissions from the plant due to the addition of a silencer.</p> <p>The reduction of the stack from 15 m to 3 m may benefit visual amenity; however, the proponent has advised that no change in visual amenity is anticipated, as the sand dune on the eastern side of the plant area prevents any visual amenity impact from the plant to nearby residences.</p>
Abstraction of water from 1.7 GLpa to 2.015 GLpa	<p>Groundwater abstraction of up to 2.015 GL/a will be managed via a groundwater licence (GWL170860(6)) granted on 20 December 2021. This includes a Groundwater Operating Strategy which identifies measures to control and mitigate degradation to groundwater dependent vegetation using triggers (for example, drawdown at Utcha Well).</p>

Summary of consultation

The proponent has consulted with the following agencies for the amended proposal:

- An amended Mining Proposal and Mine Closure Plan was submitted to DMIRS.
- An amended Works Approval (W6214/2019/1) was granted by Department of Water and Environmental Regulation (DWER) on 20 April 2022.
- Groundwater licence GWL170860(6) was amended and approved by DWER on 20 December 2021 to increase abstraction rate from 1.7 GL/a up to 2.015 GL/a.

Summary of consideration of amendment

The EPA has considered whether, if the proposal were already approved, the amendment would be a significant amendment. This has included considering the likely significance of:

- Effects of the proposed amendment on its own
- Effects of the proposed amendment in the context of the existing referred proposal
- Cumulative environmental impacts
- Holistic impacts.

The EPA has considered whether it has sufficient information about the proposed amendment to be able to make a decision whether to assess the proposal as amended, and if so, to decide the level of assessment.

The EPA has considered whether the amended proposal will still be substantially the same character as the existing referred proposal.

The EPA considers the amended proposal to be substantially the same character as the existing referred proposal, and does not consider that the amendment would be a significant amendment if the proposal were already approved. The EPA considers it has enough information to reasonably proceed to make decisions about assessment without a new referral being submitted.

Attachments

- Amended proposal content document

Appeals

Decision not appealable.

A handwritten signature in blue ink, appearing to read 'Matthew Tonts', with a stylized flourish at the end.

Prof. Matthew Tonts

CHAIR

Delegate of the Environmental Protection Authority

6 July 2022