



## Application for a works approval amendment

### Division 3, Part V *Environmental Protection Act 1986*

---

<b>Works Approval number</b>	W6214/2019/1
<b>Works approval holder</b>	Australian Garnet Pty Ltd
<b>ACN</b>	121 051 965
<b>File number</b>	DER2018/001613
<b>Premises</b>	Balline Garnet Mine George Grey Drive YALLABATHARRA WA 6535  Legal description - Tenements M70/1280, G70/253 & L70/215 within Lot 1 on Diagram 91564, Lot 300 on Plan 60565 & Lot 1431 on Plan 251608
<b>Date of report</b>	14 July 2020
<b>Proposed decision</b>	Granted

## Amendment description

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the existing works approval issued under the EP Act for a prescribed premises as set out below. This notice of amendment is hereby given under section 59B(9) of the EP Act.

This amendment is limited to relocating key site infrastructure at the proposed Balline Garnet Mine (the premises).

## Purpose and scope of assessment

Due to a change in market conditions the works approval holder has sought to relocate the wet concentrator plant and associated services, change the starting mine location and the initial tailings areas.

## Background

The premises is a large garnet deposit proposed to be mined by the works approval holder. Initial mining approvals were granted in 2010, however the project has not yet commenced due to market conditions. The project involves the mining of three open cut pits and processing of the ore through a wet gravity separation plant and a dry processing plant.

At this stage, construction is proposed to commence in quarter 3, 2020.

## Amendment

This application seeks approval for the following changes:

- Relocation of the wet concentrator plant;
- Relocation of some of the services, starting mine location and initial tailings areas; and
- Simplification of the start-up plant and phased development of the full project.

The operating capacity of the plant, the mine footprint, mining techniques and management strategies remain unchanged.

### Wet plant relocation

It is proposed to relocate the wet plant around 1 km south-south-east of the location originally approved under W6214/2019/1. The dry plant will remain in the existing location and will be constructed later than initially anticipated – a smaller dryer will be used at the new location in the interim.

The wet plant processing methods remain unchanged, however it is proposed to simplify the structures and services for the wet plant, which will reduce the construction period to around 12 months.

Relocating the wet plant is expected to reduce energy costs associated with pumping requirements.

### Tailings area changes

With the relocation of the wet plant, in order to reduce pumping costs the initial start-up tailings areas will be relocated adjacent to the wet plant area. Once sufficient open pit area becomes available (expected to be 1 year into production), both tailings streams will be deposited directly in-pit.

Due to the location of the proposed production bore, PB4, being adjacent to the tailings area, it is expected there will be increased capture of seepage from the ponds, which will reduce the water requirements from other bores.

### Other changes

It is proposed to relocate the site access road from the north end of the mine to the south end, on a block of land which the works approval holder has an agreement with the owner. The

new proposed access road is shorter than the originally planned road, and allows for safer access for entering onto/exiting from George Grey Drive. This land falls outside of the originally approved boundary of the premises – the works approval has applied for a miscellaneous lease (L70/215), which is yet to be granted.

## Decision

DWER has previously assessed the risk of establishing the Balline Garnet Mine (refer to decision report for the original works approval, dated 29 April 2019) and considers this application to be an addendum to that risk assessment.

The Delegated Officer has determined the proposed changes are unlikely to result in a material change to the overall risk profile of the premises.

This determination is based on the following:

- there is comparative separation between the original and proposed new wet plant site with nearby sensitive receptors. The risk therefore remains unchanged, providing that existing works approval conditions related to noise and dust controls are adhered to during mine construction and operation;
- the risk of relocating the initial tailings areas remains unchanged, providing that existing works approval conditions related to infrastructure requirements and groundwater management are adhered to during initial mining; and
- the site access road does not fall within the scope of the prescribed activity.

In amending the licence, the Delegated Officer has also:

- updated the format and appearance of the works approval;
- revised condition numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The decision report for the original works approval will remain on the DWER website for future reference and will act as a record of DWER's decision making.

## Consultation

The works approval holder was provided with drafts of the revised works approval and this amendment report on 25 June 2020. Comments were received on 7 July 2020.

Works approval holder's comments	DWER response.
Page 12 Schedule 2 Maps should be Schedule 1. (Schedule 1 has been removed so the titles need to change so the references in Table 3 line up).	Noted.
Condition 18 requires some clarification. The "mounding" of water occurs under the sand tails. When we start tailing, is it effectively very close to natural surface, (only topsoil will be removed). This will mean the initial start up tails mounding is going to be within 1 metre.  Note this is for the initial start up sand and slime tails only, as once we can tail back into the pit, it will nearly always be under the 1 m from natural surface. A way around this is to exempt this requirement until after tailings is returned to the pit.	Noted. Condition 14 updated to clarify that the 1 mbgl applies to the monitoring bores. Condition 22, Table 8 updated to include the 1 mbgl.  The works approval holder has had a second review of these changes and is happy to proceed.

## Conclusion

Based on this assessment, it has been determined that a works approval amendment will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

## Summary of amendments

The below table provides a summary of the proposed amendments and will act as a record of implemented changes. All proposed changes have been incorporated into the revised works approval as part of the amendment process.

Condition no.	Proposed amendments
Cover page	Restructured to clearly indicate what prescribed activities have been risk assessed.
Explanatory notes	Deleted, consistent with current DWER template. This guidance is now available in DWER's Guide to Licensing (June 2019).
Interpretation	Updated, consistent with current DWER template (based on recent legal advice).
History	Added to works approval, consistent with current DWER template.
Conditions 2, 3, 4 & 5	Reworded, consistent with current DWER template.
Condition 14 - Emissions	Deleted, this condition is considered to unnecessarily duplicate the legislation.
Condition 14	Updated to refer to bores.
Condition 22	Table 8 updated to include 1 mbgl SWL limit.
Condition 27	Deleted as considered redundant.
Definitions	Definitions removed: 'Department Request', 'DWER', 'Environmental Harm', 'Implementation Agreement or Decision', 'Inspector', 'Material Environmental Harm', 'Pollution', 'Serious Environmental Harm', 'Unreasonable Emission', 'Waste', 'Works' – conditions which contained these references have been removed, consistent with current DWER template, as part of this amendment.
	Definitions added: 'mbgl'.
	Definitions modified: 'professional engineer'.
Schedule 1: Works	Removed, as considered redundant.
Schedule 2: Maps	Premises map updated to depict approved relocation of wet plant, tailings areas and site access road.

**Carmen Standring**  
**A/MANAGER, RESOURCE INDUSTRIES**  
**REGULATORY SERVICES**

*An officer delegated by the CEO under section 20 of the EP Act*