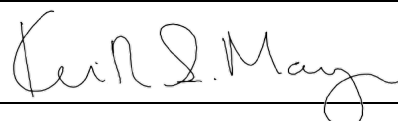


# Form

## Referral of a proposal under s. 38 of the EP Act

PART A: PROPONENT AND REFERRER INFORMATION AND PROPOSAL DESCRIPTION	
<b>Referrer information</b>	
<b>Who is referring this proposal?</b>	<input checked="" type="checkbox"/> Proponent <input type="checkbox"/> Decision-making authority <input type="checkbox"/> Community member/third party
<b>Name of the referrer</b> <i>Name of the person or organisation referring</i>	Keith Mayes
<b>Contact details (for the EPA's assessment of this proposal)</b> <i>Name, organisation, position, email, phone and address</i>	Keith Mayes Australian Garnet Pty Ltd General Manager 46 Edward St, Osborne Park, WA 6057 t: +61 8 9443 2928 Direct t: +61 8 9442 9741 e: Keith.Mayes@australiangarnet.com.au  AND  Leo Boynton MBS Environmental 4 Cook Street, West Perth, WA 6005 t: +61 8 9226 3166 m: +61 457 856 289 e: lboynton@mbsenvironmental.com.au
Does the referrer request that the EPA treat any part of the proposal information in the referral as confidential? <i>Provide confidential information in a separate attachment.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Declaration</b> I, Keith Mayes declare that I am authorised to refer this proposal on behalf of Australian Garnet Pty Ltd and further declare that the information contained in this form is true and not misleading.	
<b>Proponent information</b>	
<b>Name of the proponent/s</b> <i>Include Trading Name if relevant</i>	Australian Garnet Pty Ltd



Australian Company Number(s)	<input checked="" type="checkbox"/>	646 741 157
Australian Business Number(s)	<input type="checkbox"/>	
<b>Pre-referral discussions</b>		
<b>Have you had pre-referral discussions with the EPA (including the EPA Services of DWER)?</b> <i>If so, provide name, date, and overview of discussions.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>Pre-referral discussions were originally during 2012/2013 which EPA representative reviewed the scope of the Project and advised referral was not necessary - although this was not formally recorded by EPA.</p> <p>Communications with Stuart Simmonds between 15-28 September 2021 regarding nature of 3rd Party Referral, previous EPA reviews in 2012/13 and to provide content to make a decision on whether to assess the proposal.</p>
<b>Proposal information</b>		
<b>Proposal name</b>	Lucky Bay Garnet Mine	
<b>What is the proposal? (Include general description in the <a href="#">Instructions and template: How to identify the content of a proposal</a>)</b>	Heavy mineral sands mining operation	
<b>Have you provided electronic spatial data, maps, and figures in the appropriate format?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>What type of proposal is being referred?</b>  <i>For significant amendment or derived proposal, provide the associated existing Ministerial statement number/s</i>  <i>For a proposal under an assessed planning scheme, provide the scheme number and name</i>	<input checked="" type="checkbox"/> significant proposal. <i>Choose which type of significant proposal</i> <input checked="" type="checkbox"/> new proposal <input type="checkbox"/> significant amendment (proposal only) <input type="checkbox"/> significant amendment (conditions only) <input type="checkbox"/> significant amendment (proposal and conditions) <input type="checkbox"/> strategic proposal <input type="checkbox"/> derived proposal <input type="checkbox"/> proposals of a prescribed class <input type="checkbox"/> proposal under an assessed planning scheme  <i>Note: There is no selection available for "Non-significant Proposal - referred by a 3rd Party"</i>	
<b>Proposal content:</b> Complete the corresponding template (Proposal Content Document) from the <a href="#">Instructions and template: How to identify the content of a proposal</a> for the type of proposal identified above. The completed form <b>must be</b> submitted with the referral.		
<b>Alternatives</b>	N/a	

## PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS

### Environmental factors

What are the likely significant environmental factors for this proposal?

Note: All the listed factors below are not considered to be significant but have been specifically requested to have more information provided in order for EPA to make a decision to assess.

- Benthic Communities and Habitat
- Coastal Processes
- Marine Environmental Quality
- Marine Fauna
- ✓ Flora and Vegetation
- ✓ Landforms
- ✓ Subterranean Fauna
- ✓ Terrestrial Environmental Quality
- ✓ Terrestrial Fauna
- ✓ Inland Waters
- ✓ Air Quality
- ✓ Greenhouse Gas Emissions
- ✓ Social Surroundings
- ✓ Human Health

*For **each** of the environmental factors identified above, complete the following table, or provide the information in a supplementary report*

### Potential environmental impacts – for each environmental factor

1	<b>EPA policy and guidance</b>	Refer to: S. 38 Referral, <i>Part B - Assessment of Environmental Impacts</i> Attachment
2	<b>Receiving environment</b>	
3	<b>Likely environmental impacts</b>	
4	<b>Application of the mitigation hierarchy</b>	
5	<b>Assessment and significance of residual impacts</b>	
6	<b>Likely environmental outcomes</b>	

### Holistic impact assessment

Indirect effects on native vegetation and terrestrial fauna are insignificant given the management and mitigation measures proposed and based on the area having been historically used for agriculture/pastoralism where the majority of vegetation was removed in the 1900's. Disturbed areas will be progressively rehabilitated (i.e., the mine pit) and regrowth from historic clearing provides confidence revegetation to pre-existing levels is achievable.

While additional baseline surveys are being conducted to expand on knowledge base of the wider area, the past degradation of the site and similar surrounding agricultural land uses indicate a low level of biodiversity and so the impacts of the Proposal on flora and vegetation and terrestrial fauna are considered to be minimal and insignificant.

Surface water is rarely present in the Project area due to the high infiltrating sands and general low rainfall. Accordingly, the Project will not impact downstream environments relying on surface water. Groundwater resources will be utilised for the Project although significant impacts to the

groundwater levels or quality are not expected based on the groundwater abstraction network design and projected drawdowns, recovery of process water and monitoring regime through an abstraction licence.

Tailings produced from the processing plant are benign and will not leach, with only a settling flocculant added to the process water in liquid form and diluted to 0.025% concentration using raw water.

The impacts to land and soils are considered to be minimal and not significant. The Proposal footprint is highly disturbed and can be rehabilitated on completion of the Proposal, with rehabilitation being progressive (commencing as soon as 12 months of operations) as the mining face develops and backfilling and contouring recreates the pre-mining landform.

Noise modelling has demonstrated that noise impacts on residential properties can be managed through administrative and elimination means, and no ethnographic, indigenous heritage sites, Other Heritage Sites or cultural heritage sites will be disturbed by Project activities.

The Proposal will not produce Scope 1 GHG emissions in excess of 100,000 t CO<sub>2</sub>-e per year throughout operations. The Proposal's scope 1 GHG emissions are approximately 22,581 t CO<sub>2</sub>-e per year during operations.

Operational dust generated by the Proposal during construction and operations will be managed via conventional dust suppression management measure, in addition to controls specified in Works Approvals. Dust emissions will be monitored on the Project as part of the management measures.

Relevant regulatory tools are available to manage the identified potential impacts to human health. A Radiation Management Plan and Radiation Waste Management Plan under the *Mines Safety and Inspection Regulations 1995 and Radiation Safety Act 1975* and will be implemented which include enforceable requirements for the management of radiation impacts on the environment, including human health.

Refer to: S. 38 Referral, *Part B - Assessment of Environmental Impacts* Attachment for further information.

#### **Cumulative environmental impact assessment**

GMA Garnet Pty Ltd (GMA Garnet) owns the only nearby Project (Port Gregory Garnet), it is located approximately 4 km south south east of the Proposal. Cumulative impacts between GMA Garnet's operations and the Proposal are not expected for the majority of EPA Environmental Factors.

Inland Waters is relevant to the Proposal and GMA Garnet as the two projects share the same groundwater resource - the Superficial Formations aquifer. Nearby land users also use the superficial aquifer for stock watering. The abstraction proposed by the Project represents an increase on the use of the groundwater resource, but as indicated by approved groundwater licencing and supporting groundwater supply and abstraction studies the additional draw from the Project will not have a significant impact on groundwater availability or quality.

Refer to: S. 38 Referral, *Part B - Assessment of Environmental Impacts* Attachment for further information.

#### **Consultation**

Refer to: S. 38 Referral, *Part A - Proposal Content Document and Consultation* Attachment

#### **Supporting documents**

Refer to: S. 38 Referral, Part B - Assessment of Environmental Impacts Attachment - Appendix

Has the referrer provided survey information according to the <a href="#">Instructions and Form: IBSA Data Packages</a> and/or the <a href="#">Instructions and form: IMSA Data Packages</a>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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**Conclusion**

No significant effects on the environment with the management Agencies and management measures and controls proposed in place.

**PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR SIGNIFICANT AMENDMENTS ONLY**

Type of significant amendment	N/a <input type="checkbox"/> significant amendment to the approved proposal <input type="checkbox"/> significant amendment to the implementation conditions <input type="checkbox"/> significant amendment to both the proposal and the implementation conditions
Information of the approved proposal	N/a
Combined effects of the approved proposal and significant amendment	N/a
Analysis of existing implementation conditions	N/a
Previous changes to the Proposal and or implementation conditions	N/a
Compliance	N/a
Environmental Performance	N/a
Control of implementation of significant amendment	N/a

**PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR A PROPOSAL UNDER AN ASSESSED SCHEME ONLY**

What new environmental issues are raised by the proposal that were not assessed during the assessment of the planning scheme?	N/a
How does the proposal not comply with the assessed scheme and/or the environmental conditions in the assessed planning scheme?	N/a

## PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS FOR DERIVED PROPOSALS ONLY

Demonstrate how the proposal will meet the environmental outcomes defined through the assessment of the strategic proposal	N/a
Provide an analysis of the existing implementation conditions of the related strategic proposal in relation to the derived proposal	N/a

## PART C: OTHER APPROVALS AND REGULATION

### Decision-making authorities and their approvals

Provide a table list of the decision-making authorities, associated legislation or agreement regulating the activity and the specific approval required. (Example table at the end of form)	<i>Refer to: S. 38 Referral, Part C - Other Approvals and Regulation Attachment</i>
Provide a summary of the statutory decision-making processes you consider can mitigate the potential impacts of the proposal on the environment. (Note: this should be a summary of the information provided in Part B section 2.4).	<ul style="list-style-type: none"> <li>Mining Proposals and Mine Closure Plans (DMIRS)</li> <li>Works Approvals and Environmental Licences (DWER)</li> <li>Native Vegetation Clearing Permit (DMIRS and DWER)</li> <li>Water abstracting licencing (DWER)</li> <li>Radiation Management Plan (RMP) and Radiation Waste Management Plan (RWMP) through DMIRS and RCWA.</li> </ul>

### Tenure and Local Government approvals

Location of proposal: a) street address, lot number, suburb, and nearest road intersection; or b) if remote, the nearest town and distance and direction from that town to the proposal site.	George Grey Drive, Yallabatharra.
Name of the Local Government Authority in which the proposal is located.	Shire of Northampton.
Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
What is the current land use on the property, and the extent (area in hectares) of the property?	Agriculture/Pastoralism still on land with a shift to mining - approximately 516.5 ha.

