

GROOTE EYLANDT MINING COMPANY (GEMCO)

SOUTHERN LEASE MINING PROJECT

NT Environment Protection Act Referral - Statement of Reasons

April 2023





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1 PROPOSAL

The Groote Eylandt Mining Company Pty Ltd (GEMCO) (the "proponent") is proposing to develop the Southern Lease Mining Project (the "project"). The project involves developing a mining project in Exploration Licence (EL) 2455 (known as the Southern Lease) on Groote Eylandt. Groote Eylandt is a largely undeveloped island in the Gulf of Carpentaria, approximately 650 km south-east of Darwin and 50 km off the coast of Arnhem Land. The Southern Lease is adjacent and to the south of the existing GEMCO Mine (the Western Leases). The project area is located in the north-western part of the Southern Lease. Angurugu is the nearest township and is located approximately 10 km by direct line from the northern boundary of the project area. Groote Eylandt, including the Southern Lease, is Aboriginal land under the Aboriginal Land Rights (Northern Territory) Act 1976 (Cth).

The project will use the same open cut mining methods used at the proponent's existing operations. Approximately 15 million tonnes of run of mine (ROM)¹ ore is proposed to be mined over approximately three years. Manganese ore from the project will be transported via haul road to the existing GEMCO Mine, washed at the concentrator and blended with ore from the proponent's other operations.

Activities to be undertaken in the Southern Lease include:

- The construction of minor facilities, such as a crib hut, heavy vehicle park up area, water management infrastructure including dams and pipelines, a water treatment plant for supplying potable water, a remote truck refuelling station, and a modular sewage biocycle treatment plant.
- The development of open cut mining quarries and haul roads.
- Mining of ore and hauling it to the existing GEMCO Mine using haul trucks.
- Progressive rehabilitation of areas that have been disturbed.

The area proposed to be cleared for the project is approximately 1,620 ha.

A small workforce would be required during the construction phase, whereas the workforce for the operations phase would be drawn from the proponent's existing workforce.

¹ ROM is the volume of ore that is mined prior to any processing.

2 JUSTIFICATION FOR AN EIS

The proponent considers that an Environmental Impact Statement (EIS) is an appropriate level of assessment for the project due to the potential for the project to significantly impact the following environmental values:

- Terrestrial ecosystems. The project is located in a sensitive setting with high biodiversity values and has consequently been designed to avoid and minimise impacts where possible. Further information on the project planning process, and avoidance and mitigation measures, is provided in the Supporting Information that has been prepared as part of the *Environment Protection Act 2019* (NT) (EP Act) Referral. Despite the measures to avoid and mitigate impacts, there is still the potential for the project to give rise to significant impacts on terrestrial ecosystems, given the requirement to clear vegetation to facilitate project development. Given the sensitive setting and potential for impacts, it is appropriate for the project to be subject to a comprehensive impact assessment process in the form of an EIS.
- Water (hydrological processes, inland water environmental quality and aquatic ecology). Although the
 project has been designed to avoid and mitigate impacts on surface water and groundwater (e.g. there will
 be no discharges of mine water, the clearing footprint will be set back from watercourses), it is located in a
 sensitive setting with several watercourses traversing the project area. It is consequently appropriate for
 the project to be subject to a comprehensive impact assessment process, addressing potential impacts on
 hydrological processes, inland water environmental quality and aquatic ecosystems.
- People (community and economy, culture and heritage, human health). Although the project has been located to avoid impacts on cultural and social values (e.g. the location of sacred sites has already been documented and the project has been designed to avoid impacts on them), the project is located on Groote Eylandt which is a setting with significant values with respect to community and economy, and culture and heritage. It is consequently appropriate for the project to be subject to a comprehensive impact assessment process, addressing the potential impacts on these values.

The project may impact other values, such as terrestrial environmental quality, air quality, atmospheric processes and human health (in the context of biting insects). However, these are not expected to be significant impacts, which would trigger an EIS. Nevertheless, given that an EIS is proposed to be undertaken, a comprehensive assessment of these values will be undertaken, and the draft EIS Terms of Reference (TOR) includes these environmental values.

The reasons listed in Table 1 also indicate that assessment via an EIS is appropriate.

Item	Justification
Objects of the EP Act	Undertaking a comprehensive environmental assessment, in the form of an EIS, is consistent with the Objects of the EP Act, specifically those relating to protecting the environment, promoting ecologically sustainable development and recognising the role of environmental impact assessment and environmental approval in promoting the protection and management of the environment. In addition, an EIS process provides several opportunities for community involvement in the assessment process as per the Objects of the EP Act (i.e. providing for broad community involvement during the

TABLE 1 EIS JUSTIFICATION

Item	Justification
	environmental assessment process and recognising the role that Aboriginal people have as stewards of their country).
Section 42 EP Act	Section 42 of the EP Act requires that actions that may have a significant impact on the environment are assessed, planned and carried out taking into account:
	The principles of ecologically sustainable development; and
	The environmental decision-making hierarchy; and
	The water management hierarchy; and
	Ecosystem-based management; and
	The impacts of a changing climate.
	The project is a proposed open cut mining project, which will involve clearing of vegetation and hence give rise to potentially significant impacts on terrestrial ecosystems. Given this potential impact, it is appropriate for an EIS to be prepared that addresses the above-listed principles. These principles have been included in the draft EIS TOR prepared for the project.
	Section 42 also requires that the community be provided with an opportunity to participate, and have its views considered, in decisions on proposed actions. This will be achieved as part of the stakeholder engagement program proposed to be undertaken as part of the EIS process.
Section 43 EP Act	Section 43 of the EP Act relates to the duty of a proponent, during the environmental impact assessment process, to consult with affected communities in a culturally appropriate manner, seek and document community knowledge, and address Aboriginal values and the rights and interests of Aboriginal communities in relation to areas that may be impacted. The stakeholder engagement program proposed to be undertaken as part of the EIS process will address these requirements. Undertaking a comprehensive stakeholder engagement program, as part of an EIS process, is appropriate given that the project involves mining activities on Aboriginal land. The draft EIS TOR includes a requirement for a consultation program to be undertaken, and for the preparation of a Social Impact Assessment (SIA), which will document community knowledge. In addition, the statutory process for an EIS includes several opportunities for stakeholders to make formal submissions about the project.
	Section 42 also includes requirements relating to the principles of ecologically sustainable development, the environmental decision-making hierarchy and the waste hierarchy. The draft EIS TOR references this section of the EP Act and requires the EIS to address it.
Section 59 of the Environment Protection Regulations 2020 (NT) (EP Regulations)	Section 59 of the EP Regulations lists criteria that the Northern Territory Environment Protection Authority (NT EPA) must have regard for in deciding the method of impact assessment. The significance of the potential impact is one of the criteria listed in Section 59 of the EP Regulations. As noted above, the project has the potential for a significant impact on terrestrial ecosystems, as well as potentially on environmental values related to water and people.

Item	Justification
Consultation outcomes	In November 2022, a pre-lodgement meeting was held with Lisa Bradley (Director, Environmental Assessment, Department of Environment, Parks and Water Security (DEPWS)) ² , and Kylie Fitzpatrick (Manager, Environmental Assessment, DEPWS). The environmental assessment process for the project was discussed at this meeting, along with other topics. These regulators noted that it appeared that a significant amount of work had been undertaken to design the project in a manner that avoided and mitigated impacts, and that there was good quality data available about environmental values. However, at this meeting, all parties acknowledged that the project is located in a sensitive setting, particularly from the perspective of biodiversity values, and hence an EIS may be an appropriate method of impact assessment.
Other reasons	The proponent intends undertaking a high quality environmental impact assessment, supported by a comprehensive stakeholder engagement program. The proponent views this as being critical for ensuring that baseline environmental, cultural and social values are understood, impacts are assessed, and measures to avoid and minimise impacts are identified and applied to the project. This information will be important for demonstrating compliance with the proponent's internal standards (e.g. South32 Sustainability Policy), as well as ensuring that the Traditional Owners of the Aboriginal land on which the project is located understand the project, its impacts and the avoidance and mitigation measures. An EIS is an appropriate level of assessment to achieve these outcomes. In addition, the proponent has nominated the project as being a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act). An EP Act EIS process can be accredited under Section 87(4) of the EPBC Act to also meet the assessment requirements under the EPBC Act.

² The NT EPA is an independent authority, comprising a small number of board members. The Environmental Assessment Division of DEPWS provide services to the NT EPA.

3 TERMS OF REFERENCE

A draft TOR for an EIS has been prepared in accordance with the NT EPA guideline *Preparing a Proponent Initiated EIS Referral* (NT EPA, 2020). The draft TOR addresses the requirements outlined in NT EPA (2020), as well as the TOR template developed by the NT EPA. The draft TOR describes how the EIS will assess potential impacts of the project, focussing on the environmental factors that have been identified as being relevant to the project. The draft TOR has been developed to ensure that the EIS will provide a detailed description of environmental values, an assessment of impacts on these values, and a description of measures to avoid, mitigate and, where necessary, offset impacts.