



## **Rover 1 Project**

*Proponent Initiated EIS Referral under the  
Environment Protection Act 2019*

## **Statement of Reasons**

28 August 2023

# 1 INTRODUCTION

Castile has determined that the proposed Rover 1 Project is likely to require assessment under the *Environment Protection Act 2019* by Environmental Impact Statement (EIS) and have chosen to submit a proponent-initiated EIS referral. In accordance with the NT Environmental Protection Authority (NT EPA) guidance, the referral includes a referral form, referral report, Terms of Reference (ToR) and Statement of Reasons (SoR) (this document). This SoR addresses the requirements of Section 43 of the *Environment Protection Regulations 2020* to provide a statement of reasons describing why assessment by EIS is required, and why the draft ToR (submitted with the referral) are appropriate.

# 2 OVERVIEW

Pre-referral screening undertaken by EcOz Environmental Consultants (EcOz) using the NT EPA's *Pre-referral screening tool* determined that the proposed action has potential to significantly impact environmental values associated with the following six environmental factors<sup>1</sup>.

Theme	Factors that require assessment and reasons
Land	<p><b>Terrestrial Environmental Quality</b> - The current condition of the Project area is largely undisturbed. An estimated area of approximately 177 ha will be cleared, 120 ha of which is for a linear natural gas pipeline corridor. The alignment of the pipeline is to be confirmed. Land clearing and earthworks have the potential to impact soil integrity, and to cause erosion and dispersion of sediment to surface water.</p> <p>Soil contamination could occur by the accidental release of hazardous materials or wastes. Potential sources of contamination include the processing plant, power station, water and wastewater treatment plants, and areas where hazardous materials are stored for example the warehouse and fuel storage.</p> <p>A portion of the waste rock (and potentially tailings) will be acid forming, which could result in the leaching of metals to soil and/or groundwater. While some waste rock geochemical characterisation has been undertaken, there is uncertainty about potential for neutral or saline drainage.</p> <p><b>Terrestrial ecosystems</b> - The Project requires the clearing of native vegetation and habitat, including potential habitat for the threatened mammal species Greater bilby (<i>Macrotis lagotis</i>). The Greater bilby is listed as Vulnerable under the <i>Environment Protection and Biodiversity Conservation Act, 1999</i> and <i>Territory Parks and Wildlife Conservation Act, 1976</i>. Targeted surveys identified evidence of Greater bilby activity in close proximity to the main access road, run-of-mine pad, processing plant, waste rock dump (WRD) and decline box cut. There is uncertainty about the significance of residual impacts to the Greater bilby. Further work is required to improve the level of confidence in the assessment and management of potential impacts to the Greater bilby.</p>
Water	<p><b>Hydrological processes</b> - The interception of groundwater aquifers by the underground mine, and groundwater extraction is anticipated to result in a localised drawdown in groundwater levels. As the underground mine is developed, the majority of groundwater inflows will be pumped out to the surface, which will lower groundwater levels in the surrounding aquifer. The bore field proposed to supply potable water and makeup water for the mining operations, will also lower groundwater levels in the aquifer.</p> <p>There is uncertainty with respect to the scale (extent) and magnitude of drawdown that could occur, and the timeframe for recovery of groundwater to pre-mining levels. Further site-specific investigations and modelling are required to inform a more accurate assessment of groundwater impacts through the EIS process.</p>

<sup>1</sup> [NT EPA Factors and Objectives.](#)

Theme	Factors that require assessment and reasons
	<p><b>Inland water environmental quality</b> - Groundwater quality may be significantly impacted by spills or loss of containment of hazardous materials that are stored and handled, seepage of acid, neutral or saline drainage from the WRD, tailings storage facility or underground workings (including backfilled waste rock and tailings) and land irrigation of treated sewage. Surface water quality is unlikely to be impacted as there are no surface watercourses present in the Project area.</p> <p>Backfilling problematic wastes and paste tailings underground, will reduce the potential for acid, neutral or saline drainage and leaching of contaminants. Any material permanently placed underground will need to be carefully managed to ensure performance is as per design. The backfill mix design, and physical and chemical properties and behaviours, all need to be better understood to provide confidence that contaminants present in the waste will not mobilise to groundwater.</p> <p>There is currently insufficient information available to assess the significance of residual impacts to inland water environmental quality. Further groundwater investigation and modelling, waste characterisation and mine design details are required, to improve the level of confidence in the assessment and management of impacts to groundwater quality.</p>
<p><b>People</b></p>	<p><b>Community and economy</b> - The Project will provide benefits for the Tennant Creek community, and to the Territory more broadly. Further work is required to quantify the potential benefits and to determine measures that can be taken to maximise local community and Aboriginal benefits.</p> <p>The Project is located on Aboriginal land and will require the use of local public and private roads, including a section of the Stuart Highway, and the Tennant Creek commercial airport. Trucks entering the Stuart Highway have the potential to significantly impact other road users.</p> <p>There will be some increased road traffic south of the town to the Project turn-off, however all cartage of concentrates will be south of the town.</p> <p>There is uncertainty regarding other potential socio-economic benefits and impacts of the Proposal and further assessment is required in consultation with the community.</p> <p><b>Culture and heritage</b> - There is potential for Project activities, primarily during construction, to impact both known and unknown archaeological sites, or objects, heritage places or cultural features. This includes both tangible heritage and intangible heritage, through potential impacts to connections held between the local Aboriginal people and country.</p> <p>The Project area is located on Aboriginal lands. The land has been, and will continue to be, used by the local Aboriginal people but there will be some restrictions around the operating areas of the mine. Further consultation with Traditional Owners and site custodians is required to identify cultural heritage sites and other cultural values and uses, and to determine the management measures required to avoid unacceptable impacts.</p> <p>An application for an Authority Certificate is required under the <i>Aboriginal Sacred Sites Act</i> to identify any sacred sites and site protection measures.</p> <p>An archaeological heritage survey is required to determine whether there are archaeological heritage sites present that are protected under the <i>Heritage Act</i> and to determine avoidance and management measures required to minimise impacts to these and to comply with legislative obligations.</p>

EcOz considered other environmental factors during the pre-referral screening, however, the impact on those factors was not considered to be significant. A copy of the pre-referral screening results is attached to the referral report and provides justification for why other factors are unlikely to be significantly impacted.

### 3 JUSTIFICATION

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Castile hold the view that a standard assessment by EIS is required due to:

Regulation 59 (a) the significance of the potential impacts of the proposal

Regulation 59 (b) the need to improve the level of confidence in predicting potential significant impacts of the proposed action taking into account the extent and currency of existing knowledge, particularly in relation to:

- impacts to land and groundwater resources and terrestrial ecosystems during construction, operation and closure of all mine components
- the significance of impacts to threatened species and habitats in the terrestrial environment
- information about social impacts that may arise through engagement and consultation with communities affected by the proposed action.

Regulation 59 (c) the need to develop measures to avoid, mitigate or manage potential significant impacts, and increase the confidence in the effectiveness of the proposed measures.

Regulation 59 (d)&(e) the need for community engagement in relation to the proposed action, including avoidance of negative social and economic impacts and maximisation of benefits.