

8 April 2021

Manager Environmental Assessment
Department of Environment, Parks and Water Security
GPO Box 3675
DARWIN NT 0801

File reference
2019/0182

Via email: eia.ntepa@nt.gov.au

Dear

Re: Invite to comment - Rustlers Roost and Quest 29 Open-Cut Mine Redevelopment Referral

Thank you for the opportunity to comment on the proponent initiated environmental impact statement (EIS) referral of the Rustlers Roost and Quest 29 Open-Cut Mine Redevelopment by Primary Gold Limited.

The Mining and Energy Division of the Department of Industry, Tourism and Trade (DITT) have reviewed the documents and provide comments at attachment A.

Please contact Director Mining Operations on or via email
at if you require any further information.

Director, Resource Policy and Reform

Attachment A

**Submission on
proponent initiated EIS referral information and draft terms of reference**

Primary Gold Limited – Rustlers Roost and Quest 29 Open-Cut Mine Redevelopment

This submission is made under regulation 53 of the Environment Protection Regulations 2020

NT EPA reference number: EP 2021/005

Government authority: Department of Industry, Tourism and Trade

Summary: The referral document submitted by Primary Gold for Rustlers Roost and Quest 29 open-cut mining proposes substantial disturbances and identifies potential for significant environmental impacts. The document recognises the requirement for further detailed studies on flora and fauna, waste rock characterisation, facility design, surface hydrology, groundwater, hydrogeology and closure planning to inform management and mitigation of the potential impacts. These studies will inform an Environmental Impact Study (EIS) if determined by the NT EPA as required, and any related development of a Mining Management Plan (MMP) for assessment under the *Mining Management Act 2001*. It is expected that the MMP would also describe an appropriate environmental management system that includes monitoring activities and actions to mitigate exceedances against established criteria.

The Terms of Reference submitted by Primary Gold appears adequate, and provided the described studies are undertaken, should address the below DITT concerns.

Section of referral or terms of reference	Theme / issue	Comment
Section 1.5.2 Proposed footprint and site layout	Information gap	Figure 1-2 indicates that the proposed tailings dam on Rustlers Roost will overlie the existing heap leach pad. This is not acknowledged or addressed in the referral document. An analysis of environmental risks associated with construction of a tailings dam over the heap leach pad should be completed, particularly as the footprint crosses several drainage lines of the Upper Mount Bundey Creek tributary.
Section 1.5.6 Waste Rock material	Information gap	The referral outlines that it is likely that a significant amount of potentially acid forming (PAF) material will be encountered during mining, indicating that the potential for acid metalliferous drainage (AMD) from mine structures (e.g. the waste rock dump ((WRD) is high. Primary Gold acknowledges that further studies are required to adequately understand the geochemical characterisation of the sites. These studies are required before potential risks (e.g. AMD) can be fully understood and management methodology developed. It is recommended that waste characterisation studies include samples that adequately reflect the proposed disturbances i.e. from within pit footprints and at depths similar to proposed mine depths.
Section 1.5.8 Tailings Disposal	Risk of geotechnical failure of TSF	The tailings storage facility (TSF) has a very large footprint across multiple drainage lines and it is not yet clear how potential seepage will be prevented or managed to adequately protect the greater environment. Further studies and modelling are required.

Environmental impact assessment under the *Environment Protection Act 2019*

<p>Section 4.3.2 Groundwater</p>	<p>Information Gap</p>	<p>The referral identifies contamination of groundwater from mined pits and potential draw down of groundwater as potential risks and states groundwater and hydrogeology studies are required.</p> <p>The referral does not describe adequate mitigation measures, because these cannot be developed until an understanding of groundwater and hydrogeology is obtained.</p> <p>Further studies and modelling of potential impacts to groundwater are required.</p>
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