

Mr Rod Johnson
Department of Environment, Parks and Water Security
Floor 1, Arnhemica House, 16 Parap Street, Parap
Darwin NT 0801

Dear Mr Johnson

Re: Draft Terms of Reference for an Environmental Impact Statement- Ammaroo Ammonium Phosphate Fertiliser Project

The Department of Environment, Parks and Water Security (DEPWS) has assessed the information contained in the above draft Terms of Reference (ToR) and provides the following comments:

Flora and Fauna Division

The Flora and Fauna Division previously provided comment at various stages of the mine component of this project. Flora and Fauna Division is satisfied that the proponent had sufficiently demonstrated the likely absence of threatened species, principally Greater Bilby, Grey Falcon and Great Desert Skink, within the project area and had imposed sufficient safeguards for minimising impacts to biodiversity.

The original Ammaroo Mine was assessed as an Environmental Impact Statement under the *Environmental Protection Act 2019*. That assessment focused on several threatened species and other biodiversity values that may occur onsite and potentially be impacted. Those biodiversity values are also relevant for this proposal and the current wording in Section 2.4.1 is adequate to ensure the relevant matters are covered for the NT EPA's environmental factor – Terrestrial Ecosystems.

Rangelands Division

Weed Management Branch

Direct reference to weed management is made within the draft TOR, both in the construction and operation phases of this project. Weed Management Branch recommends that all weed related impacts to the environment addressed within the subsequent Environmental Impact Statement (EIS) be considered by the Branch upon its completion.

Bushfires NT Division

Bushfires NT recommends for any bushfire related impacts to the environment to be considered within the EIS.

Water Resources Division

Prior comments from the Water Resources Division have been provided to the proponent, see below. The ToR adequately reflect what the proponent should address in an EIS whilst incorporating the feedback already provided.

Take of surface or groundwater for rural stock and domestic purposes does not require a water extraction licence. Should take of surface or groundwater be proposed for commercial activities, advice should be sought from Water Resources (08) 8999 4455 or by email to water.licensing@nt.gov.au

Previous Water Resources Division comments were:

The application is for a significant variation being an increase of 3.9 GL/yr extraction of groundwater from the Chabalowie Formation to support the Ammaroo Phosphate Project (Project).

Take of surface and groundwater for commercial purposes requires an extraction licence under the Water Act 1992. The proponent has engaged with consultants and the requirements for a groundwater extraction licence to support the project and the processes imposed by the Act are adequately documented in the application.

The project was previously assessed for the extraction of 4.6 GL/yr and the Northern Territory Environmental Protection Authority (NT EPA) prepared Assessment Report 87.

The 8.5 GL/yr volume of water has been modelled by consultants and is a thorough study which follows relevant guidelines and has been peer reviewed however further analysis is recommended to understand the significance of the impacts of the full extraction. Further modelling should be conducted using precautionary scenarios (p90) and specific yield =0.01 to allow the NT EPA to assess worst case impacts as recommended by UNESCO (Foster 2006), which is best practice for arid zone aquifers where characteristics are largely unknown and estimates are applied over large areas.

Annual recalibration of model scenarios should be conducted which can inform adaptive management if aquifer behaviour responds poorer than expected.

Monitoring bores should be installed to establish baseline information before mining commences and be suitably located spatially to monitor relevant formations for impacts as a result of the extraction of the proposed larger volume.

Public information about water resource management is available on the Department website¹

Should you have any further queries regarding these comments, please contact the Development Coordination Branch by email DevelopmentAssessment.DEPWS@nt.gov.au or phone (08) 8999 4446.

Yours sincerely



Nigel Weston
A/Executive Director Rangelands

22 May 2023

¹ <https://depws.nt.gov.au/water>