

Ms Kylie Fitzpatrick
Department of Environment, Parks and Water Security
GPO Box 3675,
DARWIN, NT 0801

Dear Ms Fitzpatrick

Re: Ammaroo Ammonium Phosphate Fertiliser Project

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

Flora and Fauna Division

Staff from the Flora and Fauna Division reviewed the referral documentation and have provided comments in the attached table **Appendix 1**.

The Fauna and Flora Division are satisfied that the safeguards in place for the protection of biodiversity in the approved project sufficiently address the proposed project alterations. The likelihood of threatened species occurrence within the project footprint remain low. The Division's assessment of the proposed project is outlined in the **Appendix 1**.

Rangelands Division

Weed Management Branch

An assessment of the NT Weeds Database for NT Portion 1290 and surrounding areas has revealed records of the following weed species:

Common name	Botanical Name	Declared
Athel pine	<i>Tamarix aphylla</i>	Class A
Rubberbush	<i>Calotropis procera</i>	Class B
Parkinsonia	<i>Parkinsonia aculeata</i>	Class B

The *Weeds Management Act 2001* (WM Act) enables the following weed declarations: Class A (to be eradicated); Class B (growth and spread to be controlled); and Class C (not to be introduced into the NT). All Class A and B weeds are also Class C.

All land in the Northern Territory is subject to the WM Act. The WM Act states that the owner and occupier of land must - (a) take all reasonable measures to prevent the land being infested with a declared weed; and

(b) take all reasonable measures to prevent a declared weed or potential weed on the land spreading to other land.

Athel pine is subject to a statutory weed management plan. Management obligations outlined in this plan must be adhered to by all land holders.

Under the WM Act it is an offence to move or spread declared weeds off or within the site.

Any works that cause disturbance to vegetation and soils will create conditions favourable for the growth of weed species and control should be undertaken as necessary. Weed control prior to seed set should be carried out in all areas affected by the proposed project.

The proponent will need to ensure that all vehicles and machinery are free of weeds, weed seeds, soil and vegetative material prior to undertaking exploration. Vehicles must avoid driving through weeds already present on-site to prevent further spread. Vehicles and machinery exhibiting such material must be thoroughly washed down before entering/departing.

The Weed Management Branch may conduct inspections of the proposed site to ensure weeds have not been spread or introduced to the site.

Further information about management requirements and the weed management plan for Athel pine are available online¹ or alternatively contact the Weed Management Branch for further advice on (08) 8951 9210.

Water Resources Division

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 Environment Protection Authority (NT EPA) prepared Assessment Report 87 (EAR 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 for the NT EPA to understand the significance of the impacts of the proposed increase in groundwater extraction. As recommended by UNESCO (Foster 2006), modelling should be conducted using precautionary scenarios (p90) and specific yield =0.01, which is best practice for arid zone aquifers where characteristics are largely unknown and estimates are applied over large areas.

EAR 87 recommendation 3 should be sufficient to ensure monitoring bores are installed to establish baseline information before mining commences. Amendments to the recommendation may be considered to clarify that monitoring bores are located appropriately to monitor relevant formations for impacts as a result of the extraction of the proposed larger volume.

¹ www.nt.gov.au/environment/weeds

In addition to the recommendations of EAR 87 further recommendations that clearly articulate requirements for annual recalibration of model scenarios and an adaptive management plan that considers recalibration results and outlines management actions that will be taken should the aquifers response to extraction deviate from modelled predictions should be considered.

Public information about water resource management is available on the Department website².

Environment Division

The action may require approvals and licences under other NT legislation administered by the Environment Division such as the *Water Act 1992* (NT) and the *Waste Management and Pollution and Control Act 1998* (NT). See below information on when a secondary approval might be required.

All persons are required to comply at all times with the General Environmental Duty under section 12 of the *Waste Management and Pollution Control Act 1998* (NT). To help satisfy the General Environmental Duty, the proponent is advised to take notice of the list of environmental considerations below. The list is not exhaustive and the proponent is responsible for ensuring their activities do not result in non-compliance with NT laws.

A non-exhaustive list of environmental issues that should be considered to meet requirements under NT law are listed below:

Air quality:

The proposed activities have the potential to cause significant discharge to air. Please refer to the best available techniques specified in the Integrated Pollution Prevention and Control Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers, available online³ to assist in identifying and controlling all emissions (including fugitive emissions) to air from all processes including, but not limited to the phosphoric acid, sulfuric acid, ammonia and granulation plants.

Water

If this action requires the discharge of waste to water or could cause water to be polluted then it is likely that a secondary authorisation is required, such as a waste discharge licence under the *Water Act (NT)*. Without authorisation, the proponent must ensure that there is no discharge of contaminated water from the premises into the groundwater or any surface waters. Guidance on waste discharge licences is available at Guidelines on waste discharge licensing under the Northern Territory *Water Act 1992*⁴. Please refer to the best available techniques specified in the Integrated Pollution Prevention and Control Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals - Ammonia, Acids and Fertilisers, available online⁵ to assist in identifying and controlling all emissions to water from all processes including, but not limited to the phosphoric acid, sulfuric acid, ammonia and granulation plants.

Storage:

If an Environment Protection Approval or Environment Protection Licence is not required, the proponent should store liquids only in secure bunded areas in accordance with VIC EPA Publication 1698: Liquid storage and handling guidelines, June 2018, as amended. Where these guidelines are not relevant, the storage should be at least 110% of the total capacity of the largest vessel in the area. Where an Environment Protection Approval or Environment Protection Licence is required, the proponent must only accept, handle or store at

² <https://depws.nt.gov.au/water>

³ <https://eippcb.jrc.ec.europa.eu/sites/default/files/2022-03/LVIC-AAF.pdf>

⁴ https://ntepa.nt.gov.au/_data/assets/pdf_file/0005/950603/guidelines-waste-discharge-licensing.pdf

⁵ <https://eippcb.jrc.ec.europa.eu/sites/default/files/2022-03/LVIC-AAF.pdf>

the premises listed waste, including asbestos, as defined by the *Waste Management and Pollution Control Act 1998*, in accordance with that authorisation.

Waste

If the proponent will collect, transport, store, recycle or treat listed wastes on a commercial or fee for service basis as part of the development or operations of the action, then an Environment Protection Approval or Licence may be required to authorise the activity under the *Waste Management and Pollution Control Act 1998* (NT).

Dust

The proposed activities have the potential to generate dust, particularly during construction works in the dry season. The proponent must ensure that nuisance dust and/or nuisance airborne particles are not discharged or emitted beyond the boundaries of the premises.

Noise

The proponent is to ensure that the noise levels from the proposed action comply with the latest version of the Northern Territory Environment Protection Authority Northern Territory Noise Management Framework Guideline available online⁶.

Erosion and Sediment Control

The proponent must ensure that soil erosion control measures are employed throughout the construction stage of the development in accordance with Northern Territory Environment Protection Authority publications: *Guidelines to Prevent Pollution from Building Sites and Keeping Our Stormwater Clean*, available online⁷.

Site Contamination

Historical activities may have resulted in contamination at the premises. An assessment in accordance with the National Environment Protection (Assessment for Site Contamination) Measure (ASC NEPM) is required to determine whether the land is suitable for the intended land use. The proponent is encouraged to refer to the information provided on the NT EPA website⁸ and the NT Contaminated Land Guideline available online⁹.

Waste Management - Import and Export of Fill

The proposed activities have the potential to generate fill (waste material) and/or involve the importation of fill for use on-site. Prior to the removal of fill (waste material) from the site, or the importation of fill onto the site, waste classification assessment is to be undertaken in accordance with NSW EPA Waste Classification Guidelines, Part 1: *Classifying Waste, 2014*, and associated waste classification guidelines, available online¹⁰. All imported material must be accompanied by details of its nature, origin, volume, and transportation details. All records must be retained and made available to authorised officers, upon request, to confirm compliance with the General Environmental Duty detailed in the *Waste Management and Pollution Control Act 1998*. The proponent should also consider the following NT EPA fact sheets, available online¹¹: (a) *How to avoid the dangers of accepting illegal fill onto your land*, and (b) *Illegal Dumping - What You Need To Know*.

Bushfires NT

⁶https://ntepa.nt.gov.au/_data/assets/pdf_file/0004/566356/noise_management_framework_guideline.pdf

⁷https://ntepa.nt.gov.au/_data/assets/pdf_file/0010/284680/guideline_prevent_pollution_building_sites.pdf and https://ntepa.nt.gov.au/_data/assets/pdf_file/0006/284676/guideline_keeping_stormwater_clean_builders_guide.pdf

⁸ <https://ntepa.nt.gov.au/your-environment/assessment-site-contamination>

⁹ https://ntepa.nt.gov.au/_data/assets/pdf_file/0020/434540/guideline_contaminated_land.pdf

¹⁰ <http://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines>

¹¹ <https://ntepa.nt.gov.au/publications-and-advice/environmental-management>

As this land parcel falls within the Alice Springs Fire Management Zone, it is expected that the applicant is aware of their responsibility under the *Bushfires Management Act 2016* to maintain fire breaks to a minimum width of no less than 4m of bare earth or slashed to a height of no more than 50mm with the slashed material removed within the perimeter boundary of the land. Additionally, no burning may take place except where a permit to burn has been obtained from a Fire Control Officer or a Fire Warden. Please call Bushfires NT Alice Springs Office for more information (08 8951 9270).

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



Maria Wauchope
Executive Director Rangelands
19 December 2022

Appendix 1 – Flora and Fauna Detailed comments

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

Government authority: Department of Environment, Parks and Water Security, Flora and Fauna Division

Section of Referral	Theme or issue	Comment
Main report – Section 5.4 Land Disturbance Requirements	Terrestrial Ecosystems	The F&F Division notes that the Proposed Project additions (including onsite plants and infrastructure, airfield, accommodation village and access roads) are all within the nominated ML area and do not require vegetation removal exceeding the previously approved 3,775 ha.
Main report – Section 12.1.0.0 – Sensitive vegetation types	Terrestrial Ecosystems	The proponent identified an additional 0.5 ha (total 1 ha) of disturbance to Wetlands – habitat category 9 (drainage floors and floodplains) from the Proposed Project additions. This new proposed disturbed area does not include large trees suitable for Grey Falcon nesting. The Division agrees that this small increase in disturbance is unlikely to significantly impact local or regional biodiversity values.
Main report – Section 13 Protected Matters under the EPBC Act	Terrestrial Ecosystems	The proponent undertook targeted threatened fauna surveys in 2017 as part of the approved EIS and found no sign of Greater Bilby, Great Desert Skink or other threatened fauna within and surrounding the development. The Division agrees with the results of the revised desktop assessment that found no additional threatened species records for the project area and surrounds. Based on the targeted surveys, together with the results of the desktop assessments, the Division agrees that the project additions within the nominated ML present no additional risk to threatened species beyond that identified in the approved EIS.
Appendix B – Proposed Project comparison to NT EPA Environmental Factors	Terrestrial Ecosystems	The Division agrees that the identified Approved Project potential impacts to terrestrial flora and fauna adequately cover the impacts of the Proposed Project.