

Ms Kylie Fitzpatrick
Department of Environment, Parks and Water Security
PO Box 3675
Parap NT 0801

Kylie
Dear Ms Fitzpatrick

Re: Referral - Project Caymus Bulk Fuel Storage Facility, East Arm

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

Water Resources Division

The proposed Bulk Fuel Storage Facility at East Arm industrial precinct is not anticipated to interact with groundwater resources on a local or regional scale. The proponent does not intend to use local groundwater for construction or operation purposes and has listed existing Power and Water Corporation water mains as the primary water supply for the project. The volume of water used is yet to be determined and the referral references implementing a water meter and backflow prevention control device on the water main to monitor the volume of water utilised. Current best practices should be utilised during construction phases to minimise potential leaching of contaminants into underlying shallow groundwater systems.

Culturally important water features have been considered by the proponent, stating none are found within the vicinity of the proposed project area. Management measures regarding soil erosion and surface water runoff must be addressed in the Construction Environmental Management Plan (CEMP) to minimise potential impacts on water quality.

Rangelands Division
Land Management Unit

Section of Referral	Theme or issue	Comment
14 Potential Environmental Impacts and Proposed Environmental Management – Table 31	'Where construction activities are scheduled to occur over the wet season (1 October - 30 April), an ESCP (including accepted International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control Guidelines 2008 (or higher standard) where relevant) will be	Section 14 identifies an ESCP will be prepared should construction activities occur over the Wet season. It is recommended that prior to the commencement of any works (including early works), an Erosion and Sediment Control Plan (ESCP) is developed. The

	<p>prepared by a suitably qualified and experienced professional. Erosion and sedimentation structures will be inspected and maintained throughout the duration of construction occurring in the wet season'.</p>	<p>ESCP should be developed and certified by a Certified Professional in Erosion and Sediment Control (CPESC).</p> <p>Due to the size, type of works, location and being adjacent to open unlined drains that outfall to the Darwin Harbour, should the Project Caymus Bulk Fuel Storage Facility require consent under the <i>Planning Act 1999</i> the DEPWS Land Management Unit would recommend an Erosion and Sediment Control Plan Condition Precedent to the effect:</p> <p>Prior to the commencement of works, a Type 2 Erosion and Sediment Control Plan (ESCP) must be developed in accordance with the Department of Environment, Parks and Water Security ESCP Standard Requirements 2019 available at https://nt.gov.au/environment/soil-land-vegetation. The ESCP must be developed and/or certified by a Certified Professional in Erosion and Sediment Control (CPESC) to the satisfaction of the consent authority. The ESCP should be submitted for acceptance prior to the commencement of any earth disturbing activities (including clearing and early works) to Development Assessment Services via email: das.ntg@nt.gov.au.</p>
<p>Table 31 Environmental Risk Assessment Considering the NT EPA Factors and Objectives</p>	<p>Where construction activities are scheduled to occur over the wet season (1 October - 30 April), an ESCP (including accepted International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control Guidelines 2008 (or higher standard) where relevant) will be prepared by a suitably qualified and experienced professional, be endorsed by DIPL and be implemented by the construction Contractor prior to works commencing.</p>	<p>It is unclear why the ESCP would be endorsed by DIPL, unless this is in reference to the expectation that a future Development Permit Condition would require an ESCP.</p>

Environment Division
Environmental Authorisations

Section of referral	Theme or Issue	Comment
<p>3 Project description Table 20 - Marine environmental quality/marine ecosystems</p> <p>11 Sea Table 31 - Marine environmental quality</p>	<p>Potential impacts and risks to Darwin Harbour water quality from hydrocarbon spills (jet fuel and bunkering) during fuel transfers at the wharf. Are the proposed management measures adequate to avoid or mitigate significant impacts?</p>	<p>Section 13.3.4 discusses the generation of process wastewater and its disposal pathway after treatment being: (1) discharge into Darwin Harbour and (2) reuse on site.</p> <p>Contaminants within discharge process water may vary depending on the waste stream and treatment method. These matters are not discussed in this section, and is not referenced in Table 20 (Marine environmental quality).</p> <p>Further information is required to clarify whether the proposed disposal options are appropriate and should include an assessment of environmental risks.</p> <p>A discharge of contaminants to Darwin Harbour will be subject to a Waste Discharge Licence in accordance with section 74 of the <i>Water Act 1992</i>.</p>

Environmental Operations Unit

Section of referral	Theme or Issue	Comment
<p>3 Project description Table 20 - Air quality</p> <p>12.2 VOC emissions Table 31 - Air quality Appendix D - VOC emissions and GHG calculations</p>	<p>Potential impacts and risks to air quality from hydrocarbon emissions, and whether emissions controls at the tank farm are required to avoid any potential for significant impact.</p>	<p>The proponent has modelled VOC emissions from 11 proposed tanks in the tank farm and concluded: 'Based on VOC emissions of the preliminary design, the Caymus tank farm will emit a total 0.895ktpa of VOCs which does not exceed the 1000ktpa threshold set forth by the Environment Protection Authority of Australia. The proposed tank farm design follows the environmental regulations'. The proponent must note that there is no 'Environment Protection Authority of Australia' and it is not clear how the 1000ktpa threshold criteria was obtained. Clarity around where the 1000ktpa threshold is from is requested. The Northern Territory</p>

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		<p>Environment Protection Authority has not set this threshold.</p> <p>An air emissions impact assessment must be conducted in accordance with Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, as amended (https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/modelling-assessing-air-emissions).</p> <p>The proponent must note that in addition to tank breathing and working losses, other emission sources from the development will include, but are not limited to, ship unloading and loading emissions, fugitive emissions from leakages, spills and truck loading gantry, and combustion emissions from ships. The assessment should be revised to comprehensively characterise and assess all emissions associated with the development and other emissions located in close proximity to the proposed development. If toxic air pollutants are emitted from sites close to the development, in significant quantities, these additional emissions should be assessed on a cumulative basis.</p> <p>The proponent must use the correct VOC speciation profile of their tank emissions when assessing air emissions impact.</p> <p>The proponent must provide a summary of total predicted impacts for each modelled toxic air pollutant and individual odorous pollutants at and beyond the boundary of the development.</p> <p>The proponent must install a vapour recovery unit (VRU) (no incineration) to control emissions</p>

Section of referral	Theme or Issue	Comment
		<p>from the development. Refer to Part 6 'Control of volatile organic liquids' in the NSW Protection of the Environment Operations (Clean Air) Regulation 2010 for guidance. Emissions from the VRU must be included in the air quality impact assessment and any emission control efficiency proposed for the unit must be justified.</p> <p>GHG emissions estimated by the proponent shows peak emissions for the construction period will be 6019tpa CO₂ equivalent; and operational GHG emission is estimated as 600tpa. Construction and operational emissions will not cause a significant increase in contribution to the NT's greenhouse gas emissions.</p>

Yours sincerely



Luis Da Rocha
Executive Director, Rangelands

24 August 2021

