

Environmental Protection Act 1986

Section 39A(7)

PUBLIC ADVICE

Proposal: Kimberley Marine Offloading Facility

Proponent: Kimberley Marine Support Base Pty Ltd

Decision: **Not Assessed – Advice Given (Appealable)**

The EPA acknowledges the importance the Broome community places in Roebuck Bay as expressed in the public comments received on the proposal. This includes the ecological and heritage values, and the cultural associations with the local proposal area. However, having considered the information from the proponent and the public comments, the EPA considers that the design of the proposal is sensitive to the values, is unlikely to have a significant impact on the environment and does not warrant formal assessment.

Background:

Kimberley Marine Support Base Pty Ltd (KMSB) is proposing to develop the Kimberley Marine Offloading Facility at the Port of Broome, approximately 200 metres south of the existing Broome Wharf.

The proposal includes construction and operation of a deep-water floating wharf, along with associated onshore hardstand and terminal facilities suitable for container and general cargo stevedoring for coastal trading vessels, berthing and mooring for Cruise vessels and Roll on/Roll off ships. No dredging is required for the proposal as the floating wharf is positioned next to a naturally deep channel.

The proposal was advertised for public comment as part of the referral process and the EPA notes that fifty-eight public comments were received.

Relevant Statutory and Administrative Provisions

The EPA has considered the proposal in accordance with the requirements of the EP Act and the Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016 and Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual.

Materials considered in making this decision

The EPA has considered and had regard to the referral information, which is available on the EPA's consultation hub, any comments received during the 7-day comment

period, information conducted through its own inquiries and any further information requested from the proponent and government agencies.

Consideration

In making its decision on whether to assess the proposal, the EPA had regard to various matters, including the following (as outlined in the EPA's *Statement of Environmental Principles, Factors and Objectives*):

- a) values, sensitivity and quality of the environment which is likely to be impacted
- b) extent (intensity, duration, magnitude and geographic footprint) of the likely impacts
- c) consequence of the likely impacts (or change)
- d) resilience of the environment to cope with the impacts or change
- e) cumulative impact with other existing or reasonably foreseeable activities, developments and land uses connections and interactions between parts of the environment to inform a holistic view of impacts to the whole environment
- f) level of confidence in the prediction of impacts and the success of proposed mitigation
- g) public interest about the likely effect of the proposal, if implemented, on the environment, and public information that informs the EPA's assessment.

In considering the potential direct and indirect impacts of the proposal on Marine Environmental Quality, Marine Fauna, Terrestrial Fauna (Shorebirds) and Social Surroundings the EPA has had particular regard to the following:

- The high environmental values of the environment surrounding the proposal area. The proposal Development Envelope lies entirely within KPA port limits, and is surrounded on all sides by the Yawuru Nagulagun / Roebuck Bay Marine Park. The Development Envelope is located within 5 km of the West Kimberley National Heritage Place and is approximately 10 km west of the Roebuck Bay Ramsar Wetland.
- The small extent and localised nature of likely environmental impacts from the proposal. No capital dredging and spoil disposal is required for the proposal as the floating wharf is positioned next to a naturally deep channel.
- The proponent's site-specific environmental studies and investigations that have informed the types of management measures in the referral information.
- Subtidal benthic communities and habitats identified include predominantly sandy sediment with patches of subtidal rocky reef and are not considered to represent conservation significant habitat. The proposal avoids impacts to mudflats, seagrass or mangrove habitats.
- Proposal modifications and design minimise restrictions to water flow and prevent sediment trapping which limits potential impacts to coastal processes.

KMSB have outlined in its referral document ongoing monitoring of the coastline through partnering with the Shire of Broome.

- No conservation significant flora or vegetation will be directly impacted by the proposal. All proposed clearing of native vegetation will be undertaken in accordance with an existing approved Clearing Permit for the area.
- The proposal avoids the Broome Sandstone which potentially supports dinosaur footprints. The proposal was modified to reduce reclamation at the beach to minimise effects on cultural values and community access. No Aboriginal heritage sites will be directly impacted by the proposal and it is noted that support for the current proposal design was provided by the Yawuru Prescribed Body Corporate.
- The KPA are currently in consultation with Nyamba Buru Yawuru and the Department of Biodiversity, Conservation and Attractions with a view to expand the KPA Ongoing Marine Monitoring Program (OMMP) to be part of an Integrated Marine Environmental Quality Management Plan for the marine waters within the Port and the adjacent Marine Park.
- All construction and operational practices for the proposal will align to existing KPA (Port of Broome) standards and monitoring proposed will be consistent with the existing KPA OMMP at the Port.
- The proponent's mitigation and management measures to avoid and minimise impacts, including but not limited to:
 - piling operations will be temporary and undertaken as efficiently as possible to minimise the duration of disturbance. Piling will be undertaken in daylight and will be targeted during low tide periods, wherever possible.
 - deep water piling will be scheduled outside of humpback whale annual migration from July to September and all piling works will aim to avoid the active migratory shorebird season (December to February).
 - a scheduled update to KPA's Oil Spill Response Plans to address the additional risk of hydrocarbon spills the proposed facility poses. Improved oil response equipment will also be obtained and implemented.
 - trained marine fauna observers and soft-start management procedures will be used prior to and throughout operations.
 - lighting sensitive to marine and terrestrial fauna will be utilised.
 - implementation of existing KPA procedures for introduced marine pests/biosecurity.
 - monitoring will include water sampling and analysis, water column profiling, sediment sampling, benthic communities and habitat surveys, marine pest surveillance, groundwater sampling and migratory shorebird surveys.

- During the construction period KMSB will be required to comply with a Construction Environmental Management Plan, which is required to be submitted to the KPA for approval prior to construction commencing.
- For the Operation of the facility, KMSB is required to comply with a Terminal Lease and Licence in which the KPA have imposed on KMSB to adhere to an Tenancy Environmental Management Plan which the KPA will approve to ensure consistency with the KPA EMP (2019) for the Port of Broome.

Given the above considerations, although the proposal raises a number of environmental issues, the EPA considers that the likely environmental effects of the proposal are not so significant as to warrant formal assessment and the potential impacts can be adequately managed through the implementation of the proposal in accordance with the referral documentation, which includes the proponent's management and mitigation measures, and implementation of the EPA's advice (outlined below).

Advice and Recommendations regarding Environmental Issues

a) Marine Environmental Quality

The EPA notes that the potential impacts to marine environmental quality from the proposal activities may include: a temporary and localised minor increase in turbidity immediately surrounding the piling works; and hydrocarbon release into the marine environment from a potential vessel spill and/or bunkering operations.

The EPA notes that piling operations are temporary and will occur for up to one hour, twice per day for 2-3 months. Targeting periods of low tide to conduct piling works will occur to mitigate elevating turbidity along with minimising underwater noise impacts to marine fauna.

Increased vessel traffic within the Port of Broome and surrounding waters, increases the risk of vessel collision and associated accidental hydrocarbon spill. The EPA notes that standard operational management practices regulated by the Port exist and that KPA intend to update their Oil Spill Contingency Plan and Tactical Response Plans to counter the additional risk the proposed facility poses. The EPA supports this and also notes that in response to the additional level of risk, KPA are in the process of procuring improved oil response equipment.

The KPA has been implementing an OMMP for the Port of Broome to monitor and manage potential impacts to marine environmental quality which may arise as a result of Port operations. The EPA supports the additional monitoring proposed which will include:

- Biannual marine water sampling and analysis for hydrocarbons and heavy metals
- Biannual water column profiling of physicochemical parameters

- Three-yearly sediment sampling and analysis for hydrocarbons and heavy metals
- Annual benthic communities and habitat survey
- Marine Pest State-Wide Array Surveillance Program
- Biannual groundwater sampling and analysis for hydrocarbons and heavy metals.

The EPA notes that KPA are currently in consultation with Nyamba Buru Yawuru and the DBCA with a view to expand the KPA OMMP to be part of an Integrated Marine Environmental Quality Management Plan for the marine waters within the Port and the adjacent Marine Park. The EPA supports this initiative which would allow for open and transparent reporting of environmental performance.

Given the temporary and localised nature of potential impacts to turbidity and the maintenance of marine environmental quality in accordance with Levels of Ecological protection specified in the KPA OMMP, the EPA considers that the proposal, as implemented consistent with the *Kimberley Marine Offloading Facility Environmental Review Document* (Rev 1, Report No. 200018, August 2020), is unlikely to have a significant impact on Marine Environmental Quality.

b) Marine Fauna

The EPA notes that the potential impacts to marine fauna from the proposal activities may include: temporary underwater noise emissions from piling operations; increased risk of vessel strike; operational lighting affects; and potential hydrocarbon spills.

In relation to underwater noise, the EPA supports the proponent's commitment to continue to evaluate and implement alternative methods and techniques to implement marine construction to avoid and minimise underwater noise impacts (eg. marine screw piling).

The EPA notes that the proponent has outlined in the referral document the management actions to avoid, minimise and mitigate the risk of significant impacts to marine fauna, including but not limited to:

- Minimising underwater noise emissions from piling through targeting shallow depths wherever possible.
- Avoiding deep water piling between July to September when humpback whales are migrating.
- Engaging trained marine fauna observers prior to and throughout piling operations. Piling will be limited to daylight hours.
- Soft-start procedures will be used.
- Vessel movement controls including speed limits of between 5-8 knots

- Wildlife friendly lighting (i.e. with amber LED and narrow spectral distribution will be used).
- Implementation of KPA's existing procedures for biosecurity.

Given the proposal activities do not include dredging, the proposed timing of construction activities to avoid and minimise impacts to key marine fauna species, and the proponent's ongoing monitoring and management of any potential impacts to marine fauna, the EPA considers that the proposal, as implemented consistent with the *Kimberley Marine Offloading Facility Environmental Review Document* (Rev 1, Report No. 200018, August 2020), is not likely to have a significant impact on Marine Fauna.

c) Terrestrial Fauna (Shorebirds)

The Roebuck Bay Ramsar Wetland, located 10 km west of the proposal area, is recognised as a site of international importance for migratory shorebirds with total numbers of waders using the site each year estimated at over 300,000.

The EPA notes the proposal may potentially disturb shorebirds found within and adjacent to the proposal area and a loss of habitat or habitat degradation may occur.

The proponent intends to time construction works to coincide with the breeding season for Ruddy Turnstone when they will be in their Arctic breeding grounds. Specifically, ground disturbing works on the beach/dune area will be targeted between May to August. Construction lights will be directed away from any shorebird feeding or roosting areas and wildlife friendly lighting will be used, including no flickering lights. Pest management will occur to prevent encouraging feral predators, i.e. cats, foxes, into the construction area. The referral information for the proposal sets out that soft-start piling procedures will be utilised to warn birds from the area prior to commencement of full energy impact piling and piling operations will be limited to twice per day to avoid sustained periods of loud noise.

Given the timing of construction activities to avoid and minimise impacts to the Ruddy Turnstone, and the proponent's ongoing monitoring and management of any potential impacts to shorebirds, the EPA considers that the proposal, as implemented consistent with the *Kimberley Marine Offloading Facility Environmental Review Document* (Rev 1, Report No. 200018, August 2020), is not likely to have a significant impact on fauna.

d) Social Surroundings

The proposal area is located within 5 km of the West Kimberley National Heritage Place. This area is recognised as one of Australia's very special places, primarily due to presence of dinosaur footprints which are typically associated with the areas of exposed Broome Sandstone. The EPA notes that the proponent has considered the potential impacts to this important area of geological history and located the

Development Envelope within an area identified by a dinosaur footprint expert as an area that could support future developments without impacting on dinosaur footprints (Salisbury *et al.* 2018). Furthermore, the proponent will avoid impacts to the Broome Sandstone which is the geological feature that has the potential to support dinosaur footprints.

Roebuck Bay is of cultural significance to the Yawuru traditional owners. The EPA notes that KMSB have modified the proposal following heritage surveys and detailed consultation with the Yawuru Prescribed Body Corporate. In particular the hardstand area was modified, with the land reclamation part of the proposal being reduced in extent to allow the jetty to cross the dune system. This change, together with the elevated design and maximum spacing between pylons, ensured that cultural and community access was not affected. The current design was approved by Yawuru Prescribed Body Corporate in February 2020. The EPA understands that no Aboriginal heritage sites will be directly impacted by the proposal. The EPA supports KMSB's continued consultation with the Nyamba Buru Yawuru to ensure heritage sites and cultural values are identified and preserved.

Given the proposal activities will not impact on Aboriginal heritage sites, Broome Sandstone or identified areas of underwater cultural heritage, the EPA considers that the proposal, as implemented consistent with the *Kimberley Marine Offloading Facility Environmental Review Document* (Rev 1, Report No. 200018, August 2020), is not likely to have a significant impact on heritage sites.

Summary

In summary, although the proposal raises a number of environmental issues, the EPA is of the view that the proposal as implemented consistent with referral information, will result in environmental effects that are not so significant as to warrant formal assessment under Part IV of the EP Act.

This is primarily on the basis that the potential impacts of the proposal can be adequately managed in accordance with the proponent's referral documentation, the proponent's management and mitigation measures and the implementation of the above EPA advice and recommendations.