

Environmental Protection Act 1986

Section 39A(7)

PUBLIC ADVICE

Proposal:	Port Hedland Spoilbank Marina
Proponent:	Department of Transport
Decision:	Not Assessed – Advice Given (Appealable)

The EPA considers that the proposal is unlikely to have a significant impact on the environment and does not warrant formal assessment.

Background:

The Department of Transport referred the Port Hedland Spoilbank Marina to the Environmental Protection Authority (EPA) under section 38 of the *Environmental Protection Act 1986* (EP Act) in March 2020. The proposal includes:

- a marina basin, mooring facilities (up to 80 pens), boat launching area, sand trap and entrance channel
- capital dredging works resulting in up to 900,000 cubic metres (m³) of dredge spoil and dredged to a maximum depth of -2 metres chart datum (-6m AHD). Dredge spoil will be used onsite as fill material to raise the finished ground level prior to landscaping, with excess material disposed offsite
- construction of the marina breakwaters and revetments
- parking facilities, amenities (public and pen holders), public open space and upgrading of road infrastructure.

The proposal involves clearing and ground disturbance of up to 40 hectares within a development envelope of approximately 77 hectares. The proposal also includes the ongoing management and maintenance of the marina water body and infrastructure.

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

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 the environment the EPA has had particular regard to the following:

- The location of the proposal in a highly modified landscape. The Port Hedland Spoilbank is a man-made coastal landform created as a result of disposing dredge material associated with the Port Hedland Harbour and Goldsworthy shipping channel.
- The small extent and localised nature of likely environmental impacts from the proposal.
- The environmental values surrounding the proposal area, in particular, the inter-nesting and nesting flatback turtle (*Natator depressus*) population at Cemetery Beach (approximately 1.7 km east of the proposal).
- Benthic communities and habitats identified are considered to be widespread across the turbid nearshore environments of the Pilbara region and are not considered to represent conservation significant habitat.
- The high level of confidence that any minor impacts to water quality and any nearby benthic communities will recover within a reasonable time frame.
- Dust from construction will be temporary and localised and managed using best practice measures.
- The proponents site specific environmental studies and investigations that have informed the types of management measures in the referral document.

- The proponents mitigation and management measures to avoid and minimise impacts, including but not limited to:
 - measures set out in the proponent’s referral documentation for construction and operational lighting design and principles to minimise impacts to marine fauna. Key management measures are included in the proposal Construction and Operational Environmental Management Plans and will be further formalised in the proposal’s Light Management Plan in consultation with the Department of Biodiversity, Conservation and Attractions (DBCA)
 - avoidance of dredging activities from December to March to minimise impacts during inter-nesting/nesting/hatchling periods for flatback turtles. Dredging activities will occur within specified areas and only during daylight hours
 - construction activities are restricted to the western side of the Spoilbank land formation
 - a marine fauna monitoring program detailing the management measures for marine fauna and providing for marine exclusion zones
 - a post construction turtle monitoring program with Care for Hedland Environmental Association, in consultation with the DBCA
 - a Marine Environmental Quality Plan and a Dredging Environmental Management Plan, including spatially delineated areas of ecological protection and an appropriate tiered monitoring and management approach
 - a Dust Management Plan which includes measures to prevent and avoid excessive dust generation, wetting procedures, wind fencing, stockpile management and monitoring.
- Consultation undertaken by the proponent, including with the Kariyarra traditional owners.
- the presence of other statutory processes that will regulate environment aspects of the proposal, including the likely requirement for the proponent to submit a Dust Management Plan to the Town of Port Hedland for review and approval under the *Planning and Development Act 2005*.

Given the above considerations, although the proposal raises a number of environmental issues, the EPA considers that 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 Fauna

The EPA notes that the primary sources of potential significant impact from the proposal to the flatback turtle population at Cemetery Beach are from construction dredging activities and operational artificial light.

The EPA notes that the proponent has proposed management actions within its Construction Environmental Management Plan, Operational Environmental Management Plan and Dredging Environmental Management Plan to avoid, minimise and mitigate the risk of significant impacts to the flatback turtle population, including but not limited to:

- Avoidance of dredging activities from December to March to avoid critical nesting/hatchling periods for flatback turtles.
- Dredging activities will occur within specified areas and only during daylight hours (6am – 6pm).
- Implementation of a proposal specific Light Management Plan to be developed in consultation with the DBCA and detail best practice guidance on the management of proposal lighting. The Light Management Plan will be developed in accordance with the *Environmental Assessment Guideline for Protecting Marine Turtles from Light Impacts* (EPA 2010) and the *Commonwealth Light Pollution Guidelines for Wildlife – Including Marine Turtles, Seabirds and Migratory Shore birds* (in draft). The proposed measures to be included in the Light Management Plan are outlined in the proponent's referral information.
- The engagement of qualified Marine Fauna Observers on the dredge vessel.
- The use of turtle exclusion and disturbance devices such as chains.
- Enforcing speed controls.
- Noise management protocols.

The EPA supports the proponent's continuation of further and ongoing consultation regarding flatback turtle monitoring. It is noted that the proponent will engage Care for Hedland Environmental Association to continue their turtle monitoring program on the spoilbank for two seasons post-construction. The monitoring program will be conducted in accordance with the DBCA's *Turtle Monitoring Field Guide Edition 8* and will be formalised in the Proposal Light Management Plan.

In line with the referral document, the EPA expects the proponent will continue to consult with the DBCA regarding the details of the Light Management Plan and the turtle monitoring program.

b) Marine Environmental Quality and Benthic Communities and Habitats

The EPA notes that potential impacts to marine environmental quality and benthic communities are temporary and localised and that there is a high level of confidence that any minor impacts to water quality and indirect impacts to benthic communities will recover within a reasonable timeframe.

The referral information includes a proposal Marine Environmental Quality Plan (MEQP) which outlines a tiered monitoring and management approach, including a quarterly water and sediment sampling regime in the marina and surrounding environment. The MEQP presents an Environmental Quality Management Framework (EQMF) for the marina, and adjacent waters which aims to protect a range of environmental values in the area, including ecosystem integrity, seafood safe for human consumption, aesthetic values and recreation. This is consistent with the EPA's *Technical Guidance for Protecting the Quality of Western Australia's Marine Environment* (EPA 2016).

To further minimise impacts during construction and dredging, the EPA recommends the proponent consider measures that direct return water (during dredging of the channel and sandbank) to be initially discharged into the proposed harbour basin (and existing lagoon) to simplify the management of return water discharge to the marine environment (i.e. through one channel).

The EPA expects the proponent will continue to consult with the Department of Water and Environmental Regulation (DWER) in relation to further refining the Dredging Environmental Management Plan and the Marine Environmental Quality Plan to ensure consistency and clarity in matters such as Environmental Protection Outcomes and management targets, the Environmental Quality Plan to apply to construction, and the methods to apply to monitoring of underwater light.

c) Air Quality

The EPA acknowledges that dust from the proposal construction will be temporary and localised and that the proponent has proposed management measures and actions within its Dust Management Plan (DMP) such as wetting procedures, wind fencing, stockpile management and dust monitoring. These measures aim to ensure that dust emissions can be minimised to as low as practicable. The EPA supports the section in the plan that specifies a monitoring program to disseminate dust impacts resulting from emissions generated at the proposal site with background dust and emissions from other sources.

The EPA notes the Port Hedland airshed already experiences high dust concentrations from cumulative influences, including large bulk ore handling operations. Therefore, any additions to the existing high dust levels should be monitored and managed carefully by the proponent to ensure the protection of public health and amenity.

In terms of monitoring dust the EPA recommends the proponent consider:

- The collection of daily operational information during works, where there are dust generating activities at the Spoilbank site.
- Visible dust be recorded via video camera/s so that the footage can provide feedback and documentation of dust events and dust management.
- A LiDAR monitoring campaign by the proponent could aid in visualising potential dust plumes and sources of dust.

The EPA notes the advice from the Town of Port Hedland to the proponent that it would be required to submit an adequate Dust Management Plan as part of the development application for the proposal. The implementation of the Dust Management Plan, and any subsequent revisions, would form a condition prescribed in the proposal's development approval issued in accordance with the *Planning and Development Act 2005*.

In this regard, the EPA recommends that the proponent consult with the DWER to further refine the Dust Management Plan prior to submission of the plan to the Town of Port Hedland.

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 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.