

STATEMENT OF REASONS

Grant of a Waste Discharge Licence pursuant to section 74 of the *Water Act 1992* (Water Act)

Waste Discharge Licence Applicant	NRR Services Pty Ltd
Waste Discharge Licence number to be granted	WDL255
Licensed Action	The controlled discharge of wastewater from the decant basin of NRR Services Pty Ltd's dredge spoil containment pond on ML29628 to the Bing Bong Swing Basin in the Gulf of Carpentaria via the authorised discharge point and subject to the conditions of this licence.
Material considered	<ul style="list-style-type: none"> • Application in the approved form • Waste Discharge Licence Application Supporting Information Document • NRR Services' response to request for further information during the adequacy assessment stage • NRR Services' response to request for further information during the full assessment stage • Dredging Monitoring and Management Plan • Emergency management plan • Stakeholder consultation and communication plan
Decision	In accordance with section 74 of the Water Act, I have granted WDL255.
Decision Maker	Controller of Water Resources

REASONS

This Statement of Reasons (SoR) has been prepared in accordance with section 35 of the *Northern Territory Civil and Administrative Tribunal Act 2014* (NTCAT Act).

References to the Water Act and Water Regulations in this statement of reasons are references to the *Water Act 1992* (NT) and *Water Act Regulations 1992* (NT).

Background

On 30 April 2024, NRR Services Pty Ltd (the Applicant) submitted an Application for a new waste discharge licence (WDL) pursuant to section 74 of the Water Act (the Application).

The Applicant currently operates the Nathan River Project as authorised by Deemed Environmental (Mining) Licence 1062-01 granted in October 2023.

The WDL is for the discharge of dredge spoil decant water to the Bing Bong Swing Basin. It does not authorise discharges of mine-affected water associated with the Nathan River Project.

Application Duly Made

The Applicant lodged the Application in the form approved pursuant to s 3(2) of the Water Regulations.

In deciding to grant this WDL, I have taken into account the factors at section 90(1) of the Water Act (Section 90 Factors).

Section 90 Factors

1. The availability of water in the area in question (s 90(1)(a))

The proposed discharge affects marine waters only and will not impact the availability of water in the area.

2. Any water allocation plan applying to the area in question (s 90(1)(ab))

There are no water allocation plans in place for this area. The proposed discharge will not impact any water allocation plans.

3. The existing and likely future demand for water for domestic purposes in the area in question (s 90(1)(b))

There is no existing or expected future demand for water for domestic purposes in the area.

The proposed discharge will comprise saline marine waters discharged within the Bing Bong Swing Basin. Saline water is not suitable for domestic use.

For the above reasons, the proposed WDL is unlikely to affect the future demand for water for domestic purposes in the area.

4. Any adverse effects likely to be created as a result of activities under the WDL on the supply of water to which any person other than the Applicant is entitled under the Water Act (s 90(1)(c))

There are no known third party interests in the extraction of marine waters from the Bing Bong Swing Basin as a water supply.

5. The quantity or quality of water to which the Applicant is or may be entitled from other sources (s 90(1)(d))

This WDL does not authorise the extraction of water by the Applicant.

The Applicant is not entitled to extract water from any sources in proximity to the Bing Bong Loading Facility. The Applicant does not currently hold any extraction licences.

6. The designated beneficial uses of the water and the quality criteria pertaining to the beneficial uses (s 90(1)(e))

The relevant declared beneficial use area is the McArthur River Area declared in Gazettal notice Gazette G9 on 11 March 1998 and G20 on 27 May 1998. The following beneficial uses are prescribed:

- a. aquatic ecosystem protection;
- b. recreational water quality; and
- c. aesthetics.

The water quality criteria document listed in the Gazette has been updated since the Gazette's publication. The Australian & New Zealand Guidelines for Fresh and Marine Water Quality (ANZG) and the Guidelines for Managing Risks in Recreational Water published by the National Health and Medical Research Council (2008) apply to the activity.

Potential impacts to the aquatic marine ecosystem were identified and assessed by the Applicant in the Dredging Monitoring and Management Plan submitted as part of the Application. No long term risks associated with recreational water quality or aesthetics were identified.

The main potential impact to the receiving environment associated with dredging at the Bing Bong Swing Basin is the temporary deterioration of marine water quality, particularly increases in turbidity and heavy metals. The key contaminants of concern are lead and zinc which are associated with the ore loading operations in the port and are present at elevated levels in sediments in the basin.

Any deterioration of water quality associated with the maintenance dredging activity are expected to be of a short duration and contained within the heavily modified port area and transshipment zone.

Environmentally sensitive areas or areas of conservation significance surrounding the Bing Bong Swing Basin are not expected to be impacted. The monitoring program extends to areas outside of the transshipment zone, allowing for the detection of impacts in more sensitive areas.

The monitoring programs proposed by the Applicant and required by the conditions of the WDL include the assessment of turbidity and heavy metal concentrations in affected waters. Concentrations will be compared to ANZG marine water quality guideline values for 95% species protection, where available. For analytes where a 95% species protection value is not available, a low reliability guideline value will be adopted.

Maintaining water quality below the prescribed values at the compliance point will ensure that the grant of the draft licence will not prejudice the declared beneficial use of the area, as required by section 73.

7. The provisions of any agreement made by or on behalf of the Territory with a state of the Commonwealth concerning the sharing of water (s 90(1)(f))

There are no water sharing arrangements in place in the Northern Territory concerning the sharing of water in the area.

8. The existing or proposed facilities on, or in the area of, the land in question for the retention, recovery, or release of drainage water, whether surface or sub-surface drainage water (s 90(1)(g))

The Applicant intends to construct a purpose-built dredge spoil containment pond for the storage of material dredged from the Bing Bong Swing Basin. Decant water from the spoil containment pond will be pumped directly to the discharge point located at the Bing Bong Loading Facility wharf, subject to the grant of this WDL. Dredge decant water will not be released from any other source or at any other discharge point.

The Maximum Operating Level (MOL) proposed for the dredge spoil pond is 180 ML. Operating the dredge pond at or below its MOL allows a buffer of 25 ML until the pond is full and would spill into the environment. The Applicant intends to collect weekly water level surveys from the dredge spoil pond to track water storage capacity. Water levels will also be surveyed after large rainfall events.

Should the spoil pond water volume be at or greater than the designated MOL, it will trigger the immediate cessation of dredge spoil deposition into the pond. To ensure no uncontrolled discharges occur from the dredge spoil pond during periods of heavy rainfall, contingency water infrastructure will allow the dredge spoil pond to be dewatered to one of four nearby sediment ponds.

The risk controls described above are addressed and specified in the Applicant's Dredging Monitoring and Management Plan (DMMP). The DMMP is a licence document listed at Item 4 in the proposed WDL. In accordance with condition 13 of the proposed WDL, licence documents must be complied with. If the response actions associated with exceeding the MOL are not implemented, this would constitute a breach of the WDL conditions and, potentially, an offence under the Water Act. Changes to licence documents must be submitted to the administering authority and analysed for environmental risk (condition 14 of proposed WDL). If the Applicant wishes to change how they manage the water level in the spoil containment pond, the administering authority will receive notification and will assess the changed risk profile and proposed controls.

Uncontrolled discharges including spills from the spoil containment pond would constitute a breach of the Applicant's licence and must be reported in accordance with the conditions of the WDL and the Water Act.

The construction and maintenance of the spoil containment pond and water transfers to the sediment ponds will be regulated by the Mining Division in the Department of Environment, Parks and Water Security (the Department) under Deemed Environmental (Mining) Licence 1062-01.

9. The adverse effects, if any, likely to be created by such drainage water resulting from activities under the WDL on the quality of any other water or on the use or potential use of any other land (s 90(1)(h))

Spoil pond decant water quality is expected to be similar to the water quality of the receiving waters in the Bing Bong Swing Basin. The marine waters and decant discharge water will be highly saline.

Monitoring results associated with previous dredge campaigns in the Bing Bong Swing Basin indicate that decant water is not likely to have adverse effects on the water quality of the receiving environment. The WDL contains conditions for the purpose of preventing or minimising adverse effects on receiving waters, including limitations on discharge flow rates and water quality monitoring requirements.

Previous dredge campaigns used a nearby spoil containment pond to store dredged material and decant water. No vegetation dieback has been observed as a result of storing dredged material and decant water in this manner. Storing decant water in the spoil containment pond is considered unlikely to have an impact on the potential use of surrounding land.

10. The provisions under the Planning Act 1999 (NT) relate to the development or use of land in the area in question (s 90(1)(j))

The activities conducted on the land do not require development consent under the Planning Scheme established under the *Planning Act 1999* (NT). The relevant activities are exempt, as they are 'mining activities' being carried out under a 'mining interest' where these terms have the same meaning as in the *Mining Management Act 2001* (NT) (Clause 1.3.(i) of Schedule 3 of the Planning Scheme 2020).

11. Other Matters (s 90(1)(k))

Mineral titles

There are two mineral titles relevant to this licence:

- MLN1126, held by Mount Isa Mines Limited, a subsidiary of Glencore, who also operates McArthur River Mine. MLN1126 includes the Bing Bong Swing Basin, the transshipment corridor, McArthur River Mine's Bing Bong loading facility, landside infrastructure and dredge spoil ponds.
- The Applicant's dredge spoil containment pond will be located on ML29628. ML29628 is held by the licensee. ML29628 is located to the west of the Bing Bong swing basin.
 - The Licensee holds Access Authority (AA) 29692. AA29692 allows the Licensee access to ML29628, via the Bing Bong transshipment corridor and swing basin. AA29692 encompasses the Bing Bong Swing Basin, transshipment corridor and the Licensee's port infrastructure. Dredging will occur in an area covered by AA29692. The discharge point will be within AA29692.

Monitoring and environmental risk

A maintenance dredging campaign was completed by NRR Mining Pty Ltd in 2020 under WDL246-01. Monitoring conducted during and following the 2020 maintenance dredging program indicated that water quality impacts were localised and limited to the Bing Bong Swing Basin and transshipment zone. No exceedances of dissolved metals or turbidity default guideline values were recorded during waste discharge. One exceedance of the dissolved oxygen 95% species protection trigger value at BBMZ01 was recorded during the dredging program.

Long-term monitoring programs in the marine waters surrounding the Bing Bong Swing Basin indicate no significant point source or cumulative impact to water quality or habitats outside of the transshipment zone from past dredging and operational activities.

Studies of local assemblages of benthic invertebrates and seagrasses surrounding the Bing Bong Swing Basin have recorded naturally high resilience to turbid waters. This is primarily due to the prevalence of seasonal monsoons and cyclones within the Gulf of Carpentaria. Seagrass communities in the closest proximity to the Bing Bong Swing Basin are demonstrating normal health and natural succession according to studies in 2016 and 2018.

There is limited seagrass or significant habitat for motile marine species within the transshipment zone that would be directly affected by physical disturbance or water quality.

There has been no recorded incidence of significant vegetation die back following placement and storage of spoil material in existing spoil storage areas.

The monitoring results summarised above indicates that the receiving environment is unlikely to experience material or significant impacts as a result of the discharge of wastewater.

Compliance

In September 2022, NRR Mining Pty Ltd was prosecuted by the Department for contravening the conditions of WDL246-01. The non-compliances did not relate to discharges associated with dredging at the Bing Bong Swing Basin.

Since the prosecution of NRR Mining Pty Ltd, the company has undergone a business restructure. NRR Services Pty Ltd (the Applicant) reflects the restructured business who currently operate the Nathan River Project as authorised by Deemed Environmental (Mining) Licence 1062.

Consultation

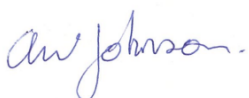
The WDL has been referred to two interested stakeholders and their comments have been considered in drafting licence conditions.

1. The Mining Regulation team in the Department of Environment, Parks and Water Security
2. Glencore's McArthur River Mining Pty Ltd (operator of a larger loading facility at Bing Bong and the overarching controller of the Port)

Conclusion

Having regard to the above and the material I considered, I am satisfied that WDL255 is consistent with the provisions and objects of the Water Act.

Accordingly, I have granted WDL255.



Andrew Johnson
Controller of Water Resources
1 August 2024
