*Nganhurra Operations Cessation*

Key matters report

# Purpose of this report

NOPSEMA has accepted the Nganhurra Operations Cessation Environment Plan Revision 10 (the EP) on 10 March 2022, submitted by Woodside Energy Ltd (the titleholder) for the inspection, monitoring, maintenance and repair of the Enfield subsea infrastructure and Nganhurra riser turret mooring (RTM) in the Pilbara Region within the period(s) 2022 to 2023.

This report explains how NOPSEMA took into account matters that may be of interest to the public and accompanies the accepted Nganhurra Operations Cessation EP Revision 10 submitted by Woodside Energy Ltd, which is available on the NOPSEMA website and should be referred to for further information.

## Background

It is noted that in December 2017, NOPSEMA accepted Revision 2 of the EP, which identified that the design basis and decommissioning approach for the RTM was for onshore disposal.

Subsequent to this, NOPSEMA accepted Revision 7 of the EP in February 2021 for the offshore disposal of the RTM based on information provided by Woodside in the EP that due to the failure and subsequent flooding of an internal compartment within the RTM, there was a low probability that the RTM could be successfully towed for onshore disposal. In making the decision on the EP, NOPSEMA recognised that the primary environmental approval for the artificial reefing activity, is an artificial reef permit issued under the Environment Protection (Sea Dumping) Act 1981 administered by Department of Agriculture, Water and Environment (DAWE).

Following acceptance of the EP, NOPSEMA issued General Direction 812 requiring Woodside to plug and abandon wells by 30 June 2024 and remove property associated with the Enfield field by 31 December 2024. NOPSEMA also commenced investigating possible breaches of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (the OPGGS Act) relating to the requirement to maintain property in good condition and repair and remove property when it is no longer in use.

On 8 November 2021, Revision 10 of the EP was submitted for assessment by Woodside in response to a request for revision from NOPSEMA. This request followed the decision in September 2021 by Recfishwest to withdraw their application for an artificial reef permit with DAWE due to the increasing complexity and risk associated with the proposal.

Revision 10 of the EP provides for the continued presence of the RTM on station while Woodside completes market engagement and selection of the method for removing the RTM from the title area for onshore disposal prior to end of cyclone season 2022/2023.

In accepting Revision 10 of the EP, NOPSEMA notes that Woodside has been requested to submit a further revision to the Nganhurra Operations Cessation EP in July 2022. This revision will outline the selected RTM removal method and onshore disposal approach based on the results of market engagement and further engineering and technical studies. This will ensure that impacts and risks associated with the removal of the RTM are reduced to ALARP and will be of an acceptable level.

## Information relevant to NOPSEMA’s decision:

In making the decision to accept this EP, NOPSEMA took into account:

* General Direction 812 issued under section 574 of the OPGGS Act;
* the Environment Regulations;
* NOPSEMA Assessment Policy (PL0050), Environment Plan Assessment Policy (PL1347) and Environment Plan Decision Making Guidelines (GL1721);
* NOPSEMA Section 572 Regulatory Policy (PL1903)
* Department of Industry, Science, Energy and Resources’ Offshore Petroleum Decommissioning Guideline, March 2022;
* the Nganhurra Operations Cessation Environment Plan Revision 10;
* the information raised by relevant persons, government departments and agencies that is relevant to making a decision;
* relevant plans of management and threatened species recovery plans developed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and relevant guidance published by the Department of Agriculture, Water and the Environment;

# Next steps

Responsibility for the ongoing environmental performance of the Nganhurra Operations Cessation activity remains, at all times, with Woodside Energy Ltd.

NOPSEMA has legislated responsibilities to inspect and investigate offshore petroleum and greenhouse gas storage activities, and to enforce compliance with environmental law. These functions will be applied to this activity in accordance with NOPSEMA’s policies.

# Sensitive Information

Sensitive information received during the consultation process, such as the names and contact details of commenters and specific information identified by the commenter or relevant person as ‘sensitive’, is not published in this report. Sensitive information is contained in a sensitive information part of the EP which has been considered by NOPSEMA during its assessment process.

# Further information

If you would like further information about the activity, please contact the titleholder’s nominated liaison person specified in the EP and on NOPSEMA’s webpage for the Nganhurra Operations Cessation activity.

If you would like to be notified of regulatory information on the activity, such as start and end dates and enforcement actions (if any), please subscribe to updates on NOPSEMA’s website.

How NOPSEMA has taken into account key matters raised during the assessment and decision-making process for Nganhurra Operations Cessation EP

| # | Matter | Titleholder response | NOPSEMA’s assessment and decision |
| --- | --- | --- | --- |
| 1 | Inadequate integrity management and monitoring of the Nganhurra riser turret mooring may result in sinking, loss of position or preclude future removal options. | The activity involves the RTM remaining on location until the end of the cyclone season 2022/2023. During this time, Woodside propose to undertake inspection, maintenance, monitoring and repair of the RTM.  Woodside have provided an assessment of the RTM’s integrity and an evaluation of the risks from integrity failures and concluded there was no major threat to RTM integrity through to April 2023.  In addition, an RTM Offshore In-Water Survey (OIWS) was completed in 2016 and April 2021. The scope of the survey included complete visual inspection of nominated components and a general assessment of their cathodic protection system. The mooring system was determined to have sufficient residual extreme load capacity, based on the corrosion rate measured during the survey to maintain the required safety factors until at least 2026. Ultrasonic wall thickness checks were also performed of the RTM outer hull/shell with no anomalous readings recorded and all within 1mm of as-built wall thickness.  The RTM is in Class with Lloyds issuing a Class Certificate on 26 August 2021 conditional on continued monthly confirmation that navigation lights remain functional, and the draft is maintained. Woodside intends to retain class until April 2023, so long as control measures required by Lloyds can be safely implemented with cost and risk proportionate to the enhanced integrity of the RTM.  Woodside have described the planning that is underway and proposed to execute the removal of the RTM for onshore disposal prior to end of cyclone season 2022/2023. This includes an outline and schedule for market engagement, selection of the method for removing the RTM from the title area, making arrangements for onshore disposal and submission of a revised EP in July 2022 to provide for RTM removal.  Woodside concluded that with controls measures in place, risks are ALARP and acceptable and will not preclude full removal within the timeframe of the General Direction 812. The control measures identified include:   * Continuous RTM draft and position monitoring system. * Weekly navigation light and submergence monitoring check. * Annual visual inspections (GVI) and navigation light testing with the next planned inspection proposed for April 2022. * Design assessment corrosion review and update based on latest surveys. | NOPSEMA recognises the importance of ensuring oil and gas operators meet their decommissioning obligations as required under section 572 of the OPGGS Act.  It is acknowledged that the integrity of the RTM has been assessed, subsequently reviewed and updated several times due to changes to the timeframe for removal of the RTM from the field, which is now required by the end of cyclone season 2022/2023. Recommendations and actions identified during the integrity risk assessment are being implemented as part of the ongoing RTM integrity management.  During the EP assessment, NOPSEMA required Woodside to provide further information to demonstrate that the integrity management of the RTM reduces the risks of unplanned sinking or loss of position to ALARP, will be of an acceptable level and that future removal was not precluded. In response, Woodside identified further integrity management control measures such as dosing of a compartment with corrosion inhibitors, fitting of valve blinds where required in April 2022. Further, Woodside has confirmed that in the unlikely event that the RTM sinks prior to removal, the RTM could and would be fully recovered using deep water salvage methods.  After considering the proposed control measures and the technical complexity and associated risks of performing further inspections, NOPSEMA is satisfied that the EP demonstrates that the current integrity status and further ongoing integrity management of the RTM is managed to ALARP and to an acceptable level. Accordingly, future full removal of the RTM from the field is not precluded within the timeframe required by General Direction 812.  In addition, NOPSEMA is satisfied that appropriate decommissioning of the RTM will be undertaken by Woodside as:   * a clear date for removing the RTM by end of cyclone season 2022/2023 has been provided, which is appropriate given the control measures in place, the work described in the EP to execute full removal of the RTM and timeframe requirements of General Direction 812. * the final end state of the RTM is onshore disposal which is consistent with requirement for full removal under section 572 of the OPGGS Act.   NOPSEMA has also taken into account the requirement for Woodside to submit a further revision to the Nganhurra Operations Cessation EP in July 2022. |