

## GRIFFIN DECOMMISSIONING PROGRESS REPORT

### Purpose

This annual decommissioning report provides a progress update on Woodside Energy (Australia) Pty Ltd's (Woodside) decommissioning activities for the Griffin Field from 1 January 2022 to 31 December 2022, including planning towards and progress with undertaking the actions in accordance with the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) General Direction 832.

### Description of Facilities

The Griffin field is located within Permit Areas WA-10-L and WA-12-L, located around 58 km north-west of Exmouth, Western Australia, in Commonwealth waters at water depths of approximately 130 meters (m).

When in production, the Griffin field comprised the Griffin Venture, a floating production, storage and offloading (FPSO) vessel, with 12 production wells from the Griffin, Scindian and Chinook reservoirs routed to the riser turret mooring (RTM) via flexible and rigid flowlines. Oil products were stabilised and stored for offloading via tanker, while gas products were transported to the shore via the Griffin gas export pipeline (GEP) for domestic sale.

The Griffin field ceased production in 2009. Since then, the following cessation activities have been completed:

- the Griffin Venture FPSO was disconnected from the RTM and demobilised from the field;
- all flowlines and gas lift lines were flushed and filled with treated seawater;
- the GEP was purged and pressurised with inert gas, for preservation purposes;
- all wells were plugged and abandoned;
- all Xmas trees (XTs) were removed and placed onto mud mats around 25 m from the wells;
- all mid-depth buoys (MDBs) were removed and recovered. MDB mooring chains were laid on the seabed at the concrete gravity bases; and
- flexible risers were laid on the seabed.

### Titleholders

Following the merger between Woodside and BHP on 1 June 2022, the Titleholders for WA-10L and WA-3PL are Woodside Energy (Australia) Pty Ltd as Operator with joint venture partners Mobil Exploration and Producing Australia Pty Ltd and INPEX Alpha Ltd. The Titleholders for WA-12L are Woodside Energy (Australia) Pty Ltd as Operator and Mobil Australia Resources Company Pty Limited as joint venture partner.

Once accepted by NOPSEMA, all Titleholders will publish this report on their website.

### Legal Obligations

Until such time as decommissioning activities have been completed, Woodside will maintain property on the titles to ensure removal of the property is not precluded, as per the Subsea Integrity Management Plan.

At the completion of the field decommissioning activities, Woodside will provide, to the satisfaction of NOPSEMA, for the conservation and protection of the natural resources in the title areas within 12 months after property is removed and make good any damage to the seabed or subsoil in the title areas caused by any person engaged or concerned in the operations.

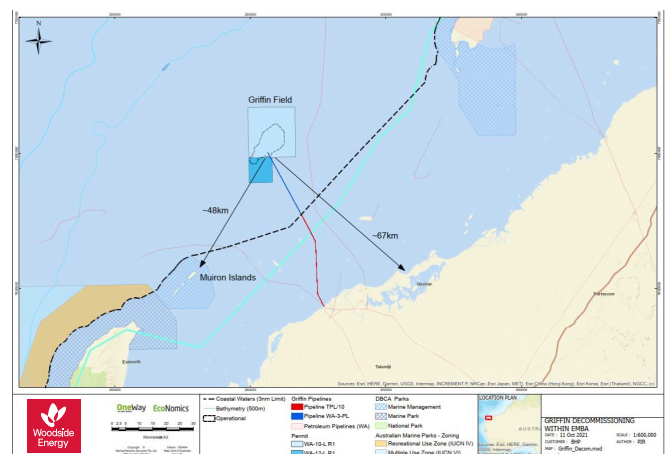


Figure 1. Griffin Operational Area

## Decommissioning Progress in 2022

Following on from work commenced in 2021, Woodside is progressing an Environment Plan Strategy to meet its obligations under the *Offshore Petroleum Greenhouse Gas Storage Act*. The Strategy separates Environment Plans based on activity type, complexity and location.

Three Environment Plans have been submitted to NOPSEMA for the decommissioning of the Griffin field and are under assessment.

The **Griffin Decommissioning and Field Management Environment Plan** covers the following scope:

- remove subsea infrastructure within the Griffin field in Permit Area WA-10-L;
- remove wellheads and associated infrastructure within Permit Areas WA-10-L and WA-12-L; and
- continue field management scopes which comprise inspection, maintenance, monitoring and repair (IMMR) and remotely operated vehicle (ROV) surveys on the subsea infrastructure and gas export pipeline, as required.

The Environment Plan was first submitted to NOPSEMA on 22 December 2021, and a further two submissions have been made in 2022 to address NOPSEMA's Request for Further Written Information (RFFWI). It remains under assessment, with Titleholder, at 31 December 2022.

The **Griffin Gas Export Pipeline Decommissioning Environment Plan** covers the following scope:

- pig the gas export pipeline (GEP) to prepare for pipeline removal in Commonwealth waters; and
- remove the GEP within Commonwealth waters.

The first revision of the Griffin GEP Decommissioning Environment Plan outlined a leave *in situ* option for the pipeline and was submitted in February 2022. Following regulatory feedback relating to the long term fate of the pipeline, and the time constraints of the General Direction, the Environment Plan is being updated to enable removal activities. Further assessment will be undertaken post removal to better understand the effects that the production has had on the pipeline in order to support future decommissioning activities in the region. Woodside will continue to assess decommissioning options on a case by case basis, informed by science and consultation. It is anticipated the Environment Plan will be resubmitted around Q1/2 2023.

The **Griffin Field Equipment Deviation Environment Plan** covers the following scope:

- proposal to leave in situ six concrete gravity bases (CGBs), twelve anchors and five concrete piles cut at or below the mudline, demonstrating an equal or better environmental outcome which is satisfactory to NOPSEMA;

The first revision of the Griffin Field Equipment Environment Plan was submitted in March 2022. It is anticipated the Environment Plan will be resubmitted around Q1/2 2023.

In addition to the development of the Regulatory permissioning documents informing the scope, the following pre-execution activities were completed:

- tender for Engineering, Preparation, Removal and Disposal (EPRD) contract, covering the removal and disposal scopes outlined in the Griffin Decommissioning and Field Management EP and the Griffin Gas Export Pipeline Decommissioning EP, developed and issued to the market in December 2021;
- tender evaluation in Q1/2 2022, with EPRD contract award to Technip FMC (Execution contractor) in June 2022;
- equipment procurement for long lead items;
- commencement of detailed design for removal activities by Execution contractor; and
- commencement of safety case development by Woodside and Execution contractor, with submission planned for around Q1 2023.

## Decommissioning Plan in 2023

It is anticipated that acceptance of the three Environment Plans and safety case revisions will occur in 2023. In addition, Woodside will progress other necessary approvals such as Sea Dumping Permits, as applicable.

During 2023, the following activities are planned:

- ongoing detailed design and procurement for removal activities and equipment disposal by Execution contractor and associated sub-contractors;
- pre execution survey of field equipment to confirm status; and
- commencement of in-field decommissioning activities around Q4 2023 (earliest).

## General Direction 832

Direction	Key Tasks	Progress in CY 2022	Look-ahead for CY 2023
<p>Direction 1</p> <p>Remove, or cause to be removed, to the satisfaction of NOPSEMA, from the title area all property brought into that area by any person engaged or concerned in the operations authorised by the title as soon as practicable and no later than 31 December 2024</p>	<ul style="list-style-type: none"> <li>• EP development, concept studies</li> <li>• Decommissioning and Field Management EP submission and acceptance</li> <li>• Deviation EP submission and acceptance</li> <li>• Development of other regulatory permissioning documents.</li> <li>• Contract award, detailed design progression, field execution activities</li> </ul>	<ul style="list-style-type: none"> <li>• Three EPs submitted, Environment Plan Strategy and end states for equipment finalised</li> <li>• Decommissioning and Field Management EP resubmitted in response to RFFWIs.</li> <li>• Acceptance delayed due to changes in scope associated with full removal of RTM and consultation updates associated with changes in law (Santos NA Barossa Pty Ltd v <i>Tipakalippa</i> Federal Court decision)</li> <li>• Deviation EPs submitted for Griffin Gas Export Pipeline (Commonwealth) and Griffin Field Equipment (piles, anchors, CGBs)</li> <li>• Progression of technical studies to support deviation scopes (contaminants analysis)</li> <li>• Continued engagement with DCCEEW regarding Sea Dumping Permits</li> <li>• Development and submission of EP for Griffin Gas Export Pipeline (State)</li> <li>• Development of safety case updates commenced</li> <li>• Tender evaluation in Q1 2022</li> <li>• Contract award to Technip FMC in June 2022</li> <li>• Detailed design commenced in August 2022</li> <li>• Procurement of long lead items</li> </ul>	<ul style="list-style-type: none"> <li>• Acceptance of three EPs relating to Griffin decommissioning activities</li> <li>• Final revision of Decommissioning and Field Management EP planned for submission around Q1/2 2023, acceptance around Q2/3 2023. This may be delayed through the extended consultation period as required by change in law (Santos NA Barossa Pty Ltd v <i>Tipakalippa</i> Federal Court decision), introducing schedule risk.</li> <li>• Resubmission of Griffin Field Equipment Deviation EP around Q1 2023</li> <li>• Resubmission of Griffin GEP EP, detailing pipeline removal around Q1/2 2023</li> <li>• Acceptance of EPs around Q3 2023. This may be delayed through the extended consultation period as required by change in law (Santos NA Barossa Pty Ltd v <i>Tipakalippa</i> Federal Court decision), introducing schedule risk.</li> <li>• Progress Sea Dumping Permits for Griffin piles and CGBs, following acceptance of deviation EP</li> <li>• Progress acceptance of EP for Griffin Gas Export Pipeline (State) with DMIRS</li> <li>• Submission and acceptance of Safety Case revisions</li> <li>• Ongoing detailed design</li> <li>• Pre execution survey and activities in field (around Q2 2023)</li> <li>• Commencement of in field removal activities (around Q4 2023, earliest)</li> </ul>
<p>Direction 2</p> <p>Until such time as direction 1 are complete, maintain all property on the title to NOPSEMA's satisfaction, to ensure removal of the property is not precluded.</p>	<ul style="list-style-type: none"> <li>• EP development and submission</li> </ul>	<ul style="list-style-type: none"> <li>• Decommissioning and Field Management EP resubmitted addressing comments, detailing ongoing field management activities.</li> <li>• Integrity of the subsea infrastructure will be managed as outlined in the Griffin Subsea Integrity Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Equipment status will be confirmed in pre-execution survey (around Q2 2023) to support the development of detailed removal plans</li> <li>• No maintenance activities are planned due to impending equipment removal campaign</li> </ul>
<p>Direction 3</p> <p>Provide, to the satisfaction of NOPSEMA, for the conservation and protection of the natural resources in the title area within 12 months after property referred to in direction 1 is removed.</p>	<ul style="list-style-type: none"> <li>• EP development and submission</li> </ul>	<ul style="list-style-type: none"> <li>• Two revisions to the Decommissioning and Field Management EP made, detailing conservation and protection measures and how the requirements of S270 will be met.</li> </ul>	<ul style="list-style-type: none"> <li>• Decommissioning and Field Management EP accepted around Q1 2023</li> <li>• Griffin Gas Export Pipeline EP accepted around Q2/3 2023</li> </ul>
<p>Direction 4</p> <p>Make good, to the satisfaction of NOPSEMA, any damage to the seabed or subsoil in the title area caused by any person engaged or concerned in the operations authorised by the title within 12 months after the property referred to in Direction 1 is removed.</p>	<ul style="list-style-type: none"> <li>• EP development and submission</li> </ul>	<ul style="list-style-type: none"> <li>• Two revisions to the Decommissioning and Field Management EP made, detailing Make Good monitoring and determination measures and how the requirements of S270 will be met</li> </ul>	<ul style="list-style-type: none"> <li>• Decommissioning and Field Management EP accepted around Q2/3 2023</li> <li>• Griffin Gas Export Pipeline EP accepted around Q2/3 2023</li> </ul>
<p>Direction 5</p> <p>Annual progress reporting until all directions have been met</p>	<ul style="list-style-type: none"> <li>• Annual Progress report</li> </ul>	<ul style="list-style-type: none"> <li>• 2022 Annual report submitted December 2022</li> </ul>	<ul style="list-style-type: none"> <li>• Submit annual progress report in December 2023</li> </ul>

## Schedule

An indicative schedule of the decommissioning activities is provided below:

	2021			2022					2023					2024					2025					2026												
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
<b>Project Milestones</b>	Selection Phase												Execute Phase																							
	General Direction, 31 Dec 2024 All Commonwealth waters scope complete																																			
<b>Regulatory Submissions</b>																																				
Decommissioning /Field Management EP	Develop			Approval window																																
Gas Export Pipeline EP (Commonwealth)	Develop			Approval window																																
Deviation EP (field)	Develop			Approval window																																
Additional Permitting Documents																																				
<b>Execution Contractor Engagement</b>																																				
Expression of Interest	▲																																			
Early Contractor Engagement	▲																																			
Tender Process	▲																																			
Engineering & Project Management	▲																																			
Procurement	▲																																			
Offshore Campaign	▲																																			
<b>General Direction Requirements</b>																																				
Conservation, Protect, Remediate (as reqd)																																				
General Direction Annual Reporting																																				

## Providing feedback

If you would like to comment on the proposed activities outlined in this information sheet, or would like additional information, please contact Woodside via:

E: [Feedback@woodside.com.au](mailto:Feedback@woodside.com.au)

Toll free: 1800 442 977