

## *Sasanof-1 Exploration Drilling Environment Plan*

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### **1. Purpose of this report**

NOPSEMA has accepted the Sasanof-1 Exploration Drilling environment plan (the EP) submitted by Western Gas (519 P) Pty Ltd (the titleholder) for an exploratory drilling activity in the Carnarvon Basin within the period(s) Q1 2022 and Q4 2023.

As required by the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (the Environment Regulations), the public was provided with an opportunity to comment on the EP. After this period, Western Gas (519 P) Pty Ltd took into account public comments and prepared a Report on Public Comment which is published on NOPSEMA's website<sup>1</sup>.

Following the public comment period, the titleholder submitted the EP for assessment by NOPSEMA on 23 August 2021. NOPSEMA has since completed its assessment of the EP and has determined that it is satisfied that the EP meets the criteria for acceptance<sup>2</sup> on 16 December 2021.

This report explains how NOPSEMA took into account key matters raised by stakeholders and comments received from the public during the public comment period in making its decision<sup>3</sup>. This report also contains other key matters that may be of interest to the public.

This report accompanies the accepted Sasanof-1 Exploration Drilling Environment Plan (WG-EHS-PLN-002) revision 4 submitted by Western Gas (519 P) Pty Ltd, which is available on the NOPSEMA website and should be referred to for further information.

#### **1.1. Information relevant to NOPSEMA's decision:**

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

- the Environment Regulations;
- NOPSEMA Assessment Policy (PL0050), Environment Plan Assessment Policy (PL1347) and Environment Plan Decision Making Guidelines (GL1721);
- the Sasanof-1 Exploration Drilling Environment Plan which includes the titleholder's Oil Pollution Emergency Plan and Operational and Scientific Monitoring Plan;
- the information raised by relevant persons, government departments and agencies that is relevant to making a decision;
- the information raised through public comment that is relevant to making a decision;
- There was one submission received during the public comment period with issues raised in relation to the key matters outlined in the below report;

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<sup>1</sup> Titleholder report (on public comments) – Sasanof-1 Exploration Drilling Environment Plan, dated: 23 August 2021

<sup>2</sup> Environment Regulations, Regulation 10A Criteria for acceptance of environment plan

<sup>3</sup> Environment Regulations, Regulation 11(3) Publication of notice, etc.

- 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 the Environment and Energy.

## 2. Next steps

Responsibility for the ongoing environmental performance of the exploratory drilling activity remains, at all times, with Western Gas (519 P) Pty 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.

## 3. Sensitive Information

Sensitive information received during the public comment period, 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.

## 4. 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 Sasanof-1 Exploration Drilling.

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 from the [Approved projects and activities](#) on NOPSEMA's website.

## How NOPSEMA has taken into account key matters raised during public comments, relevant persons consultation and the assessment and decision-making process for Sasanof-1 Exploration Drilling EP

#	Issues raised and Matters	Titleholder response	NOPSEMA's assessment and decision
1	<p><b>Matter:</b> Emergency response capacity and capability</p> <p><b>Claim:</b> Western Gas are not adequately resourced with trained personnel to establish and sustain a Crisis Management Team (CMT) and Drilling Incident Management Team (DIMIT), over the duration of the response timeframe outlined within the EP and OPEP, for a loss of well control incident.</p>	<p>Western Gas has developed an emergency response structure and resourcing plan that is commensurate with credible marine pollution scenarios modelled for the proposed activity, these being a gas/condensate release from the well and a marine diesel spill from a vessel collision. This structure and resourcing plan is adaptable and scalable in the unlikely event of a marine pollution event resulting from more persistent hydrocarbons.</p> <p>Western Gas outlines in the OPEP (Section 4.1) the response strategy selection for its modelled scenarios. Source control has been identified as the initial and highest priority response for a loss of well control. Concurrent activities would take place involving Monitoring, Evaluation and Surveillance (MES) and waste management.</p> <p>To enhance its internal capabilities, Western Gas has a resourcing model drawing on industry expertise for technical aspects of its business activities, including emergency response management.</p> <p>In support, Western Gas has prepared an OPEP resourcing plan to support the activities of the Crisis Management Team coordinated by Western Gas (Titleholder), the Drilling Incident Management Team</p>	<p>NOPSEMA expects titleholders to demonstrate that a sufficient incident management capability will be in place for the effective and timely implementation of the oil spill response operations described in the OPEP.</p> <p>In making a decision regarding this matter, NOPSEMA took into account the Sasanof-1 Exploration Drilling EP and OPEP, relevant oil spill response publications, views expressed by relevant persons, NOPSEMA's Decision Making Guidelines (GL1721) and NOPSEMA's Oil Pollution Risk Management Guidance Note (GN1488).</p> <p>During the assessment NOPSEMA required Western Gas to provide further information and make modifications to demonstrate that it had access to sufficient trained personnel to manage response operations described in the OPEP in the event of a LOWC.</p> <p>In response, Western Gas revised its submission to improve its arrangements for incident response personnel through the inclusion of the following:</p> <ul style="list-style-type: none"> <li>• An updated evaluation of incident management personnel requirements.</li> <li>• Provision for implementing a "virtual DIMIT" approach due to potential COVID-19 travel restrictions.</li> <li>• Delineation of required personnel for key DIMIT functions and support roles.</li> </ul>

		<p>activities coordinated by AGR (Well Engineering and Well Delivery Manager) and vessel/helicopter Incident Management Teams.</p> <p>A summary of this plan outlining all externally sourced oil spill response contractors and the form of engagement has been included in <u>Section 3.6</u> of the OPEP to demonstrate the significant depth of capacity and capability to manage an incident. These specialist contractors include AMOSC Core Group, source control contractor, ROV suppliers, vessel providers, operational and scientific monitoring services and industry mutual aid through Western Gas' APPEA membership.</p> <p>The OPEP has been prepared in accordance with the AMSA Technical Guidelines for Preparing Contingency Plans for Marine and Coastal Facilities and is linked to the National Plan via the Industry AMOSPlan. Commonwealth and State oil spill response agencies were engaged in planning the EP, with feedback from the WA Department of Transport included in the OPEP submitted to NOPSEMA with the Environment Plan for assessment.</p> <p>It will also undergo an independent resourcing needs analysis (AMOSC) using the worst-case oil spill trajectory modelling and hydrocarbon compositions to review Western Gas' predicted peak CMT, DIMT and support organisation requirements relative to the considered scenarios.</p>	<ul style="list-style-type: none"> <li>• Identification of “peak manning levels” for the DIMT and a scalable response capability to meet these peak requirements.</li> <li>• Arrangements in place with external oil spill response organisations to provide DIMT personnel.</li> <li>• Confirmation of availability of sufficient incident management personnel (internal and external) to meet peak DIMT staffing requirements for the duration of a response.</li> <li>• Provision for a DIMT Facilitator to support implementing a “virtual DIMT”.</li> <li>• Details of CMT membership and confirmation that sufficient trained personnel will be available to sustain a CMT for the duration of a LOWC.</li> <li>• Proposed testing of DIMT arrangements and capability, including operation of a “virtual DIMT”.</li> </ul> <p>Taking into consideration the revisions to response personnel resources outlined above and the nature and scale of the activity, NOPSEMA is satisfied that Western Gas has systematically evaluated its response requirements and can access sufficient trained incident management personnel for the duration of a worst-case LOWC scenario.</p>
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2	<p><b>Matter:</b> NOPSEMA Guidance Note - Oil Pollution Risk Management</p> <p><b>Claim:</b> Western Gas have note (sic) adequately addressed the requirements of NOPSEMA's Guidance Note, N-04750-GN1488 A382148, specifically Sections 4 &amp; 5 of the guidance note</p>	<p>Western Gas has undertaken a gap analysis of its OPEP for the proposed activity to ensure it meets the requirements of NOPSEMA's Guidance Note, N-04750-GN1488 A382148.</p> <p>The gap analysis demonstrated that Western Gas' OPEP meets the requirements of Sections 4 and 5 of the Guidance Note. To further demonstrate the competence of the OPEP, Western Gas has provided additional information in the OPEP to provide greater clarity and transparency on response arrangements.</p> <p>This information includes an update to <a href="#">Appendix B</a> to provide further details on:</p> <ul style="list-style-type: none"> <li>• Arrangements in place and capability for timely response;</li> <li>• Maintenance of arrangements and capability; and</li> <li>• Incident Management Capabilities.</li> </ul>	<p>NOPSEMA considered the general concern raised about the submission being consistent with the expectations detailed in NOPSEMA Guidance Note - Oil Pollution Risk Management (N-04750-GN1488).</p> <p>The Guidance Note aims to assist titleholders in understanding how to address the requirements of the Environment Regulations in relation to oil pollution risk management and response planning. Section 4 addresses regulatory requirements for OPEP content and response arrangements and Section 5 addresses incident management capability requirements.</p> <p>During the assessment NOPSEMA required Western Gas to provide further information and modify its OPEP having regard to the Oil Pollution Risk Management Guidance Note (N-04750-GN1488). Specifically, NOPSEMA requested further information on arrangements for oil spill monitoring, testing of response arrangements and incident management personnel arrangements.</p> <p>In response, Western Gas revised its OPEP to provide:</p>

			<ul style="list-style-type: none"> <li>• Sasanof-1 Operational and Scientific Monitoring Plan and details of arrangements with service providers to implement the plan.</li> <li>• Revised oil spill response exercise schedule with training and testing objectives.</li> <li>• Revised assessment and details of incident management personnel capabilities and arrangements (see Matter #1 above).</li> </ul> <p>Taking into consideration the additional information provided above and the nature and scale of the activity, NOPSEMA is satisfied that the Sasanof-1 Exploration Drilling OPEP presents adequate response arrangements and capability to meet the requirements of the Environment Regulations and is consistent with NOPSEMA expectations detailed in the Oil Pollution Risk Management Guidance Note (N-04750-GN1488).</p>
3	<p><b>Key Matter:</b> The operational area is within the Australian Defence Force North West Exercise Area (NWXA) where unexploded ordnance may be present.</p> <p><b>Claim:</b> Unexploded ordnance (UXO) may be present on and in the sea floor within the NWXA and Western Gas must inform itself as to the risks associated with conducting activities in the area.</p>	<p>Western Gas conducted a Safety Risk assessment on the potential presence of unexploded ordnances in the operational area with Rig Management and the anchor handling vessel providers. This assessment and the management measures considered and adopted will be detailed in the MODU Safety Case.</p> <p>Western Gas assessed that as the MODU to be used in the Sasanof-1 Drilling Program is a semi-submersible rig, the only credible opportunity to potentially impact with UXOs is during spudding and anchor deployment / retrieval using the anchor handling vessels. Any potential UXOs which are likely to be buried, would be in a minimum distance of 1,070 m water depth from the</p>	<p>The Department of Defence alerted Western Gas to risks associated with potential UXO on the seafloor of the operational area.</p> <p>In making a decision regarding this matter, NOPSEMA took into account the content of the EP, NOPSEMA's Decision Making Guidelines (GL1721), the full text correspondence with relevant persons, the extent of the consultation effort by Western Gas and how it addressed the merits of objections and claims made.</p> <p>During the assessment NOPSEMA required Western Gas to provide further information on the UXO safety risk assessment in the context of the environment plan,</p>

		<p>MODU or vessels thus, in the highly unlikely event that spudding, or an anchor would cause an UXO to detonate, the impact to vessels or rig would be negligible.</p> <p>The key controls (Safety Case) to be implemented are:</p> <ol style="list-style-type: none"> <li>1. Inclusion of the Department of Defence North West Exercise Area coordinates in the rig move plan to ensure awareness of the potential presence of unexploded ordnances.</li> <li>2. Inclusion of the potential presence of unexploded ordnances in the Drill Well On Paper (DWOP) exercise attended by all key third party contractors including tow vessel providers.</li> <li>3. Use of subsea Remotely operated vehicle (ROV) deployed at well head during spud activities.</li> </ol>	<p>including any management measures considered and adopted to demonstrate that risks associated with UXO had been identified, evaluated and will be reduced to ALARP.</p> <p>Taking into consideration the nature and scale of the activity, NOPSEMA is satisfied that the consultation met the requirements of Division 2.2A and appropriate authorities and relevant persons have been engaged in consultation, with sufficient time and information provided, and that the response by Western Gas to objections and claims are appropriate.</p>
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