

Beehive Pre-Drill Seabed Assessment Environment Plan

1. Purpose of this report

NOPSEMA has accepted the Beehive Pre-Drill Seabed Assessment Environment Plan (the EP) submitted by EOG Resources Australia Block WA-488 Pty Ltd (the titleholder) for a geophysical investigation (including 2D seismic survey) and geotechnical investigations in permit area WA-488-P, located approximately 163 km offshore from WA coastline and 73 km from the Northern Territory (NT) coastline. The activity is scheduled to be completed between April 2022 and August 2022.

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. There was one public comment received during the public comment period. After this period, EOG Resources Australia Block WA-488 Pty Ltd took into account the public comment and prepared a Report on Public Comment which is published on NOPSEMA's website¹.

Following the public comment period, the titleholder submitted the EP for assessment by NOPSEMA on 24/12/2021. NOPSEMA has since completed its assessment of the EP and has determined that it is satisfied that the EP meets the criteria for acceptance² on 2 March 2022.

This report explains how NOPSEMA took into account key matters raised by the public during the public comment period in making its decision³.

This report accompanies the accepted Beehive Pre-Drill Seabed Assessment Environment Plan, Revision 2 submitted by EOG Resources Australia Block WA-488 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 Beehive Pre-Drill Seabed Assessment 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 public comment submission received during the public comment period with issues raised relating to the key matter outlined in the below report; and

¹ Titleholder report on public comments – Beehive Pre-Drill Seabed Assessment Environment Plan

² Environment Regulations, Regulation 10A Criteria for acceptance of environment plan

³ 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 Agriculture, Water and the Environment.

2. Next steps

Responsibility for the ongoing environmental performance of the geophysical investigation (including seismic survey) and geotechnical investigations activity remains, at all times, with EOG Resources Australia Block WA-488 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 Beehive Pre-Drill Seabed Assessment Environment Plan.

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 [Underway Offshore page](#) on NOPSEMA's website.

How NOPSEMA has taken into account key matters raised during public comment, the assessment and decision-making process for the Beehive Pre-Drill Seabed Assessment EP

#	Issues raised	Titleholder response	NOPSEMA's assessment and decision
1	<p>Matter: <i>Seismic surveys result in damage to marine life</i></p> <p>Claim: Intense sound waves of seismic surveys damage or kill fish eggs and larvae and impair the hearing and health of fish. They also disrupt and displace important migratory patterns, pushing marine life away from suitable habitats like nurseries and foraging, mating, spawning, and migratory corridors, and cause whale stranding.</p>	<p>In accordance with Section 4 of NOPSEMA's Guidance Note Responding to public comment on Environment Plans, because these comments do not specifically relate to the activity to which the EP relates, they are not considered relevant. Notwithstanding this, below is EOG's response to the claim.</p> <p>The shallow seismic component of the Beehive PDSA activity is a very low-impact and short-term part of the overall activity and is not a traditional marine seismic survey (MSS), the sort in which the submitter perhaps assumes. As detailed in Table 2.1 of the EP, a sound source no greater than 100 cubic inches (cui) will be used for the shallow seismic survey. This is an order of magnitude less than a traditional 3D MSS, which typically uses in the order of 2,500-3,500 cui. The shallow seismic survey would take no more than a few days to complete. The environmental impact assessment for underwater sound originating from the geophysical equipment is detailed in Sections 7.1 and 7.2 of the EP and assessed impacts to all marine life as 'negligible'. This is based on numerous factors, including:</p>	<p>NOPSEMA recognises that the matter raised is in relation to underwater noise impacts from marine seismic surveys. The activity proposed by EOG is limited to a shallow 2D seismic survey, using a small, compressed air unit with a volume between 10 and 60 cui over a period of ~11 to 22 days. The impacts of this activity are therefore not of the same scale or magnitude of a traditional marine seismic survey with a much larger sound source over a longer duration.</p> <p>A focus of NOPSEMA's assessment was to ensure that potential impacts from underwater noise will be managed in a manner that will not have an unacceptable impact on matters protected under Part 3 of the EPBC Act, including marine turtles, whales, and values of the Commonwealth Marine Area such as commercially important prawns.</p> <p>In making a decision regarding this matter, NOPSEMA took into account EP content, relevant scientific literature; views expressed by relevant persons, Approved Conservation Advice for <i>Megaptera novaeangliae</i> (humpback whale) (DoE 2015), Conservation Management Plan for the Blue Whale (DoE 2015), Recovery Plan for Marine Turtles in Australia (DoEE 2017), EPBC Act Policy Statement 2.1 (DEWHA 2008), and the EPBC Act Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (DEWHA 2013).</p> <p>NOPSEMA recognises that the operational area for this activity overlaps with a number of marine turtle BIAs and there is potential overlap with the flatback turtle peak nesting period. During the assessment process, NOPSEMA required EOG to provide further information on the extent, duration, and severity of</p>

		<ul style="list-style-type: none"> • Underwater sound emissions are temporary; • The sound sources are small; • The distances to effect for underwater sound from geophysical equipment are very low (generally less than 1 km for most receptors); • Biologically important areas (BIAs) for cetaceans (whales and dolphins) and fish do not occur in or around the activity area; • There is only one active commercial fishery in the activity area, and the timing of the activity is likely to avoid that fishery's operating season; and • There is no spatially limiting habitat in or around the activity area. <p>EOG is cognisant of the concerns regarding potential impacts to cetaceans from MSS. The Australian oil and gas exploration industry has operated within well-defined guidelines for minimising such impacts for many years, and there have been no reported cases of injury or death to cetaceans from MSS in Australian waters. The control measures listed in the EP are designed to avoid or minimise impacts to cetaceans.</p>	<p>underwater noise impacts to marine turtles and to evaluate all reasonable control measures. In response, EOG revised the noise evaluation to demonstrate that the activity will be managed consistent with the requirements of the Recovery Plan for Marine Turtle and adopted additional control measures to manage impacts to marine turtles.</p> <p>NOPSEMA also recognises that the operational area overlaps with potential spawning habitat for commercially important prawn species. During the assessment process, NOPSEMA required EOG to provide further information on these habitats and spawning seasons and incorporate this into the evaluation of impacts. In response, EOG updated the impact evaluation for prawns to better consider potential disturbance to spawning activity. No additional control measures were required, given the minor nature of the survey and limited spatio-temporal overlap with prawn spawning areas and seasons.</p> <p>EOG has committed to manage the activity in a manner that will not result in injury to whales or marine turtles. The primary control measures that will be implemented during geophysical investigations, include pre-start visual observations, shut-down procedures, and night-time/low visibility procedures, consistent with Part A of EPBC Act Policy Statement 2.1 [IMP-01:EPS-01].</p> <p>NOPSEMA is reasonably satisfied that with the proposed control measures in place impacts to matters protected under Part 3 of the EPBC Act will be limited to short term, localised disturbance to isolated individuals.</p> <p>NOPSEMA has concluded that the activity will be undertaken in a manner that does not result in unacceptable impacts to matters protected under Part 3 of the EPBC Act, including whales and marine turtles, and not inconsistent with relevant species recovery plans.</p>
--	--	---	---

5. References

CA. (2015). Conservation Management Plan for the Blue Whale. Commonwealth of Australia. Available at <https://www.awe.gov.au/sites/default/files/documents/blue-whale-conservation-management-plan.pdf>

DEWHA. (2008). EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales. Department of the Environment, Water, Heritage and the Arts. Available at <https://www.environment.gov.au/system/files/resources/8d928995-0694-414e-a082-0ea1fff62fc8/files/seismic-whales.pdf>

DEWHA. (2013). Matters of National Environmental Significance – Significant Impact Guidelines 1.1 *Environment Protection and Biodiversity Conservation Act 1999*. Department of the Environment, Water, Heritage and the Arts. Available at https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf

DoE (2015). Conservation Advice - *Megaptera novaeangliae* humpback whale. Threatened Species Scientific Committee. Available at <http://www.environment.gov.au/biodiversity/threatened/species/pubs/38-conservation-advice-10102015.pdf>

DoEE (2017). Recovery Plan for Marine Turtles in Australia, 2017 – 2027. Commonwealth of Australia. Available at <https://www.awe.gov.au/sites/default/files/documents/recovery-plan-marine-turtles-2017.pdf>