

Polarcus Petrelex 3D Marine Seismic Survey Environment Plan

1. Purpose of this report

NOPSEMA has accepted the Petrelex 3D Marine Seismic Survey 2019-2020 Environment Plan (the EP) submitted by Polarcus Seismic Limited (the titleholder, hereafter referred to as Polarcus) for a seismic survey activity, of a maximum of 64 days, in the outer Joseph Bonaparte Gulf region within the period October 2019 to 31 December 2020.

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 were no public comments received during the public consultation period.

Following the public comment period, the titleholder submitted the EP for assessment by NOPSEMA on 23 August 2019. On 4 October 2019 NOPSEMA completed its assessment of the EP and determined that it was reasonably satisfied that the EP meets the criteria for acceptance¹.

This report explains how NOPSEMA took into account key matters raised by stakeholders in making its decision. Comments have been grouped into 'key matters' that capture the key issues and concerns or information provided during the consultation process. This report also contains other key matters reflecting important values and sensitivities that may be of interest to the public.

This report accompanies the accepted Petrelex 3D Marine Seismic Survey 2019-2020 Environment Plan (Version 2, dated 27 September 2019) submitted by Polarcus, 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 Polarcus Petrelex 3D Marine Seismic Survey 2019-2020 Environment 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 (in this case none were received);
- 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;

¹ Environment Regulations, Regulation 10A Criteria for acceptance of environment plan



2. Next steps

Responsibility for the ongoing environmental performance of the Petrelex 3D Marine Seismic Survey 2019-2020 activity remains, at all times, with Polarcus.

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

This report does not provide an exhaustive record of all matters relevant to environmental management and decision making for this EP.

If you would like further information about the activity readers should refer to the relevant section of the EP or contact the titleholder's nominated liaison person specified in the EP and on NOPSEMA's webpage for the Petrelex 3D Marine Seismic Survey 2019-2020.

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 [\[https://info.nopsema.gov.au/environment_plans/25/show_public\]](https://info.nopsema.gov.au/environment_plans/25/show_public) on NOPSEMA's website.

How NOPSEMA has taken into account key matters during assessment of Petrelex 3D MSS 2019-2020

#	Matter:	What Polarcus are doing:	What NOPSEMA decided:
<i>Impacts to marine turtles</i>			
1	<p><i>There could be unacceptable impacts on protected matters, specifically marine turtles within designated foraging Biological Important Areas (BIAs)</i></p> <p>During the assessment consideration was given to potential impacts and risks to marine turtles within the designated foraging BIAs.</p>	<p>Polarcus analysed the potential noise disturbance associated with the proposed seismic survey on a range of sensitive receptors including marine reptiles.</p> <p>The impact evaluation was supported by acoustic modelling of sound propagation at several representative locations within the acquisition area. Polarcus provided a demonstration that the control measures proposed ensure all impacts and risk are acceptable and as low as reasonably practicable (ALARP).</p> <p>Relevant controls proposed by Polarcus included:</p> <ul style="list-style-type: none"> • Minimum source size • Marine fauna observers to keep a look out for cetaceans, whale sharks as well as turtles. • Reporting requirements 	<p>NOPSEMA acknowledges that there is the potential for the activity, if not appropriately managed, to have unacceptable impacts to marine turtles within foraging BIAs within and adjacent to the Operational Area (in particular green, loggerhead, flatback and olive ridley turtles).</p> <p>In making a decision regarding this matter, NOPSEMA took into account the Petrelex 3D MSS Environment Plan, scientific literature, NOPSEMA's Decision Making Guidelines (GL1721), and the relevant Conservation Advice, Recovery Plans and other guidelines.</p> <p>NOPSEMA required Polarcus to consider what more could be done to reduce impacts and risks to turtles during the assessment. In response, Polarcus added a number of controls to prevent impacts and risks to marine turtles in foraging BIA's including applying the following:</p> <ul style="list-style-type: none"> • A 500 m shut-down zone from the operating source, as per the shut-down zone for whales in EPBC Act Policy Statement 2.1, will also be applied to turtles and whale sharks • Pre-start visual observations to include observations for marine turtles and whale sharks, in addition to whales. <p>NOPSEMA agreed with the conclusion presented in the EP that the survey was consistent with the Recovery Plan for Marine Turtles in Australia.</p> <p>NOPSEMA concluded, after taking into consideration all the environmental management requirements, that the activity would not cause unacceptable impacts to marine turtles.</p>

Consultation method

<p>2 <i>The appropriateness of the consultation in the course of preparing the EP.</i></p> <p>During the assessment consideration was given to determine whether consultation was carried out as specified by Division 2.2A</p>	<p>Polarcus undertook a systematic approach to identify relevant person and provide them with sufficient information and sufficient time in which to consider this information.</p> <p>A thorough consultation process was followed which involved initial stakeholder notification, follow-up (as required), public comment notification. The EP provides a stakeholder consultation log which includes a summary of each correspondence and an assessment of merit of the objection or claim.</p> <p>The consultation process includes a commitment by Polarcus to provide further notification (ongoing consultation) to relevant persons at least four weeks prior to the scheduled acquisition commencement date. There is also a commitment to provide interested stakeholders with daily update detailing the location lines planned for the upcoming 48 hours, on the water interaction/safety requirements or advice and any other on the water progress updates (e.g. schedule delays).</p>	<p>NOPSEMA acknowledges the importance of appropriate consultation to ensure that relevant persons have sufficient information and time and that any objection and claims are appropriately dealt with by the titleholder.</p> <p>In making a decision regarding this matter, NOPSEMA took into account the Petrelex 3D MSS Environment Plan (which included a summary report of all correspondence with relevant persons), the sensitive information report (which included the full text of the correspondence) the extent of the consultation effort undertaken by Polarcus and NOPSEMA’s Decision Making Guidelines (GL1721).</p> <p>During the assessment process NOPSEMA reviewed the consultation process undertaken by Polarcus and required them to provide further description and justification of how the consultation was appropriate. In response, Polarcus provided a revised consultation report that gave more detailed documentation of the assessment of merits of the objections and claims raised during consultation.</p> <p>In particular, NOPSEMA noted engagement with the Department of Defence resulted in the Petrelex activity been adjusted to avoid overlap with planned defence exercises. The consultation report also details the extensive, cooperative engagement and exchange of information between Polarcus and the NT DPIR fisheries. NT DPIR provided useful information and advice that allowed a science based assessment of the potential for impact to fish and fisheries.</p> <p>Taking into consideration the nature and scale of the activity, NOPSEMA is satisfied that the consultation has met the requirements of Division 2.2.A in that appropriate authorities and relevant persons have been engaged in consultation, with sufficient time and information provided, and that the response by Polarcus to objections and claims are appropriate.</p>
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Impacts on commercial fishers
3 There would be unacceptable impacts on commercial fisheries and commercial fish spawning

Concerns were raised by relevant persons that the impacts and risks to commercial fisheries and commercial fish spawning would be unacceptable.

Polarcus analysed the potential interference with fishing activity in the operational area and determined that spatial overlap with all of the relevant fisheries is well below 2%.

Polarcus also analysed, based on available science and fish stock information provided by relevant authorities including the NT DPIR Fisheries, the potential noise disturbance associated with the proposed seismic survey on fish spawning and recruitment for key indicator commercial fish species. For goldband snapper and red emperor the temporal and spatial overlap with the Kimberley and Northern Territory stock areas was calculated to be in the order 1% or less.

Polarcus provided acceptability tables that were based on risk level, legislative requirements, stakeholder objections, claims, concerns or advice. Notable for spawning impacts was advice provided by WAFIC, WA Department of Primary Industries and Regional Development (DPIRD), NT Department of Primary Industries and Resources (Fisheries) (DPIR) and Northern Prawn Fishing Industry (NPFI) who raised concerns regarding seismic acquisition during key spawning time for commercially targeted species. These concerns were addressed during the consultation.

A control to prevent cumulative impacts on fish stocks was included as a minimum separation distance of 40km between operating seismic vessels.

NOPSEMA acknowledges the potential for the activity, if not appropriately managed, to have unacceptable impacts to Commercial fisheries by displacing fishers and impacting on spawning.

In making a decision regarding this matter, NOPSEMA took into account the Petrelex 3D MSS Environment Plan, relevant scientific literature, views expressed by relevant persons and NOPSEMA's Decision Making Guidelines (GL1721).

NOPSEMA noted that Polarcus provided comprehensive information demonstrating that impacts and risks from underwater noise, and the physical presence of the seismic vessel and streamers were of an acceptable level. The rationale provided for this conclusion was found to be reasonable, based on sound logic and supported with a sufficient scientific basis.

NOPSEMA concluded, after taking into consideration all the evaluations and controls provided in the EP, that the activity would not cause unacceptable impacts to fishing and fish spawning.