

Acceptance (with Conditions) of the Scarborough 4D B1 Marine Seismic Survey Environment Plan

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1. On 31 July 2023, I, [REDACTED], [REDACTED] within the National Offshore Petroleum Safety and Environmental Management Authority (**NOPSEMA**), delegate of the Chief Executive Officer of NOPSEMA decided, pursuant to regulation 10 of the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* (Cth) (**Regulations**), to accept, subject to conditions, the Scarborough 4D B1 Marine Seismic Survey Environment Plan (Revision 7, June 2023) (**Environment Plan**). The Environment Plan was submitted by Woodside Energy Scarborough Pty Ltd (ACN 650 177 227) and Woodside Energy (Australia) Pty Ltd (ACN 006 923 879) (**titleholders**), to enable the titleholders to undertake a new three-dimensional marine seismic survey (**MSS**)/baseline 4D MSS in the Northern Carnarvon Basin on the Exmouth Plateau located in Commonwealth waters 188 km north-west of Northwest Cape, Western Australia (**activity**).
2. The reasons for my decision are set out below. All references to a regulation (**reg**) are to the Regulations unless otherwise stated.

Legislative Framework

3. The legislation relevant to my decision is set out in **Attachment A**.

Background

4. On 11 October 2021, the titleholders submitted an Environment Plan (Revision 0, October 2021) to NOPSEMA in accordance with reg 9(1).
5. On 18 October 2021, the Environment Plan (Revision 0, October 2021) was published by NOPSEMA on its website for public comment, in accordance with reg 9AB. The period for public comment closed on 17 November 2021, with no public comments being received during this period.
6. On 22 November 2021, following the completion of the 30-day public comment process, the titleholders resubmitted the Environment Plan (Revision 0, October 2021) to NOPSEMA in accordance with reg 9(1).
7. Between 16 December 2021 and 18 April 2023, NOPSEMA issued four not reasonably satisfied notices requiring the titleholders to modify and resubmit the Environment Plan, pursuant to reg 10. In addition, NOPSEMA made four requests for further information during this timeframe, pursuant to reg 9A. The not reasonably satisfied notices identified areas where NOPSEMA considered the Environment Plan did not meet the criteria in reg 10A. The requests for further information outlined areas where further information was required about matters required by the regulations before a decision could be made against the reg 10A criteria. In response to these requests, the titleholders resubmitted seven environment plans which incorporated additional information pursuant to reg 9A(3) and modifications pursuant to reg 10. The Environment Plan the subject of this decision was received on 2 June 2023, and is identified as Revision 7, June 2023.

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8. On 13 July 2023, NOPSEMA wrote to the titleholders providing an opportunity to review the draft conditions which may be imposed if I were to find that the criteria in reg 10A were not met. This afforded procedural fairness to the titleholders and to ensure the conditions were clear and could be implemented. On 26 July 2023, the titleholders responded with a number of comments on the draft conditions and NOPSEMA took these into consideration when finalising the conditions but did not change the scope and intent of the conditions.

Materials

9. The materials which I considered in making my decision are set out in **Attachment B**. Where relevant to my decision, I identify these materials in my reasons below.

Decision Overview

10. The issue before me was whether the Environment Plan should be accepted under reg 10.
11. Prior to considering whether I was reasonably satisfied that the Environment Plan met the criteria in reg 10A, I considered whether the Environment Plan complied with Division 2.3, which sets out the matters which must be included in the Environment Plan.
12. I am satisfied that the Environment Plan contained the matters in Division 2.3. My reasons are set out at [16]-[32] below.
13. I then considered whether I was reasonably satisfied that the Environment Plan meets each of the criteria in reg 10A.
14. If I was reasonably satisfied that the Environment Plan met the criteria in reg 10A, I must accept it. However, if I was not reasonably satisfied that the Environment Plan met the criteria in reg 10A, I must:
 - a. give the titleholders the opportunity to resubmit the Environment Plan; or
 - b. refuse to accept the Environment Plan; or
 - c. accept the Environment Plan in part for a particular stage of the activity; or
 - d. accept the Environment Plan subject to limitations or conditions applying to operations for the activity.
15. I considered that the criteria in reg 10A were not all satisfied. However, I exercised my discretion to accept the Environment Plan, subject to conditions. My reasons are set out at [33]-[132] below.

Findings

Does the Environment Plan comply with Division 2.3?

16. Reg 12 requires that an Environment Plan must include the matters set out in regs 13-16. As I was satisfied that the Environment Plan met regs 13-16 (for the reasons set out individually below), I was satisfied that reg 12 was met, and that the Environment Plan complied with Division 2.3.

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Regulation 13 – Environmental Assessment

Regulation 13(1) - Description of the activity

17. Section 3 of the Environment Plan is titled 'Description of Activity' and included the following information:
- a. the description of the activity as a new three-dimensional (3D) marine seismic survey (MSS)/baseline 4D MSS that will be acquired in the Northern Carnarvon Basin on the Exmouth Plateau located in Commonwealth waters 188 km north-west of Northwest Cape (section 3.3), Western Australia in waters 800 to 1150 metres of depth (section 3.3.2);
 - b. the location of the activity is clearly set out in the Environment Plan by figures and tables that include the coordinates for the operational area (9,200 km²) and active source area (5,650km²) of the MSS (section 3.3.1 and 3.3.2);
 - c. the activity will be undertaken using up to three project vessels powered by marine diesel oil (MDO); a seismic vessel (~110 m long), a support vessel (~65 m long) to be used to re-supply and other logistical and operational activities, and a chase vessel (~22 m long) to manage interactions with shipping or fishing activities, with representative vessel specifications for each type of vessel provided in the Environment Plan (section 3.5.5);
 - d. information considered relevant for the consideration of environmental impacts and risks (such as the operational details of the activity and proposed timetable) (sections 3.4 and 3.5), including:
 - i. the timing and duration of the activity, which is 24-hours/day over an 80-day period between the date the Environment Plan is accepted and 31 December 2023 (inclusive). Further, the number of days for acquisition at full power, is a maximum of 70 days and 10 days of contingency have been allowed for vessel or equipment downtime and adverse weather conditions;
 - ii. the survey design, which includes sail lines with a maximum length of up to 105 km separated by approximately 450 m and either orientated at 24 deg/205 deg or 40.5 deg/220.5 deg (section 3.6);
 - iii. the source configuration, which is triple or dual source, while the frequency range of source arrays is 2 to 200 Hz;
 - iv. the approximate airgun array capacity, which is a maximum of 3150 cubic inches (cui) and the operating pressure of the airgun array, which is a maximum of 2,000 pounds per square inch (psi);
 - v. the tow depth of airgun array, which is a 6 to 8 m +/- 1 below the sea surface and the shot point interval of airgun arrays, which is 12.5 m (triple source) (every 5 to 6 seconds) or 18.75 m (dual source); and
 - vi. the hydrophone type, which is a maximum of 14 solid hydrophone streamers with an approximate length of 8,000 m, towed approximately 500 m behind the vessel, positioned an approximate distance of 50 to 100 m apart and fitted with active steering and streamer recovery devices. Further, the tow depth of hydrophone streamers, which is

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approximately 15 to 25 m below the sea surface and the towing speed, which is 4 to 5 knots (7.4 km/hour).

18. I was satisfied that this information provided a comprehensive description of the activity, with a large amount of detail in relation to each of the matters in reg 13(1).

Regulation 13(2) and (3) - Description of the environment

19. Reg 13(2) and (3) requires the Environment Plan to describe the existing environment that may be affected by the activity and include details of the particular relevant values and sensitivities (if any) of that environment. The Environment Plan addressed each of these matters in Section 4, Appendix C and Appendix H. In particular, the Environment Plan described and included the following information:
- a. that the environment that may be affected by the activity is defined by an operational and acquisition area in which the vessel and equipment used by the activity will be physically present (**Operational Area**), and an environment that may be affected (**EMBA**) is defined as the largest spatial extent where unplanned hydrocarbon release could have an environmental consequence, and which also encompasses the area over which acoustic emissions exceed behavioural impact thresholds (section 4.1);
 - b. that the regional setting of the area that may be affected by the activity, including under emergency conditions, is the North-west marine region (**NWMR**) as defined under the Integrated Marine and Coastal Regionalisation of Australia bioregions. The operational area lies within the Northwest Province and the EMBA partially overlaps with additional provincial bioregions of the NWMR including the Northwest Transition, Central Western Transition, Northwest Shelf Province, and Central Western Shelf Transition. The southern tip of the EMBA enters the South-west Marine Region, and Central Western Province provincial bioregion (section 4.2);
 - c. the Department of Climate Change, Energy, the Environment and Water EPBC Protected Matters Search Tool (**PMST**), which evidenced that that the activity or any part of the activity will not be undertaken in any part of a declared World Heritage Property or National Heritage Place, nor a declared Ramsar wetland, within the meaning of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**);
 - d. the PMST, identifying 27 listed threatened species and 43 listed migratory species (or their habitat) that are known to occur, may occur or are likely to occur in the area that may be affected by the activity, including under emergency conditions. Two conservation-dependent species are also identified with a potential to occur within the Operational Area and EMBA, including the scalloped hammerhead shark and the southern bluefin tuna (section 4.6);
 - e. the biologically important areas (**BIAs**) and habitat critical to survival (**HCTS**) for species in the area that may be affected by the activity within the broader EMBA, including under emergency conditions. They include a whale shark foraging BIA, pygmy blue whale migration and possible foraging BIAs, a humpback whale migration BIA, seabird and migratory shore bird breeding and foraging BIAs, internesting buffer BIAs for four species of marine turtles (flatback, green, hawksbill and loggerhead) and HCTS for three marine turtle species (green, flatback and hawksbill). The Operational Area and EMBA also overlap with the known distribution range for pygmy blue whales, noting that the closest boundary of the pygmy blue whale migration BIA is located 14 km south-east of the Operational Area (section 4.6);

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- f. the values and sensitivities of the Key Ecological Features (**KEFs**) in the area that may be affected by the activity, including under emergency conditions. KEFs within the EMBA include the Canyons linking the Cuvier Abyssal Plain and the Cape Range Peninsula KEF, Continental slope demersal fish communities KEF and the Exmouth Plateau KEF. The operational area for the activity is located entirely on the Exmouth Plateau KEF, which is a distinctive geomorphic feature containing topographic features including terraces, canyons, and pinnacles, noting that the topography of the Exmouth Plateau KEF is thought to modify deep water flow and contribute to upwelling of deep nutrient-rich waters (section 4.8);
 - g. in section 4.9, the Australian Marine Parks (**AMPs**) in the area that may be affected by the activity, including under emergency conditions. Within the broader EMBA there was overlap with the Gascoyne AMP (Multiple Use Zone (IUCN VI), National Park Zone (IUCN II) and Habitat Protection Zone (IUCN IV)) and Montebello AMP (Multiple Use Zone (IUCN VI)) (section 4.9);
 - h. the Commonwealth and Western Australian managed fisheries in the area that may be affected by the activity, including under emergency conditions, including the Southern Bluefin Tuna Fishery, Western Skipjack Tuna Fishery, Western Tuna and Billfish Fishery, Western Deepwater Trawl Fishery, North West Slope Trawl Fishery, Mackerel Managed Fishery, Pilbara Line Managed Fishery, Pilbara Trap Managed Fishery, Pilbara Fish Trawl (Interim) Managed Fishery, South West Coast Salmon Managed Fishery, Marine Aquarium Managed Fishery, West Coast Deep Sea Crustacean Managed Fishery, Pearl Oyster Managed Fishery, Pilbara Crab Managed Fishery and West Coast Rock Lobster Managed Fishery (section 4.10); and
 - i. in section 4.10, the social, economic, and cultural features of the environment that may be affected by the activity, including First Nations cultural heritage, maritime archaeological heritage, traditional fishing activities, tourism and recreation activities, oil and gas activities, commercial shipping activities and defence activities have been identified and described.
20. In light of the matters identified immediately above, I was satisfied that the Environment Plan met the requirements in regs 13(2) and (3).

Regulation 13(4) - Requirements

21. I noted that the Environment Plan provided a detailed table at Appendix B identifying various Commonwealth acts and regulations that apply to the activity. Various parts of the Environment Plan, in particular sections 1.9 (Requirements), 4 (Environment), 6 (Impact and Risk Assessment), 6.8 (EPBC Act Assessment) and Appendix H (Master Description of Existing Environment), provide descriptions of the legislative requirements that apply to the activity and how they are relevant to the environment management of the activity. The Environment Plan demonstrates that relevant legislative requirements will be met by directly addressing them in the demonstration of acceptable levels of impacts and risks (section 6). I was therefore satisfied that reg 13(4) was met.

Regulation 13(5) and (6) - Evaluation of environmental impacts and risks

22. Section 6 of the Environment Plan detailed the environmental impacts and risks, including those arising from potential emergency conditions whether resulting from accident or any other reason, for the activity which is provided in section 6 of the EP. The details of the environmental impacts and risks associated with the activity were included in Table 6-1 of the Environment Plan, and included:
- a. planned activities such as physical presence to marine users, routine acoustic emissions from seismic survey equipment and from project vessels, routine atmospheric and greenhouse gas

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emissions, routine discharge of bilge water, grey water, deck drainage water, sewage, and putrescible wastes and routine light emissions from external lighting on project vessels; and

- b. unplanned aspects such as accidental hydrocarbon release due to vessel collision or from bunkering, unplanned discharge of deck spills or solid hazardous and non-hazardous wastes including dropped objects, vessel collision with or entanglement with marine fauna, loss of equipment and introduction and establishment of invasive marine species.
23. The Environment Plan contained an evaluation of all the impacts and risks, whether arising directly or indirectly, and including those arising from potential emergency conditions whether resulting from accident or any other reason, appropriate to the nature and scale of each impact or risk. The impact and risk analysis process is described in Section 2.6 and includes assigning a consequence rating (defined in Table 2-3) for all impacts and risks and a likelihood rating (defined in Table 2-4) for unplanned events, which together were used to categorise planned and unplanned activities into a rating for the acceptability of the impact or risk (defined in Table 2-6). A description was provided in Table 2-5 about how the titleholders demonstrates that the impacts and risks will be managed to ALARP. The outcome of the process for the impacts and risks identified in [22] is summarised in Table 6-1, with the impacts and risks generated by the activity that are identified in [22] being considered to be acceptable or broadly acceptable when taking into account the application of control measures and considering the extent, severity and duration of any planned or unplanned impacts to environmental receptors. The full evaluation of each individual impact and risk is provided in Section 6 of the EP.
24. Examples of details of the control measures that will be used to reduce the impacts and risks of the activity to as low as reasonably practicable and an acceptable level that were included in the Environment Plan include control measures used to raise awareness to other marine users about the activity to manage on water interactions; people, procedures and equipment that will be used to mitigate the impacts of noise on marine fauna; equipment to be used, marine standards to be applied and emergency procedures in place to manage impacts from any vessel discharges, procedures to be used, standards to be applied and equipment to be used to avoid vessel strike with marine fauna.
25. In light of the matters above, I was satisfied that the requirements of reg 13(5) and (6) were met.

Regulation 13(7) - Environmental performance outcomes and standards

26. I considered the environmental performance outcomes and standards (**EPOs**), the environmental performance standards (**EPS**) and measurement criteria provided in section 6 of the Environment Plan and was satisfied that the:
- a. EPOs have been set which define performance for the management of the environment aspects of the activity. For example, EPO2 Prevent adverse interactions between vessels and other marine users during the Petroleum Activities Program, EPO9 No impact to water quality greater than consequence level of F (defined as no lasting effect < 1 month) or negligible impact, localised impact not significant to environmental receptors, EPO10 No release of hydrocarbons to the marine environment due to a vessel collision during the Petroleum Activities Program, EPO14 No vessel strikes with marine fauna (whales, whale sharks and turtles) during the Petroleum Activities Program, EPO16 No introduction and establishment of invasive marine species into the Operational Area as a result of the Petroleum Activities Program;
 - b. EPSs, which are statements of performance for the control measures, have been set for all control measures identified as being necessary to reduce the environmental impacts and risks of the activity to as low as reasonably practicable and acceptable levels. Examples of EPSs include limitations on the extent of the activity (e.g. no operation of the seismic source within

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25 km of the pygmy blue whale migration BIA), mandatory use of vessels/equipment/people at all times during the survey (e.g. two dedicated MFOs per observing vessel (survey vessel and spotter vessel), use of turtle guards on streamer tail-buoys), compliance with regulations (e.g. EPBC Regulations 2000 – Part 8 Division 8.1, Australian Ballast Water Management Requirements and Marine Orders); and

- c. measurement criteria (e.g. records of equipment being present, evidence of compliance with regulations, standards and procedures, evidence of notifications being sent to marine users) are provided that will allow the titleholders to determine whether each EPO and EPS is being met for the duration of the activity.

27. Based on the findings above, I was reasonably satisfied that the requirements of reg 13(7) are met.

Regulation 14 - Implementation strategy for the EP

28. In relation to the requirements in reg 14, Section 7 of the Environment Plan details that:

- a. the implementation strategy includes a commitment in Section 7.9.4 to report to the NOPSEMA in relation to the titleholders' environmental performance for the activity monthly for recordable incidents and then within three months of completing the activity (reg 14(2));
- b. the implementation strategy contains the key elements of an environmental management system (EMS) for the activity, which is described in Section 2.11. This includes specific measures to ensure that the environmental impacts and risks of the activity continue to be identified and reduced to a level that is as low as reasonably practicable and control measures described in the Environment Plan are effective in reducing the environmental impacts and risks of the activity to as low as reasonably practicable and an acceptable level, and EPOs and EPSs set out in the Environment Plan are being met (reg 14(3)). Key examples of these measures include ongoing monitoring of compliance with environmental performance outcomes and environmental performance standards and environmental performance auditing. The EP review and management of change processes are described in Sections 7.5.4 and 7.6;
- c. the implementation strategy establishes a clear chain of command, setting out the roles and responsibilities of personnel in relation to the implementation, management and review of the Environment Plan, including during emergencies or potential emergencies (reg 14(4)). For example, Section 7.3 outlines the organisation structure and the roles and responsibilities of key project team members including responsibilities for environmental performance monitoring and reporting (Table 7-1). The roles and responsibilities of key personnel involved in spill preparation and response are outlined in Appendix D;
- d. the implementation strategy includes measures to ensure that each employee or contractor working on, or in connection with, the activity is aware of their responsibilities in relation to the Environment Plan, including during emergencies or potential emergencies, and has the appropriate competencies and training (reg 14(5)). For example, the titleholders has made commitments to inductions and pre-activity meetings to raise awareness of Environment Plan responsibilities in Section 7.4, which also outlines the measures that are in place for ensuring employee and contractor competency, including the necessary awareness, training and induction requirements to fulfil their duties;
- e. the implementation strategy provides for sufficient monitoring, recording, audit, management of nonconformance and review of the titleholders' environmental performance and the implementation strategy to ensure that the EPOs and EPSs in the Environment Plan are being

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met (Sections 7.5 to 7.9) (reg 14(6)). For example, internal and external reporting obligations are identified and the titleholders commits to conducting a program of periodic monitoring, auditing and marine assurance for the duration of the activity and outcomes of these processes may lead to management review or change and revision;

- f. the implementation strategy provides for sufficient monitoring of, and maintaining a quantitative record of, emissions and discharges (whether occurring during normal operations or otherwise), such that the record can be used to assess whether the EPOs and EPSs in the Environment Plan are being met (reg 14(7)), this record is stated to be in the daily seismic reports (Section 7.8);
- g. the implementation strategy contains an oil pollution emergency plan (OPEP) that includes the following components: Woodside Oil Pollution Emergency Arrangements (Australia), which is a framework for response arrangements from shipping sourced spills in the Commonwealth waters consistent with the National Plan for Maritime Environmental Emergencies and for marine oil pollution incidents in WA State waters consistent with the WA State Hazard Plan for Maritime Environmental Emergencies; an Oil Spill Preparedness and Response Mitigation Assessment (Appendix D) and an Oil Pollution First Strike Plan (Appendix I) and provides for the updating of the plan (Section 7.7) (reg 14(8));
- h. the OPEP (Appendix D) includes adequate arrangements for responding to and monitoring oil pollution and includes:
 - i. the control measures necessary for timely response to an emergency that results or may result in oil pollution;
 - ii. the arrangements and capability that will be in place for the duration of the activity to ensure timely implementation of the control measures including arrangements of ongoing maintenance of response capability;
 - iii. the arrangements and capability that will be in place for monitoring the effectiveness of the control measures and ensuring that the EPSs for the control measures are met; and
 - iv. the arrangements and capability in place for monitoring oil pollution to inform response activities (reg 14(8AA));
- i. the implementation strategy includes arrangements for testing the response arrangements in the OPEP that are appropriate to the response arrangements and to the nature and scale of the risk of oil pollution for the activity (Section 7.11.1 and 2 and Appendix D) (reg 14(8A));
- j. the arrangements for testing the response arrangements includes a statement of the objectives of testing, a proposed schedule of tests, mechanisms to examine the effectiveness of response arrangements against the objectives of testing, and mechanisms to address recommendations arising from tests. These tests are the titleholders' common arrangements for spill response across its Australian operating assets and activities (Table 7-7 and Figure 7-1) (reg 14(8B));
- k. the proposed schedule of tests provides for:
 - i. testing the response arrangements when they are introduced;
 - ii. testing the response arrangements when they are significantly amended;

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- iii. testing the response arrangements not later than 12 months after the most recent test;
 - iv. if a new location for the activity is added to the Environment Plan after the response arrangements have been tested, and before the next test is conducted – testing the response arrangements in relation to the new location as soon as practicable after it is added to the plan; and
- l. the implementation strategy provides for monitoring of impacts to the environment from oil pollution and response activities that is appropriate to the nature and scale of the risk of the environmental impacts and risks for the activity and is sufficient to inform any remediation activities (Appendix D) (reg 14(8D));
- m. the arrangements established in Appendix D and Appendix I are consistent with the national system for oil pollution preparedness and response, as outlined in Woodside Oil Pollution Emergency Arrangements (Australia) (reg 14(8E));
- n. the implementation strategy provides for appropriate ongoing consultation during the implementation of the petroleum activity with relevant authorities of the Commonwealth, a State or Territory and other relevant interested persons or organisations (reg 14(9)). In particular, Section 5.6 and Section 7.9.2.1 outline the arrangements for ongoing stakeholder consultation. The EP also provides for ongoing consultation with relevant cultural authorities in relation to the identification, assessment, and consideration of cultural values relevant to the petroleum activity (Table 7-2); and
- o. the implementation strategy complies with the Act, the regulations and any other environmental legislation applying to the activity (as outlined in Section 1.9 and Appendix B) (reg 14(10)).
29. Based on the findings above, I was reasonably satisfied that the requirements of reg 14 are met.

Regulation 15 - Details of titleholders and liaison person

30. Section 1.7 of the Environment Plan, headed 'Details of Titleholders and Public Affairs Contact' relevantly:
- a. includes a heading 'Titleholder' identifying Woodside Energy Scarborough Pty Ltd, and providing the relevant address and contact details, in addition to the ACN;
 - b. under the heading 'Nominated Liaison Person' includes the relevant address and contact details; and
 - c. confirms that any changes to the details provided under Section 1.7 will be communicated in writing within 2 weeks or as soon as reasonably practicable.
31. In light of the inclusion of the above matters in the Environment Plan, I am satisfied reg 15 was met.

Regulation 16 - Other information in the EP

32. I considered that the Environment Plan met reg 16 as it contained:
- a. a statement of the titleholders' corporate environmental policy in section 1.8 and Appendix A;

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- b. the information required under reg 16(b) relating to all consultations under reg 11A of any relevant person by the titleholders in section 5, appendix F (which contains over 100 consultation communications) and the sensitive information part of the Environment Plan; and
- c. details of any reportable incidents in relation to the proposed activity in section 7.9.7.

Should the Environment Plan be accepted?

33. Reg 10 of the Regulations requires that when making my decision as to whether the Environment Plan should be accepted, refused or accepted in part or with conditions I must consider:
 - a. the further information that the titleholders had provided under reg 9A(3). The information which I considered was contained in the various resubmitted environment plans, which resulted in the Environment Plan; and
 - b. any public comments received under reg 11B(2) of the Regulations. No comments were received.
34. I understood that, pursuant to reg 11B(6)(b), I was unable to take into account any other public comments that had been received in relation to the activity. I have not done so.
35. Against this background (and having considered the materials at Attachment B), I made the following findings against each criteria.

Regulation 10A(a) - The Environment Plan is appropriate for the nature and scale of the activity

36. I noted that the Environment Plan includes a description of the scope and bounds of the activity. In particular, the Environment Plan provides details of the proposed location, spatial extent, timeframe, and duration of the activity and clearly defines the limits of the survey acquisition parameters for the activity (see above at [17]).
37. I considered that the Environment Plan contained a thorough description of the activity components with the greatest potential to generate impacts and risks to the environment throughout the activity duration. In particular, the Environment Plan thoroughly applies a logical process to identify and describe the activity components that may present sources of impact and/or risk to the environment and provides more detail on activity components with the greatest potential to generate impacts and risks to the environment, particularly the equipment that will be used to generate and measure acoustic signals during seismic acquisition. In this regard, the Environment Plan comprehensively describes the numbers and types of equipment and property that will be brought into the title areas and used to undertake the activity.
38. I also considered that the Environment Plan contained a thorough description of the environment that may be affected by the activity, including:
 - a. matters protected under Part 3 of the EPBC Act. In particular, the Environment Plan applies a logical process to identify and describe the matters protected under Part 3 of the EPBC Act that overlap with the areas that may be affected by impacts and risks from the planned and/or unplanned aspects of the activity. The Environment Plan has utilised relevant information to adequately inform and support the descriptions, such as information available on DCCEEW's website including plans of management, threat abatement plans, threatened species recovery plans and marine bioregional plans;

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- b. key physical, biological, social, economic, and cultural features, values and sensitivities of the environment of the Commonwealth marine area that overlap with the areas that may be affected by impacts and risks from the planned and/or unplanned aspects of the activity. The Environment Plan has utilised relevant references and information sources, such as contemporary peer reviewed scientific literature and other authoritative sources, to inform and support the descriptions.
- c. First Nations cultural features and heritage values of the EMBA. In particular:
 - i. the description in the Environment Plan includes consideration of both tangible and intangible aspects and is supported by multiple sources of relevant and suitable information. For example, cultural values related information published in State and Commonwealth Marine Park Management Plans, information on the cultural features of marine ecosystems including the broader concept of “sea country”, and information on Indigenous archaeology in the offshore marine environment. The Environment Plan also provided opportunities through relevant persons consultation with traditional custodians to inform the description of the potential for First Nations cultural heritage values within the EMBA.
 - ii. during the assessment process, an expert report was obtained from Extent Heritage to assist NOPSEMA to determine whether the Environment Plan included a thorough description of First Nations cultural features and heritage values of the environment. Extent Heritage concluded that the location of the activity will occur in waters that are well beyond the inundated coastal plain First Nations people occupied during the Pleistocene and is likely to be beyond the view lines and extent that First Nations watercraft were likely to have travelled. According to the report, this indicates that there is no potential for any in-situ First Nations submerged terrestrial archaeological deposits within the Operational Area. The conclusions in the report are consistent with information presented in the Environment Plan that does not identify any known First Nations archaeological sites in the activity's Operational Area or EMBA which are located in Commonwealth waters;
 - iii. I also considered advice in the Extent Heritage report that the cultural heritage features and values may be considered as including physical, environmental and topographic features that have social, cultural, historical or spiritual values to First Nations people. This could include traditional resources of the sea and marine species that may have totemic or other values to First Nations people, cultural connections of First Nations people and marine life potentially impacted by the seismic survey illustrated in the rock art at Murujuga, which includes representations of marine creatures including marine turtles and whales.
 - iv. In relation to potential cultural connections to whale species, I considered information on whale occurrence and areas of biological importance documented in the EP including that the humpback whale migration BIA is 138 km south-east of the Operational Area and that the potential presence of other migratory cetacean species including the fin, sei and killer whale within or adjacent to the Operational Area during the acquisition of the survey is likely to be limited to individuals or small groups.
 - v. In relation to potential cultural connections to turtle species, I considered that there are no BIAs or Habitat Critical to the survival of marine turtles within the Operational Area.

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The nearest BIAs and HCTS for flatback turtles, located approximately 135 km southeast and 147 km south-east of the Operational Area, respectively.

- vi. the description in the Environment Plan is supplemented with results from an ethnographic heritage assessment undertaken for the Scarborough project development footprint which identified no ethnographic sites or values within the EMBA. I recognised that there is some uncertainty about the suitability of this ethnographic survey to provide a comprehensive understanding of ethnographic sites and values in the EMBA, including those intangible values associated with stories, dreaming, mythology, song or other cultural practice. This uncertainty exists given that the ethnographic study was undertaken by a limited group of traditional custodian representatives (i.e. Murujuga Aboriginal Corporation Circle of Elders) and for another purpose (i.e. the EP describes that the survey purpose as providing understanding of the cultural values within the coastal, nearshore and offshore proposed Scarborough trunkline and associated works areas). However, I note that the conditions imposed in [132] will afford further opportunity for any cultural features or heritage values (including intangible values) that may be affected by the activity to be identified, described and managed to ALARP and acceptable levels;
 - d. the Environment Plan includes sufficient information on legislative requirements that are relevant to the activity, and a demonstration of how they will be met. Notably, the Environment Plan includes an outline of the legislative requirements that are relevant to the activity and explains how they will be complied with throughout the life of the Environment Plan as part of the process that the Environment Plan applies for evaluating whether environmental impacts and risks of the activity will be of an acceptable level.
39. I also noted that the impact and risk assessment presented in the Environment Plan is commensurate to the magnitude of impacts and risks, and the level of analysis and evaluation is appropriate for the nature and scale of the activity and the severity of individual impacts and risks. For example:
- a. the Environment Plan has identified and evaluated all environmental impacts and risks that may arise from the activity, whether arising directly or indirectly, and including those arising from potential emergency conditions whether resulting from an accident or any other reason;
 - b. evaluations of impacts and risks provided in the Environment Plan are specific for the nature and location of the activity and the environment receptors that may be affected; and
 - c. the Environment Plan applies more detail and rigour to the impact and risk assessments where there is a higher degree of scientific uncertainty in predictions of impacts and risks and/or severity of potential consequence of impacts and risks. The Environment Plan provides details of the additional studies that were undertaken by the titleholders to adequately support and inform those impact and risk evaluations, including underwater sound modelling and oil spill trajectory modelling.
40. I considered that there is a clear demonstration in the Environment Plan that the evaluation of impacts and risks informed the selection of suitable control measures appropriate for the nature and scale of the activity to either reduce the consequence/severity or likelihood of environmental impacts and risks.
41. In light of the above, I am reasonably satisfied that the Environment Plan is appropriate for the nature and scale of the activity.

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Regulation 10A(b) - The Environment Plan demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable

42. Having regard to the Environment Plan, and subject to what I say below (at [46]) about threatened and migratory whales:
- a. I noted that the Environment Plan applied a clear, systematic, defensible, and reproducible process for demonstrating how environmental impacts and risks will be reduced to as low as reasonably practicable. In particular, the process involves analysing the effectiveness of a range of control measures that will either reduce the consequence/severity or likelihood of impacts and risks and setting out reasoned conclusions for whether a control measure is adopted based on environmental benefit versus cost of implementing that control measure;
 - b. I considered that all reasonable control measures have been considered and evaluated by the titleholders, including control measures reflecting good industry practice. For higher order impacts and risks, I accepted that the exploration of alternative, additional, or improved control measures by the titleholders had been evidenced;
 - c. I found that the evaluation of impacts and risks informed the selection of suitable control measures and that Environment Plan included sufficient detail of the control measures, particularly when read in conjunction with EPSs, to understand how control measures are intended to perform and to demonstrate that they will be effective in reducing impacts and/or risks to as low as possible for the duration of the Environment Plan; and
 - d. I am satisfied that the Environment Plan provides well-reasoned and supported arguments as to how the adopted control measures will reduce the potential impacts and/or risks to the point that any additional or alternative control measures either are not feasible, fail to lower impacts and/or risks any further or are grossly disproportionate in cost/sacrifice compared to the environmental benefit gained based on the residual consequence of the impact or risk.
43. However, I had some concerns that the Environment Plan did not demonstrate that the environmental impacts and risks of the activity to threatened and migratory whales will be reduced to as low as reasonably practicable. In this regard, I accepted that the evaluation of adoption of control measures relevant to threatened and migratory whales is based on environmental benefit and is systematic, defensible, and reproducible (section 6.6.2).
44. The Environment Plan, I am satisfied, adequately identifies and evaluates the potential impacts and risks from the activity to pygmy blue whales, humpback whales and deep diving species such as sperm and beaked whales, by being informed by the likelihood of species presence, distribution and behaviour within the area that may be affected by underwater noise emissions and supported with peer-reviewed literature and underwater noise propagation modelling. In particular, I noted that;
- a. the evaluation of impacts and risks to threatened and migratory whales were informed by applying suitable control measures including those set out within EPBC Act *Policy Statement 2.1 - Interaction between offshore seismic exploration and whales (Policy Statement 2.1)*, the control measures applied are proportionate to the fact that whales are not expected to be encountered in high numbers noting the Operational Area and EMBA is 16 km away from any BIA;
 - b. the predicted movement patterns and speed of whales in the migration BIA (as applied in the acoustic modelling) were used to support an assessment that auditory injury from the survey is unlikely due to lower noise exposure durations and an associated reduction in the TTS effect

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range meaning that the effect range was outside of the known pygmy blue whale migration corridor (Koessler et al. 2021);

- c. the Environment Plan also considered research on blue whale distribution patterns published in peer-reviewed literature during the period of the assessment (Thums et al. 2022) that indicated increased possibility of blue whale presence in and around the Operational Area than previously predicted by the NCVA and Conservation Management Plan for the Blue Whale. In light of this information, an additional control measure (being the inclusion of an additional whale detection platform in the form of a spotter vessel resourced with two trained and experienced marine fauna observers (**MFOs**) travelling 5 km ahead of the seismic survey vessel) was adopted so that whale detection is enhanced during the survey to a distance beyond which behavioural disturbance thresholds are reached, and shutdowns can be implemented to protect blue whales; and
 - d. the Environment Plan includes a commitment (C4.3 and PS4.3.1) that passive acoustic monitoring (**PAM**) observations will be undertaken on a 24-hour basis by two trained and experienced PAM operators and the PAM will be used to trigger shutdowns for any sperm and beaked whales detected in the 2 km shutdown zone during daylight and night/low visibility periods as well as being used to validate MFO observations and distances.
45. I agreed that the Environment Plan considered, evaluated, and detailed all reasonable control measures that could reduce impacts to threatened and migratory whales to as low as reasonably practicable. I considered that the Environment Plan provided supported reasons why the adopted controls for threatened and migratory whales reduce the potential impacts to the point that any additional or alternative control measures are either not feasible, or their cost would be grossly disproportionate to the benefit. Control measures adopted include:
- a. additional control measures for those species for which there is a higher potential for impacts, such as pygmy blue, sperm, and beaked whales;
 - b. Policy Statement 2.1 Part A measures will be implemented for all whale species including humpback whales, as well as some Part B measures in accordance with an increased likelihood of encounter with whales considering that the survey occurs in the distribution range of pygmy blue whales;
 - c. use of experienced MFOs and PAM operators on the vessel to detect whales and initiate shutdowns, including the use of PAM on a 24-hour basis to detect odontocete whales and a shutdown requirement applies if any sperm or beaked whale is detected within 2 km as is required by Policy Statement 2.1;
 - d. an increased observation zone that extending across the observable distance and immediate shut down to apply to any pygmy blue whales and other large unidentified whales sighted as a precautionary measure;
 - e. use of an additional spotter vessel to travel 5 km ahead of the seismic vessel at all times of the year to observe for whales and initiate shutdowns within the limits of visibility for any possible blue whale effectively reducing the potential for behavioural disturbance of blue whales to as low as reasonably practicable; and
 - f. adaptive mitigation measures to ensure that impacts and risks would continue to be managed to as low as reasonably practicable. Specifically, if there are three or more shutdowns over a 24-hour period for pygmy blue whales then seismic operations will cease during low visibility or at

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night-time and cannot resume at night-time until there has been a cumulative 24-hour period during which there has been less than three sightings/shutdowns.

46. I noted that analysis of impacts to threatened and migratory whales has been incorporated into the EP in Table 5.4 and section 6.6.2 and includes consideration of objections and claims raised in relation to the management of impacts to whales to reduce these to as low as reasonably practicable. Despite the above, I noted that there was some inconsistency in the way the Environment Plan describes the use of a spotter vessel with two additional trained and experienced MFOs. In some parts of the Environment Plan, this measure will only be applied during the peak northbound migration months for blue whales (May and June) and in other parts the measure is described as being applied for the full duration of the seismic survey.
47. Noting this inconsistency, NOPSEMA wrote to the titleholders proposing that a condition be imposed requiring that 2 additional trained and experienced MFOs be present for the full duration of the seismic survey. The titleholders responded and did not raise any comments or concerns about this proposed condition.
48. Noting the inconsistency in the Environment Plan, I am not reasonably satisfied that the Environment Plan met reg 10A(b) because I believed that the inconsistency meant that the Environment Plan was unable to demonstrate that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable. However, if the spotter vessel with 2 MFOs was, in fact, present for the full duration of the seismic survey I considered that the Environment Plan could be accepted. Therefore, I considered it would be appropriate to impose a condition in relation to such (see [133] below).

Regulation 10A(c) - The Environment Plan demonstrates that the environmental impacts and risks of the activity will be of an acceptable level

49. Reg 10A(c) required that I be reasonably satisfied that the environmental impacts and risks of the activity will be of an acceptable level.
50. I found that that the Environment Plan applies a clear, systematic, defensible, and reproducible process for demonstrating how environmental impacts and risks will be of an acceptable level. The process involves evaluating impacts and risks in the context of how they comply or align with relevant internal and external policy settings, stakeholder feedback received by the titleholders during relevant persons consultation and relevant legislative requirements. This includes but is not limited to applicable plans of management, recovery plans, conservation advice and other guidance for matters protected under the EPBC Act, and the principles of ecologically sustainable development as defined under the EPBC Act.
51. I considered that the Environment Plan:
 - a. and the process that it applies for demonstrating that impacts and risks will be of an acceptable level is commensurate with the nature and scale of the activity and the severity of its impacts and risks. For example, the Environment Plan demonstrates that the process has driven the titleholders to apply more effort and rigour to evaluations where there is a higher degree of scientific uncertainty in predictions of impacts and risks and/or severity of potential consequence of impacts and risks;
 - b. includes appropriate and accurate content to demonstrate that the proposed activity is not inconsistent with a recovery plan or a threat abatement plan for a listed threatened species or ecological community;

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- c. areas of uncertainty in predictions of impact and risk are identified, acknowledged, and addressed. For example, the process that the Environment Plan applies for demonstrating how environmental impacts and risks will be of an acceptable level considers the uncertainty in the level of harm associated with individual impacts and risks and adopts a precautionary approach (e.g. conservative 'worst-case' approach) for those impacts and risks involving greater uncertainty;
 - d. the Environment Plan provides reasoned conclusions that impacts and risks will be acceptable or managed to acceptable levels with the implementation of suitable control measures to either reduce the consequence/severity or likelihood of environmental impacts and risks (see [24] above for examples). In particular, the Environment Plan has regard for relevant scientific papers, recovery plans for listed threatened species and good practice guidance for the management of impacts and risks when making the case that impacts and risks will be managed to acceptable levels; and
 - e. the Environment Plan evaluates environmental impacts and risks associated with the activity, including but not limited to atmospheric emissions (including greenhouse gases) and light emissions generated by the activity, and the potential for the introduction of invasive marine species (IMS). With the implementation of monitoring and adopted control measures that consider relevant guidelines/requirements, such as Marine Order 97 – Marine Pollution Prevention – Air Pollution, the National Light Pollution Guidelines for Wildlife, and the Australian Ballast Water Management Requirements, I am reasonably satisfied that the environmental impacts and risks of the activity will be managed to an acceptable level.
52. I am reasonably satisfied that each of the above as addressed in the Environment Plan demonstrated that the environmental impacts and risks of the activity will be of an acceptable level.
53. I found above (at [45]) that the Environment Plan considered, evaluated, and detailed all reasonable control measures that could reduce impacts to threatened and migratory whales to as low as reasonably practicable. I noted that the Environment Plan defines acceptable levels of impact for threatened and migratory whale species in Section 6.6.2 of the EP taking into consideration the titleholders' acceptability criteria that includes the Principles of ESD, the titleholders' corporate environmental policies, consultation feedback and legislative requirements under the EPBC Act. This was incorporated into the EPO that requires the titleholders to "Undertake seismic acquisition in a manner that prevents injury to whales and minimises the potential for biologically significant behavioural disturbance."
54. I found that the Environment Plan adequately addressed the potential for the activity to directly or indirectly affect marine turtles, whales and other marine fauna, including species that may be of cultural significance to First Nations people. In particular, I considered the potential for underwater noise to disrupt migration, seasonal movement patterns and vocalisation/communication. In considering this, I took into account the following:
- a. Marine mammals and especially cetaceans rely on sound for important life functions including individual recognition, socialising, detecting predators and prey, navigation and reproduction and underwater noise can affect marine mammals in various ways including interfering with communication (masking), behavioural changes, a shift in the hearing threshold, physical damage and stress.
 - b. There are no marine turtle or whale BIAs or habitats critical to survival in the areas that may be affected by the MSS underwater noise emissions above behavioural disturbance thresholds for these species.

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- c. Given the location, duration and timing of the activity and with control measures in place to mitigate underwater noise [45], impacts to cetaceans and marine turtles are likely to be restricted to temporary behavioural changes in individuals moving through the Operational Area and impacts to species recovery or population viability are unlikely to be realised.
 - d. During the 11A consultation process First Nations relevant persons did not identify cultural connections to particular species and the conditions [132] provide an opportunity for such information to be provided and inform the management of the activity.
55. For the reasons given at [45] above, and as follows, I accepted that the Environment Plan demonstrated that the environmental impacts and risks of the activity to the threatened and migratory whales will be of an acceptable level because:
- a. the Environment Plan is not inconsistent with Commonwealth of Australia, Conservation Management Plan for the Blue Whale 2015–2025 including Guidance on Key Terms within the Blue Whale Conservation Management Plan (2021) and Blue Whale Conservation Management Plan – FAQs published by NOPSEMA, Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North-west Marine Region, Department of the Environment, Water, Heritage and the Arts, EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales: Industry Guidelines (September 2008). I considered that the Environment Plan contained all Part A management measures as described in Policy Statement 2.1, as well as adoption of additional Part B measures, which reflected a precautionary approach by the titleholders to the risks and impacts of the activity;
 - b. the acceptable level of impact for underwater noise impacts on whales is compared to the predicted level of impact, which is derived from comparing noise modelling studies with published studies on the distribution and abundance patterns of whales to demonstrate that the environmental impacts of the activity will be managed to an acceptable level;
 - c. areas of uncertainty in predictions are addressed by the control measures, including a commitment to cease acoustic emissions immediately if a blue whale (or possible blue whale is) is detected within observable distances (these distances are extended beyond the distance at which noise can exceed thresholds known to cause behavioural disturbances). This will be achieved through use of an additional support vessel with two trained and experienced MFOs on board at all times during the survey for possible pygmy blue whales and in accordance with Policy Statement 2.1 for other whales;
 - d. the method applied to demonstrate that the environmental impacts and risks of the activity from acoustic emissions to threatened and migratory whales is based on a description of whale distribution, abundance and behaviour in the ensonified area, contemporary science on effects of noise on whales, source and location specific acoustic modelling, Policy Statement 2.1 control measures as well as consideration of other commonly used and known control measures for whale detection and mitigation and so is systematic, defensible, and reproducible;
 - e. the Environment Plan considers the potential for permanent and temporary threshold shifts in hearing, behavioural disturbance, and masking due to underwater noise exposure and any subsequent potential impact to individual fitness and population viability. The titleholders' evaluation for this topic is more detailed than for other environment receptors and so is commensurate to the predicted magnitude of impacts and risks to listed threatened and migratory whale species that may be encountered in the Operational Area;

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- f. the Environment Plan provides an evaluation of the potential impacts to planktonic food sources and potential foraging activity of pygmy blue whales within their distribution range. The activity is unlikely to have an unacceptable level of impact on whale foraging because the Operational Area is not located in a designated pygmy blue whale foraging area (Blue Whale Conservation Management Plan and Thums et al. 2022). Therefore, based on the low likelihood of foraging occurring in the area, the adoption of additional controls in the event whales are sighted, including increased observation and shutdown zones, and precautionary adaptive mitigation where greater than predicted numbers of pygmy blue or unidentified whales are detected, there is limited potential for impacts to biologically important behaviours of pygmy blue whales. Precautionary measures are in place to manage any potential impacts to an acceptable level;
 - g. the Environment Plan addresses impacts and risks from underwater noise to baleen and odontocete whales, including both mid-high frequency cetaceans and low frequency cetaceans. It details the modelling which predicts that Permanent Threshold Shift (**PT**) and Temporary Threshold Shifts (**TTS**) will not be exceeded, or the range to exceedance will be limited to the immediate proximity of the seismic source therefore indicating that shutdown zones of 2km will be effective in mitigating auditory injury. Further, the Environment Plan specifies detection and mitigation measures including pre-start surveys, extended shutdown zones for the seismic source, the use of qualified and experienced MFOs and passive acoustic monitoring operators to improve the efficacy of visual observations to inform management responses, use of a spotter vessel to extend the observation distance for whales to greater than the distance for predicted behavioural disturbance as well as night time and low visibility procedures; and
 - h. responses received by relevant persons consultation in relation impacts to threatened and migratory whales have been incorporated into the Environment Plan (Table 5.4 and section 6.6.2) or considered by the assessment team. I am reasonably satisfied that the titleholders had considered and addressed these responses, which included objections and claims related to the impact assessment of zooplankton as a source of food for pygmy blue whales, noise impacts on whales including hearing injury, behavioural disturbance and masking, concerns about the accuracy of the underwater acoustic modelling and access to supporting literature used in the evaluation, and that the Environment Plan demonstrates that the environmental impacts and risks of the activity to the threatened and migratory whales will be of an acceptable level.
56. I noted that the Environment Plan predicts, based upon scientifically supported predictions and the location of the activity outside of the BIA, that the likelihood of encountering pygmy blue whales in the area within which received noise levels may elicit TTS, PTS, behavioural disturbance, or masking is low but possible. Nevertheless, the Environment Plan:
- a. explains that PTS will be prevented by the seismic source being shut down well in advance of any whale approaching the PTS effect range;
 - b. predicts that it is unlikely that TTS or masking will occur due to; the conservative shut down protocols; routine and non-routine breaks in noise generation due to turns and other logistics requirements; results of the noise modelling combined with the movement of the seismic vessel and the predicted movements and behaviour of whales if present (mostly migrating, not breeding or foraging), all of which will reduce noise exposure periods. If greater than expected numbers of whales are observed in the survey area, or behaviours observed are different than expected (i.e. not migrating, indicating foraging or other behaviours, which would indicate an increased risk of TTS or masking effects) it is expected that the titleholders will initiate and follow its change and revision processes (which I consider in reg 10A(e) below);

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- c. demonstrates that the potential impacts and risks of behavioural disturbance will be reduced to an acceptable level through the application of an immediate shutdown for all detections of pygmy blue whales or large unidentified whales. This shutdown measure will be supported by two trained MFOs who will maintain watch during all hours of daylight and good visibility conditions and two MFOs on an additional spotter vessel; and
 - d. includes triggers to cease night-time operations should higher than anticipated whale numbers be encountered in accordance with Policy Statement 2.1. This control measure will eliminate noise and associated impacts during periods when whales cannot be effectively detected.
57. I found that, through the adoption of the control measures described above (and at [45]), the Environment Plan demonstrated how the activity will be managed to ensure that environmental impacts and risks of the activity to the threatened and migratory whales will be of an acceptable level.
58. For the above reasons, I am reasonably satisfied that the requirements of reg 10A(c) are met.

Regulation 10A(d) - The Environment Plan provides for appropriate environmental performance outcomes, environmental performance standards and measurement criteria

59. Sections 2 and 6 of the Environment Plan contain the EPOs, EPSs and measurement criteria.
60. The Environment Plan provides 16 EPOs that I considered are:
- a. clear, unambiguous and address all environmental impacts and risks relevant to the activity (noting that one EPO may relate to multiple impacts and risks), including the combinations of all environment aspects and the cumulative impacts on all values and sensitivities that may be affected by the activity. For example, the Environment Plan contains discrete EPOs for impacts and risks to whales that address all identified impacts and risks and are directly linked to acceptable levels. I also note that the EPOs reflect the level of environmental performance set by recovery plans where relevant;
 - b. establish levels for environmental performance that are equivalent to or better than the predicted levels of environmental impact or risk that the Environment Plan has demonstrated are acceptable. For example, there is a discrete EPO for underwater noise that reflects the defined acceptable level of impact for pygmy blue whales which sets a level of performance for the management of the activity to ensure impacts do not impede the recovery of pygmy blue whales; and
 - c. reflect levels of environment performance for management that are achievable, consistent with the principles of ecologically sustainable development and are compliant with relevant legislative requirements and the *Program Report – Strategic Assessment of the Environment management authorisation process for petroleum and greenhouse gas storage activities administered by the National Offshore Petroleum Safety and Environment Management Authority under the Offshore Petroleum and Greenhouse Gas Storage Act 2006* (endorsed on 7 February 2014) (**Program**) requirements.
61. The Environment Plan includes EPSs that:
- a. are directly linked to control measures determined through impact and risk evaluations to be necessary to ensure environmental impacts and risks are reduced to as low as reasonably practicable and to an acceptable level. For example, the EPSs can be directly linked to control

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measures that are relevant to the management of impacts to whales and are supported by clear measurement criteria that can be easily monitored;

- b. contain clear and unambiguous statements of environmental performance. The statements of environmental performance established by the EPSs describe how each of the adopted control measures will function and perform to effectively reduce environmental impacts and risks to as low as reasonably practicable and to an acceptable level;
 - c. have clear measurement criteria defining how environmental performance will be measured for demonstrating that the defined levels of environmental performance are being met and impacts and risks are being reduced to as low as reasonably practicable and to an acceptable level. For example, log books demonstrating MFOs on duty during daylight hours and CVs demonstrating suitably competent passive acoustic monitoring operators.
62. I considered that the EPOs, EPSs and measurement criteria are all linked and complementary because they are consolidated in a table for each of the environmental aspects with EPSs and measurement criteria set out in relation to each EPO. Therefore, I accepted that they can easily be monitored for compliance, by both the titleholders and NOPSEMA, to ensure environmental impacts and risks are being reduced to as low as reasonably practicable and to an acceptable level.
63. For the above reasons, I am reasonably satisfied that the Environment Plan provides for appropriate EPOs, EPSs and measurement criteria, and reg 10A(d) was met.

Regulation 10A(e) - The Environment Plan includes an appropriate implementation strategy and monitoring, recording and reporting arrangements

64. I am satisfied that the Environment Plan included all of the details required by reg 14 (see [28]-[29] above). Reg 10A(e) required that I be reasonably satisfied that that strategy and the monitoring, recording and reporting arrangements were appropriate.
65. The implementation strategy in the Environment Plan includes processes and systems for environmental performance monitoring, auditing, management of non-conformance, review, record keeping and reporting (both internally and externally). When implemented together, I am satisfied that these processes and systems provide for all impacts and risks to be identified and reduced to as low as reasonably practicable and acceptable levels for the duration of the Environment Plan. I therefore considered that the Environment Plan describes adequate and effective processes and systems to ensure that all impacts and risks continue to be identified and reduced to as low as reasonably practicable and acceptable levels.
66. I noted that the EMS includes measures to ensure that control measures in the Environment Plan continue to be effective in reducing impacts and risks to as low as reasonably practicable and acceptable levels, and monitoring arrangements are in place to determine whether, and ensure that, EPOs and EPSs are being met. The effectiveness of the EMS would be tested through implementation of system components, including the processes outlined within the arrangements that will be in place to ensure environmental risks and impacts will continue to be reduced to as low as reasonably practicable and acceptable levels. I considered that these measures are appropriate as they include fundamental 'do', 'check' and 'act' components of an EMS post-planning phase.
67. I am satisfied that the implementation strategy includes appropriate management of knowledge and change processes that provide for the titleholders to undertake monitoring for, and understand change in, both internal and external context relevant to the activity, implement processes to consider change in the context of environmental impacts and risks and regulatory requirements, and to have accepted

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changes implemented. In this regard, the implementation strategy in the Environment Plan outlines circumstances where additional risk assessments will be undertaken on an ongoing basis, including when new relevant scientific information/papers become available.

68. I noted that arrangements were in place for monitoring, recording, audit, management of non-conformance and review of the titleholders' environmental performance. For example, system components for monitoring and recording of information relevant to the activity are outlined, including routine reporting and notifications. The Environment Plan also provides for auditing and inspection of performance, including non-compliant incident investigation and tracking of close-out actions and arrangements are in place to allow monitoring of, and maintaining a quantitative record of, emissions and discharges (whether occurring during normal operations or otherwise). I considered that these records can be used to assess whether the EPOs and EPSs in the Environment Plan are being met, and accepted that all of the arrangements were appropriate in the context of the nature and scale of the activity.
69. I also considered that the following aspects of the Environment Plan were notable:
- a. the Environment Plan describes the titleholders' organisational structure for the activity and sets out roles and responsibilities of key personnel in a structured manner. The titleholders' emergency management structure is also detailed in the OPEP; and
 - b. the Environment Plan outlines measures for ensuring employee and contractor training and competency to ensure that these persons can fulfil their duties and maintain awareness of their responsibilities. In this regard, the Environment Plan identifies management system components that include contractor evaluation and management, employee training and competency development, and activity-specific induction of personnel as key measures.
70. These two matters demonstrated that appropriate arrangements were made for reporting and that appropriate measures were in place to ensure that those involved in the activity would be aware of what was expected of them.
71. I considered that the OPEP was appropriate for the nature and scale of the activity, and that there were sufficient measures in place to respond to, and monitor, oil pollution in the event of an unplanned hydrocarbon spill. For example, development of a first strike plan that includes a suite of oil pollution monitoring techniques as well as oiled wildlife response arrangements. The OPEP also had in place the arrangements and capability:
- a. for the duration of the activity, to ensure timely implementation of the control measures, including arrangements for ongoing maintenance of response capability;
 - b. for monitoring the effectiveness of the control measures and ensuring that the EPSs for the control measures are met;
 - c. for monitoring oil pollution to inform response activities;
 - d. to undertake appropriate monitoring of impacts to the environment from oil pollution and response activities in consultation with the control agency; and
 - e. for testing of the response arrangements in the OPEP that reflect requirements of the regulations and are considered commensurate with the risk, including commitments to test spill response arrangements prior to commencing the activity.

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72. The process for ongoing consultation described in the Environment Plan demonstrates that the titleholders will consult with relevant interested persons or organisations, and continue to consult with relevant persons, throughout the life of the Environment Plan as appropriate. For example, any significant changes to the activity will be communicated to relevant persons and in the event of an incident, such as an unplanned hydrocarbon spill, the titleholders will ensure stakeholders that may be affected are identified and engaged. The titleholders will continue to accept feedback from relevant interested persons or organisations, including relevant persons, during the life of the Environment Plan, and assess the feedback for merit. Any relevant new information will be assessed using the Environment Plan management of knowledge and change processes to ensure impacts and risks continue to be identified and managed to as low as reasonably practicable and acceptable levels.
73. Although these high-level commitments for ongoing consultation are appropriate, they are not sufficiently detailed to demonstrate that the issues identified at [94 - 97] for First Nations relevant persons will be addressed through the ongoing consultation arrangements as set out in Section 7.9.2.1 of the Environment Plan.
74. Taking into account all of the matters identified at [64]-[73], I am reasonably satisfied that the requirements of reg 10A(e) were met.

Regulation 10A(f) - The Environment Plan does not involve the activity or part of the activity, other than arrangements for environmental monitoring or for responding to an emergency, being undertaken in any part of a declared World Heritage property within the meaning of the EPBC Act

75. As I stated above (at [19.c]), the PMST evidenced that that neither the activity, nor any part of it, will be undertaken in any part of a declared World Heritage Property within the meaning of the EPBC Act. The Environment Plan notes that the closest World Heritage Property to the activity is the Ningaloo Coast World Heritage Property, located approximately 168 km south-south-east from the Operational Area. More significantly, the Ningaloo Coast World Heritage Property is located outside of the EMBA, which represents the largest spatial extent where unplanned events could have an environmental consequence on the surrounding environment.
76. In circumstances where the activity is not being undertaken in, and could not have any environmental impact upon, a World Heritage Property, I am reasonably satisfied that reg 10A(f) was met.

Regulation 10A(g) - The Environment Plan demonstrates that the titleholders has carried out the consultations required by Division 2.2A and the measures (if any) that the titleholders has adopted, or proposes to adopt, because of the consultations are appropriate

77. Reg 10A(g) has two components which the Environment Plan must demonstrate:
 - a. first, that consultation has occurred as per the requirements in Division 2.2A of the Regulations. Division 2.2A requires that the titleholders consults with each 'relevant person' as defined in reg 11A(1), and imposes certain requirements for how that consultation is to occur (as specified in reg 11A(2)-(4));
 - b. second, that the titleholders adopted, or proposed to adopt, appropriate measures in light of those consultations.
78. NOPSEMA received a number of communications from relevant persons raising issues and/or expressing concerns with and objections to the Environment Plan. Those communications raised the

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same issues, concerns and objections as were raised during the consultation with the titleholders required by reg 11A, and are addressed in my reasons below regarding whether reg 10A(g) is met.

Relevant Persons under Regulation 11A(1)(a)-(c)

79. Relevant persons under reg 11A(1)(a)-(c) are each Commonwealth, State or Northern Territory Department or agency to whom the activity in the Environment Plan may be relevant, in addition to the Department of each responsible State Minister or Northern Territory Minister.
80. Table 5-3 of the Environment Plan identified Commonwealth and State Departments and agencies in the marine, environment and industry fields, and Section 5.7.1 provided further detail of the identification process, which I considered to be appropriate. The titleholders then made an assessment whether the activities to be carried out under the Environment Plan may be relevant to Commonwealth and State bodies. Of the 18 Commonwealth and State bodies identified, 15 were assessed as being 'relevant persons.' Reasons were provided why the 3 remaining bodies were not considered relevant persons. For example, the Ningaloo Coast World Heritage Advisory Committee was not considered a relevant person because the Operational Area and EMBA would not impact upon the area for which the Committee has responsibility. I agreed with and accepted the reasoning provided by the titleholders as to why these bodies were not consulted, namely, because the activity did not have the potential to impact the respective bodies' functions.
81. I noted that consultation with the relevant persons under reg 11A(1)(a)-(c) occurred, in accordance with GL1887 – Consultation with Commonwealth agencies with responsibilities in the marine area – January 2023, via email unless otherwise requested. Emails were sent to the relevant bodies on 13 May 2021, requesting responses by 14 June 2021. Emails were sent (with updated information) on 27 January 2023, requesting responses by 26 February 2023. Reminder emails were sent by the titleholders as this date approached.
82. I considered that sufficient information was provided to allow the relevant persons under reg 11A(1)(a)-(c) to make an informed assessment of the possible consequences of the activity on the functions, interests or activities of the relevant person. In particular, I noted that, in many of the cover emails for respective bodies, the titleholders provided a table of further information specific to the functions, interests or activities of the relevant person. For example, specific details of "Implications for Parks Australia interests" was sent to the Director of National Parks. Specific details of "Potential risks to commercial fishing and proposed mitigation measures" was sent to AMFA, and various other examples contained in the Environment Plan.
83. Finally, the consultation emails sent to each relevant person contained the following statement:

Please let us know if your feedback for this activity is sensitive and we will make this known to NOPSEMA upon submission of the Environment Plan in order for this information to remain confidential to NOPSEMA
84. In light of the matters at [799]-[83], I am reasonably satisfied that consultations with relevant persons, as defined by reg 11A(1)(a)-(c) was completed as required by Part 2-2A (and therefore reg 10A(g)(i) was met).
85. I noted that most relevant persons under reg 11A(1)(a)-(c) provided no feedback or objections to the activity in response to the consultation requests. Where a response was received, it was in the nature of feedback, as opposed to objections against the activity. Where feedback was received, the Environment Plan has identified this and indicated what changes were made to the Environment Plan in response. For example, a large part of the feedback was that certain bodies should be notified of

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things or provided documents when they occur or become available. The Environment Plan contains the details of this reporting or commits to providing these documents. I considered that these measures were appropriate, and therefore reg 10A(g)(ii) was met.

86. Considering the matters above, I am reasonably satisfied that, in relation to relevant persons as defined by reg 11A(1)(a)-(c), the Environment Plan demonstrates that the titleholders has carried out the consultations required by Division 2.2A and the measures (if any) that the titleholders has adopted, or proposes to adopt, because of the consultations are appropriate, as required by reg 10A(g).

Relevant Persons under Regulation 11A(1)(d)

87. Relevant persons under reg 11A(1)(d) are considered to be 'a person or organisation whose functions, interests or activities may be affected by the activities to be carried out under the environment plan, or the revision of the environment plan.'
88. I considered that the Environment Plan provided clear details of the processes that have been applied to identifying and determining who are relevant persons, as well as the processes undertaken for consulting with them. In particular, the Environment Plan correctly states that the terms "functions", "interests" and "activities" for the purpose of identifying relevant persons under reg 11A(1)(d) is to be interpreted and applied broadly by the titleholders in a manner consistent with the objects of the Regulations and the EPBC Act. The Environment Plan also utilised NOPSEMA's 'Consultation in the course of preparing an environment plan guideline' (N-04750-GL2086) (**NOPSEMA's Consultation guideline**) in defining the terms.
89. The Environment Plan identified and considered the following broad categories within the scope of reg 11A(1)(d):
- a. commercial fisheries (Commonwealth and State) and peak representative bodies;
 - b. recreational marine users and peak representative bodies;
 - c. titleholderss and operators;
 - d. peak industry representative bodies;
 - e. Traditional Custodians and nominated representative corporations;
 - f. Native Title Representative Bodies (NTRBs);
 - g. historical heritage groups or organisations;
 - h. local government and recognised local community reference/liaison groups or organisations;
 - i. other non-government groups or organisations; and
 - j. research institutes and local conservation groups or organisations.
90. I will first explain my conclusions on Traditional Custodians, nominated representative corporations and NTRBs, and then my conclusions on the other 8 'relevant persons' categories identified at [899].

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Traditional Custodians and nominated representative corporations and NTRBs

91. I considered that the titleholders' process for relevant persons identification has provided for the broad capture of First Nations representative groups such as NTRBs and Prescribed Body Corporates (**PBCs**) by identifying and consulting with all relevant groups along the full extent of the coastline adjacent to the EMBA as relevant persons.
92. The First Nations people/groups that have been identified as relevant persons in the Environment Plan includes one NTRB, eight First Nations nominated representative corporations and one other First Nations group that made themselves known to the titleholders and self-identified as a relevant person.
93. I accepted that the Environment Plan demonstrated the following matters:
 - a. I considered that the titleholders has provided these relevant persons with sufficient information in a readily accessible form and appropriate format to allow them to make an informed assessment of the possible consequences of the proposed activity on their functions, interests, or activities. For example, the titleholders provided the PBCs with a simplified consultation information sheet to share with their individual members that provided details on the environmental impacts and risks associated with the proposed activity with the location and extent of the EMBA clearly depicted. The titleholders also used clear, simple, and directly expressed terms during the consultation to make it clear to the PBCs that the invitation to participate in consultation provides an opportunity to inform the titleholders of the nature of cultural interests that the PBC or their members may have within the EMBA;
 - b. additional information was provided iteratively and consultation was adapted in response to the feedback received from relevant persons to allow them to make an informed assessment of the possible consequences of the proposed activity on their functions, interests, or activities. For example, when a PBC expressed interest in engaging in the consultation process and provided feedback on their preferred method for the consultation, the titleholders accepted that feedback and adapted their approach to engaging with the PBC and their members based on their preferred method which typically resulted in the provision of additional verbal briefings and/or presentations supported with information in pictorial or graphic form;
 - c. where requested, the titleholders adapted their approach to consultation in an appropriate manner to accommodate the provision of culturally restricted or sensitive information from relevant persons;
 - d. the titleholders provided these relevant persons with a reasonable period to consider information and provide feedback on how their functions, interests or activities may be affected by the activity. For example, relevant persons consultation with the PBCs commenced in January 2023, approximately 4.5 months prior to the submission of the Environment Plan and there has been an iterative process of information provision and various opportunities to provide feedback in writing or verbally at meetings; and
 - e. there is evidence in the consultation records that the titleholders has advised First Nations groups that they may request that particular information they provide is not published and it is evident that these requests have been addressed.
94. Despite the consultation with First Nations relevant persons outlined above, I remained concerned that the titleholders had not carried out all consultation required by Division 2.2A. I considered that there was uncertainty in the Environment Plan as to whether all First Nations persons who may have cultural interests that may be affected by the activities have been identified, whether a reasonable

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period has been afforded to consult with them on the consequences of the activity, and whether appropriate measures have been adopted as a result of the consultation. In this regard, I considered the following matters:

- a. the titleholders' process for identifying First Nations people/groups that may have functions, interests or activities affected by the proposed activity places a heavy reliance on directing consultation through NTRBs and PBCs that may not represent all traditional custodians. However, there is uncertainty as to whether all traditional custodians are represented by the identified representative bodies and the NOPSEMA's Consultation guideline describes that a connection of traditional owners with sea country may constitute an interest for the purposes of reg 11A(1)(d);
- b. the consultation process outlined in the Environment Plan states that "*Woodside asks nominated representative bodies and the NTRBs to identify individuals*". However, consultation records with the NTRBs and nominated representative corporations that were consulted by the titleholders do not demonstrate that they were appropriately asked in all cases to support the identification of other traditional custodian individuals or groups known to hold cultural interests that intersect with the Operational Area or EMBA;
- c. the Environment Plan also states that the consultation process "*enables individuals to self-identify in response to national and local advertising, social media and community engagement opportunities*". It is noted that these advertisements were developed in consultation with indigenous representatives. However, despite this, these advertisements do not describe the opportunity for consultation in clear, simple and directly expressed terms so that individuals were sufficiently informed as to the opportunity being afforded to them, i.e. consultation on petroleum activities, the associated environmental impacts and risks and the potential for consequences to their functions, interests and activities. For example, the titleholders obligations for relevant persons consultation are not clearly explained and some of the information presented suggests it is an opportunity to participate in a passive feedback process rather than an iterative consultation process;
- d. the titleholders' consultation process includes some limiting steps that may prevent the titleholders from identifying and consulting with First Nations relevant persons even if they were to self-identify. In particular, the process describes that "*Woodside will consult with individual Traditional Custodians where we have been directed to do so by the representative institution or the native title representative body*" and "*Where Woodside receives feedback from a person or organisation that identifies as a Traditional Custodian for an area overlapping the EMBA, including via an advertisement, Woodside will assess the feedback provided including whether the person(s) functions, interests and activities are represented by virtue of their membership of a PBC, and determine relevance*". The Regulations and judicial guidance do not provide a basis for limiting the scope of relevant persons in this way.
- e. consultation records indicate that representatives of Save our Songlines have requested a second meeting with the titleholders in order to further understand the proposed activity and to share information on their functions, interests or activities that may be affected by the proposed activity, and that this had not yet taken place before the Environment Plan was resubmitted. This indicated to me that, at least at the time the Environment Plan was resubmitted, further consultation was to occur.

95. I am aware that, since the Environment Plan was resubmitted, further consultation has occurred between the titleholders and Save our Songlines. Correspondence from the titleholders dated 3 July

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2023 was copied to NOPSEMA, and indicates that the titleholders considers that consultation with Save our Songlines has been completed under reg 11A, but that the titleholders is willing to continue discussions. NOPSEMA was copied into correspondence on 25 July 2023 that further confirms additional consultation has been undertaken with Save our Songlines. Noting that these matters took place after the Environment Plan was submitted, it has no bearing upon whether the Environment Plan demonstrates that the titleholders has carried out the consultations required by Division 2.2A. However, this information indicates that there is uncertainty as to whether there is additional information held by First Nations people on the cultural features of the environment, including spiritual and cultural connections to the environment that may be affected by the activity. The conditions set out at [133] require that additional consultation is undertaken with relevant First Nations people and groups so that information on cultural features and/or heritage values that may be impacted by the activity can be provided and control measures can be adopted/revised by the titleholders where necessary to manage any impacts and risks to as low and reasonably practicable and acceptable levels.

96. While I considered that the consultation undertaken by the titleholders was comprehensive, the concerns I have raised above meant that I am not reasonably satisfied that consultation as required by Division 2.2A had been carried out (and therefore I am not reasonably satisfied that reg 10A(g)(i) was met).
97. I also considered whether the Environment Plan demonstrates that the measures (if any) that the titleholders has adopted, or proposes to adopt, because of the consultations are appropriate. Given that I am not satisfied that consultation undertaken had met the requirements of Division 2.2A, I am not satisfied that reg 10A(g)(ii) was met.
98. However, as I noted above, the titleholders has nevertheless undertaken comprehensive consultation. Based upon the relevant sections of the Environment Plan, I considered that:
 - a. the titleholders has assessed the merits and provided responses to all objections and claims raised by relevant persons during the consultation thus far;
 - b. in circumstances where no responses from a relevant person were received by the titleholders, the Environment Plan provides that the titleholders made reasonable efforts to consult the relevant person to understand how their functions interests or activities may be affected. For example, consultation records in section 5 and the sensitive information part of the Environment Plan show that the titleholders attempted to contact these relevant persons on multiple occasions, using multiple methods (e.g. phone calls, emails and/or face to face meeting attempts) and over a reasonable timeframe (e.g. multiple months).
 - c. information that was gathered during the titleholders' consultation process with First Nations relevant persons thus far has been appropriately incorporated into the Environment Plan. For example, where Buurabalayji Thalanyji Aboriginal Corporation (**BTAC**) informed the titleholders of the Thalanyji people's cultural obligation to care for the environmental values of sea country and this information has been all incorporated into the description of the environment in the Environment Plan. The consultation records with BTAC demonstrate that the titleholders committed to continue engaging with BTAC regarding their environmental values of sea country, and that BTAC has agreed for the further engagement to be completed as part of ongoing consultation subject to formalising a 'collaborative agreement'. Additionally, the titleholders has developed the Cultural Heritage Management Plan with the Murujuga Aboriginal Corporation
99. To the extent that consultation has occurred and been undertaken, the Environment Plan largely demonstrated that the measures that the titleholders has adopted, or propose to adopt, because of the consultations are appropriate. My residual concerns are that the Environment Plan did not include

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a clear commitment to continuing to work with BTAC to finalise the proposed 'collaborative agreement' for the purposes of identifying, managing and protecting the Thalanyji people's values of sea country and to clarify what is important to, and shared understanding between, the titleholders and BTAC for a broader range of activities in Thalanyji country in the short, medium and longer terms, including but not limited to the proposed Scarborough activities in the EMBA. I am therefore not reasonably satisfied that all of the measures that the titleholders proposed to adopt were appropriate.

100. I am unable to be satisfied that reg 10A(g) was met in relation to consultation with Traditional Custodians, nominated representative corporations and NTRBs. However, for the reasons given above, I accepted that consultation that had been undertaken was comprehensive and had been assessed and implemented where relevant. Accordingly, I considered that it would be appropriate to approve the Environment Plan subject to conditions addressing the concerns that I have raised above. I discuss these conditions in further detail below [133].

Other 'relevant persons'

101. The Environment Plan clearly identifies who has been identified as a relevant person, includes details of the rationale the titleholders has used to determine who they consider fall within that definition and broadly describes the functions, interests or activities of those persons or organisations identified as relevant persons under reg 11A(1)(d). The Environment Plan includes reference to multiple sources of information used by the titleholders to assist in the identification of relevant persons, such as publicly available materials, review of databases and registers, published guidance, previous history and advice from authorities and other relevant persons.
102. Table 5-1 and Table 5-2 of the Environment Plan provide a comprehensive overview of the identification and assessment of the relevant persons (outside of those addressed at [91]-[100] above) falling within reg 11A(1)(d). I considered the nature of the activity, description of the environment and the possible impacts and risks of the activity have been taken into account when determining whose functions, interests and activities may be affected. For example:
- a. the titleholders considered all of the known environment values and sensitivities within the full extent of the environment that may be affected by the planned and unplanned impacts and risks of the activity when determining relevant persons; and
 - b. the titleholders considered the nature and scale of the activity and all of the possible impacts and risks of the activity when determining relevant persons.
103. I am satisfied that the process of identifying these other relevant persons was sufficient and appropriate to the activity.
104. Having identified these relevant persons, I considered the information that had been provided to them in accordance with reg 11A(2). I considered that the information provided was sufficient, in particular:
- a. the Environment Plan includes a description of the approach to provision of sufficient information that takes into account the functions, interests or activities of relevant persons and the possible consequences of the activity that may affect them;
 - b. the consultation opportunity provided relevant persons with the opportunity to provide input and engage in a genuine two-way dialogue. I noted that offers were made to meet and discuss with relevant persons and steps were taken by the titleholders to create awareness of the activity and to encourage potentially relevant persons to make themselves known to the titleholders;

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- c. the titleholders tailored the information to suit the needs of the different types of relevant persons and provided information in a form that is readily accessible and appropriate for the relevant person being consulted. Further, the titleholders used different materials to support the provision of information that was suited to the relevant person being consulted, such as pictorials, graphics and maps; and
- d. the titleholders considered the views of relevant persons as to what level of information is “sufficient” to allow the relevant person to make an informed assessment of the possible consequences of the activity on the functions, interest or activities of the relevant person. In particular, the titleholders considered requests for additional information by certain relevant persons and provided such additional information in response to reasonable requests. Although there are examples where the titleholders did not provide certain relevant persons with additional information requested (e.g. scientific literature, copy of the latest version of the Environment Plan), I am satisfied that sufficient information was made available to the relevant person including: a link to the publicly available Environment Plan; the Consultation Information Sheet; numerous email responses tailored to a relevant person’s objections and claims raised; as well as the measures the titleholders proposes to adopt as a result of the consultation undertaken.

105. I noted that the period for consultation was determined on a case-by-case basis. The Environment Plan described the approach taken to determining a reasonable period based on consideration of the relevant person’s particular circumstances on a case-by-case basis and includes consideration of the nature, scale and complexity of the activity, as well as the extent and severity of potential impacts and risks on each relevant person’s functions, interests or activities. I acknowledged that the titleholders considered relevant persons’ views of what constitutes a reasonable period for consultation, considered requests for additional time by relevant persons, with additional time provided in response to reasonable requests. I also noted that the titleholders was proactive in sending reminders to relevant persons about impending dates for providing any response. Taking all of these matters into account, I am satisfied that a reasonable period for consultation had been given (as per reg 11A(3)).

106. I accepted that reg 11A(4) was satisfied because relevant persons were informed (in similar terms to those at [83] above), that they may request that particular information provided during consultation not be published and information subject to such a request was not published.

107. For the purposes of reg 10A(g)(ii), I found that:

- a. information gathered through the consultation process with the other relevant persons under reg 11A(1)(d) has been incorporated into the Environment Plan, and effectively informed the identification of environmental values and sensitivities to ensure impacts and risks are reduced to as low as reasonably practicable and acceptable. For example, information obtained from relevant persons has informed the identification of environmental values and sensitivities where relevant and information obtained from relevant persons has been considered in the evaluation of environmental impacts and risks, and in the titleholders’ processes for demonstrating that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable and acceptable levels where relevant. This includes, but is not limited to, the provision of notifications to relevant persons and other marine users as agreed to during consultation, amendments made to the OPEP as a result of relevant persons’ feedback received in the preparation of the Environment Plan, and a revised cumulative underwater noise impact assessment being undertaken in response to information received;

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- b. the titleholders' assessment of merit and all responses to objections and claims are reasonable and supported, and the measures adopted (if any) because of the consultation are appropriate. For example:
- i. in some cases, the titleholders' assessment of the merits of objections and claims did not result in the adoption of additional control measures because additional control measures were not reasonably practicable to implement and/or necessary to demonstrate that impacts and risks will be reduced to as low as reasonably practicable and acceptable levels. Those items that were the subject of objections and claims which NOPSEMA considered to be reasonable were required to be addressed through requests for information and opportunities to modify and resubmit. For example, in relation to controls for mitigating noise impacts to blue whales, the titleholders adopted additional control measures or improved performance standards which addressed the objections and claims of relevant persons.
 - ii. in other cases, the titleholders' assessment of the merits of objections and claims resulted in no additional control measures being adopted. I am already satisfied [at 42] that the titleholders has demonstrated that they were not reasonably practicable to implement and/or were not necessary to demonstrate that the impacts and risks of the activity will be reduced to as low as reasonably practicable and acceptable levels. For example, claims were raised about vessel collision risks on whale sharks and although no additional control measures were adopted, NOPSEMA considered this to be reasonable given the nearest biologically important area is more than 100 km from the operational area.

108. I was satisfied that the measures which the titleholders adopted following consultation were appropriate. Accordingly, I was reasonably satisfied that reg 10A(g)(ii) was met.

109. Considering the matters discussed above, I was reasonably satisfied that, in relation to relevant persons (other than those considered at [94]-[100] above) as defined by reg 11A(1)(d), the Environment Plan demonstrates that the titleholders has carried out the consultations required by Division 2.2A and the measures (if any) that the titleholders has adopted, or propose to adopt, because of the consultations are appropriate, as required by reg 10A(g).

Relevant persons under Regulation 11A(1)(e)

110. Reg 11A(1)(e) states that Woodside must consult with 'any other person or organisation that the titleholders considers relevant.'. The titleholders consulted with the following 'other persons or organisations' that it considered to be relevant:

- a. The Shire of Exmouth and Exmouth Community Reference Group;
- b. The City of Karratha and the Karratha Community Liaison Group;
- c. The Australian Marine Conservation Society (**AMCS**);

111. I was reasonably satisfied that consultations with these persons met the requirements in reg 11A(2)-(4). The Environment Plan demonstrates that consultation took the form of emails and presentations, and were over a reasonable period (ranging from April and September 2022 until March 2023). The information provided to the relevant persons was sufficient. Once again, the information that was provided was tailored to the particular relevant person. For example, the information provided to AMCS included a detailed attachment explaining the specifics of the activity and the 'themes' in which AMCS may have an interest and also raised that information which is sensitive could be requested not

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to be published. The presentation to community members was also specific. For example, the Exmouth presentation contained information about traffic through the local airport associated with the activity.

112. Table 5-4 of the Environment Plan demonstrates that no feedback, objections or claims were raised by any of these relevant persons, and that control measures were not necessary. I agreed with the conclusions in this table. No substantive responses were received (as opposed to queries), which required the titleholders to consider additional measures.
113. I also acknowledged the ongoing consultation commitment in the Environment Plan. I considered this was appropriate measure which would ensure that any future feedback, objections or claims which may arise from such persons would be assessed and reported.
114. I was, therefore, reasonably satisfied that Reg 10A(g) was met in relation to 'relevant persons' as defined by reg 11A(1)(e).

Regulation 10A(h) - The Environment Plan complies with the Act and the regulations.

115. I was required to be reasonably satisfied that the Environment Plan complied with the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) (**Act**). I was satisfied that the Environment Plan was compliant, noting in particular:
 - a. the requirements under s 571 of the Act, that the titleholders maintain financial assurance sufficient to give the titleholders the capacity to meet costs, expenses and liabilities arising in connection with, or as a result of the activity. The titleholders has provided a financial assurance confirmation form which I was satisfied was acceptable and demonstrated that the titleholders will maintain financial assurance in relation to the activity (and therefore complied with s 571);
 - b. the requirements under s 572, relating to the maintenance and removal of equipment. I noted that the Environment Plan includes commitments for avoiding the loss of streamers/dropped objects and for recovering accidentally lost streamers/dropped objects. I was reasonably satisfied that this demonstrated that the activity does not allow for any equipment or property to be left on the seabed at the completion of the petroleum (and therefore complied with s 572);
 - c. subject to findings in [93 - 99], the consultation process has assisted the titleholders to meet their obligation under s 280 of the Act which requires that it must carry out the activity in a manner that does not interfere with navigation, fishing, conservation of resources of the sea and seabed, other offshore electricity infrastructure and petroleum activities, and the enjoyment of native title rights and interests (within the meaning of the *Native Title Act 1993*) to a greater extent than is necessary for the reasonable exercise of the titleholders' rights and obligations.
116. Turning to the Regulations, for the reasons set out above (at [16]-[32]), I am satisfied that the Environment Plan addressed the content requirements of regs 13-16 with enough clarity, consistency and detail commensurate to the nature and scale of the activity.
117. I observed that the Environment Plan also stated as follows:
 - a. that the titleholders would report all reportable incidents to the regulator (orally) as soon as possible to NOPSEMA, but within two hours of the incident or of its detection, with a written report to follow in a form consistent with Form FM0831 – Reportable Environmental Incident;

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- b. that the titleholders will notify NOPSEMA no later than 15 days after the end of the calendar month using the NOPSEMA Form – Recordable Environmental Incident Monthly Summary Report of any recordable incident; and
- c. that the titleholders will notify NOPSEMA of the commencement of the petroleum activities at least ten days before the activity commences and will notify NOPSEMA within ten days of completing the activity.

118. I am reasonably satisfied that the Environment Plan contained information necessary to be compliant with regs 26, 26A, 26AA and 29 of the Regulations. I also considered the titleholders' Environment Knowledge Management System enabled storage of records, and for them to be made available, as required by regs 27 and 28.

119. Based on the above, I am reasonably satisfied that the requirements of reg 10A(h) are met.

The appropriate conditions

120. I have found above that I am not reasonably satisfied that the criteria in reg 10A(b) and reg 10A(g) were met. On 13 July 2023, NOPSEMA invited the titleholders to comment on proposed conditions that I considered might be appropriate to address concerns I have raised above.

121. In response, the titleholders provided comments focused on ensuring the conditions were clear and could be implemented. NOPSEMA took these into consideration when finalising the conditions but did not change the scope and intent of the conditions.

122. NOPSEMA concluded that the conditions were appropriate because they address the residual issues associated with reg 10A(b) and 10A(g) and the requirements are clear and implementable.

Other Considerations

Principles of Ecological Sustainable Development

123. The Regulations provide that their object is to ensure that any activity or greenhouse gas activity carried out in an offshore area is carried out in a manner consistent with the principles of ecologically sustainable development (**ESD**) set out in s 3A of the EPBC Act. I am satisfied that the Environment Plan was consistent with the principles of ESD. In this regard, the Environment Plan:

- a. included the titleholders' evaluation of the socio-economic, cultural and ecological features of the EMBA by the activity and consultation with relevant persons. The Environment Plan demonstrates an integrated approach to considering all environmental features, including relevant social, cultural and economic features that make up the definition of environment in reg 4. Further, the Environment Plan includes an evaluation of the potential impacts and risks of the activity on cultural heritage, commercial fisheries, traditional fisheries, tourism and recreation, commercial shipping, oil and gas and defence activities. I considered that these matters were consistent with ensuring that this decision-making process should effectively integrate both long-term and short-term economic, environment, social and equitable considerations;
- b. detailed the titleholders' evaluation of environmental impacts and risks, the reasons and evidence in support of how the impacts and risks will be of an acceptable level and the scientific uncertainty associated with predictions of environmental impacts and risks (see [51] and [55]). I noted that the Environment Plan detailed additional control measures in relation to whales as

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a precautionary approach given the uncertainty of possible impacts, and considered that the Environment Plan also included effective management measures to ensure the activity will not result in serious or irreversible environmental harm. Accordingly, I considered the Environment Plan was consistent with the 'precautionary principle' within the meaning of s 3A(b) of the EPBC Act, and that the conditions were a further precautionary measure;

- c. identifies the measures adopted by the titleholders to minimise the environmental impacts and risks of the activity. The titleholders applied the mitigation hierarchy, such that where avoidance was not possible, control measures were adopted to ensure impacts and risks are managed to as low as reasonably practicable and an acceptable level. I considered this was consistent with the principle that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations; and
- d. in relation to the 'biodiversity principle':
 - i. included the titleholders' evaluation of environmental impacts and risks to the biodiversity and ecological values of the Commonwealth marine area, including EPBC Act listed threatened and/or migratory species, and the EPOs defined in the EP. I noted that the titleholders' defined acceptable levels of impact and risk for biodiversity and ecological values at levels that are below the significant impact criteria defined in Significant Impact Guidelines 1.1 – Matters of National Environment Significance for matters protected under Part 3 of the EPBC Act. Further, I found that the environmental impact and risk evaluations and EPOs collectively demonstrate that the activity will be managed so that impacts and risks to biological diversity and the ecological integrity of the Commonwealth marine area will be of an acceptable level.
 - ii. undertook a robust evaluation of environmental impacts and risks using appropriate impact assessment tools (such as acoustic modelling) to provide the basis for assessing higher order impacts and risks and demonstrating that impacts and risks will be managed at or below the acceptable level;
 - iii. contained an assessment against relevant requirements of statutory instruments to demonstrate that the activity would not be inconsistent with these instruments;
 - iv. the activity will not have a significant impact on MNES protected under the EPBC Act, including World Heritage properties, National Heritage properties, Ramsar wetlands of international significance, listed threatened species and communities, listed migratory species, Commonwealth marine areas, and the Great Barrier Reef Marine Park.
- e. recognised that the titleholders is required to bear the costs relating to environmental management of the activity, to ensure that environmental impacts and risks are managed to as low as reasonably practicable and to an acceptable level. I considered that the onus is on the titleholders to protect ecological services and capital associated with the EMBA of the activity, and that, to the extent that the valuation principle is relevant for an individual activity, the Environment Plan demonstrates compliance and is consistent with Australian government legislation and policy requirements relating to environmental management.

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The Program: protected matters under Part 3 of the EPBC Act

124. The Program endorsed under s 146 of the EPBC Act outlines the environmental management authorisation process for offshore petroleum and greenhouse gas activities administered by NOPSEMA and requires NOPSEMA to comply with Program responsibilities and commitments.
125. In implementing the Program, NOPSEMA conducts assessments of Environment Plans against the requirements of the Program, which include meeting the acceptance criteria and content requirements under the Regulations (which I have detailed above). Specific Program commitments relating to protected matters under Part 3 of the EPBC Act are outlined in Table 2 of the Program report and must be applied during decision making with respect to offshore projects and activities.
126. As I have noted above, the only Part 3 EPBC Act protected matters are listed threatened species and migratory species. I considered that the activity under the Environment Plan:
- a. will not result in unacceptable impacts on any of the species and is not inconsistent with EPBC Act Part 13 Statutory Instruments as identified in Section 6.8 of the EP. I note my findings above (see [51 - 608]) where I have considered these documents when determining the acceptability of the Environment Plan where impacts to listed threatened species and ecological communities may arise;
 - b. has control measures in place to ensure that impacts to the Commonwealth marine area will be of an acceptable level having regard to EPBC Act Part 13 Statutory Instruments as identified in Section 6.8 of the EP, Guidance on Key Terms within the Blue Whale Conservation Management Plan (2021) published by DCCEEW, Commonwealth of Australia, Director of National Parks, Australian Marine Parks - North-west Marine Parks Network Management Plan 2018, Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North-west Marine Region; and Department of the Environment, Water, Heritage and the Arts, EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales: Industry Guidelines (September 2008) (see [49-56]).
 - c. Has control measures in place to ensure that the decision to accept the Environment Plan will not result in an unacceptable impact to a migratory species or an area of important habitat for a migratory species having regard to the documents identified in [b] (see [49-56]).

The Program: cumulative Environmental impacts

127. In the context of the Program, cumulative impact refers to the direct and indirect impacts of several different activity actions that may influence the natural environment or other users within a locality or region which, when considered together, have a greater impact on the offshore marine environment than each action or influence considered individually.
128. I considered the potential for cumulative environmental impacts to the Commonwealth marine area as required by the Program. I am reasonably satisfied that the environmental impacts of the activity combined with existing and proposed future pressures on the Commonwealth marine area, particularly to noise sensitive receptors including threatened and migratory whales, would be of an acceptable level because:
- a. the Environment Plan has evaluated the potential for cumulative impacts to relevant environmental receptors in the Commonwealth marine area that may be affected by the activity and adopts suitable control measures. In assessing the potential for cumulative environmental

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impacts, the Environment Plan has considered multiple noise exposures from the activity combined with other previous and proposed future noise generating activities in the region with overlapping temporal and/or spatial noise exposure extents; and

- b. the Environment Plan has evaluated the potential for cumulative impacts to cetaceans from multiple noise exposures over the duration of the activity, as well as previous and potential future marine seismic surveys over consecutive seasons in areas that are considered biologically important for marine mammal species. The cumulative impact assessment concludes that impacts resulting from cumulative exposure to underwater noise are more likely for species that may remain within, or adjacent to, the operational area for extended periods of time due to biologically important behaviours. Precautionary control measures have been adopted to ensure potential cumulative impacts to threatened and migratory whales are managed to as low as reasonably practicable and an acceptable level.
- c. the Environment Plan identifies that the confirmed start and end dates for the activity will be considered in conjunction with other proposed activities that are part of the Scarborough project to ensure consideration of possible concurrent and cumulative impacts.

The Program: indirect consequences of an action

129. Under the Program, NOPSEMA must have regard to EPBC Act requirements, including *EPBC Act Policy Statement - 'Indirect consequences' of an action: section 527E of the EPBC Act (indirect consequences policy)*. NOPSEMA considers the policy to determine where indirect consequences may be considered an 'impact' of an activity. This consideration is on a case-by-case basis against the circumstances of the activity in accordance with the criteria set out in the policy.
130. In assessing the Environment Plan, I had regard to the indirect consequences policy, in relation to indirect greenhouse gas (GHG) emissions. I gave consideration as to whether the activity is a substantial cause of GHG emissions from the processing, consumption, and combustion of gas, and are facilitated to a major extent by the activity, within the contemplation of the titleholders and are a reasonably foreseeable consequence of the activity.
131. Having regard to the indirect consequences policy, and the assessment teams' findings and conclusions, I agreed that:
 - a. the activity is a defined stage in the broader Scarborough project development, for which there is an accepted Offshore Project Proposal;
 - b. the extraction of gas for onshore processing is not included in the activity, and as such is not authorised by the Environment Plan, if accepted;
 - c. further activities, including drilling, completions, and installation of infrastructure, are required prior to the point any gas can be extracted and transported for gas processing and sale, and will themselves be subject to a separate assessment and approval process;
 - d. extraction and supply of gas for processing and subsequent sale, transport, consumption & combustion will require a future approval through an environment plan for operations.
132. Future activities require their own separate environment plan approvals, including consideration of the indirect consequences policy and appropriate coverage of 'impacts' of any activity based on the case specific circumstances. In the case of the Environment Plan, there is no resource extraction component to the activity and future regulatory approvals are required prior to any activity with a

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resource extraction component occurring. Given this, I consider that emissions from gas processing, consumption and combustion of Scarborough gas are not facilitated to a major extent by the activity and would not be considered a substantial cause of emissions generated in the future from processing, consumption, or combustion of gas.

Conclusion

133. For the reasons set out above, I decided to accept the Environment Plan subject to the following conditions:

- 1) Prior to commencement of the activity, the titleholders must consult with registered native title bodies corporate, representative Aboriginal / Torres Strait Islander bodies and other persons or organisations identified as a relevant person in relation to First Nations cultural heritage in Tables 5-3 and 5-4 of the EP to confirm whether:
 - a) They are aware of any people, who in accordance with Indigenous tradition, may have spiritual and cultural connections to the environment that may be affected by the activity that have not yet been afforded the opportunity to provide information that may inform the management of the activity.
 - b) There is any information they wish to provide on cultural features and/or heritage values.
- 2) The purpose of the consultation outlined in Condition 1 is to be communicated, and relevant persons are provided with a copy of the NOPSEMA Consultation on offshore environment plans Brochure as part of consultation.
- 3) The method of consultation is informed by the relevant persons being consulted.
- 4) If at any time, as a result of compliance with Condition 1, relevant persons are identified, they must be consulted in accordance with the NOPSEMA Guideline on Consultation in the course of preparing an environment plan (GL2086).
- 5) At any time, prior to or during the activity, if new cultural features and/or heritage values of places within the environment that may be affected by the activity are identified that are not described in the EP, the titleholders must:
 - a) Ensure the environmental impacts and risks of the activity continue to be managed to as low as reasonably practicable and an acceptable level.
 - b) Notify NOPSEMA in writing within 7 days of these cultural features and/or heritage values of places and the potential environmental impacts and risks.
- 6) The titleholders must submit a report to NOPSEMA no later than 14 days after the notification in Condition 5 which confirms the following:
 - a) The control measures that have been adopted to ensure that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable and an acceptable level.
 - b) The consultation undertaken with any relevant persons to develop these control measures, including:



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- i) the control measures that those persons considered reasonably necessary to manage impacts on the cultural features and/or heritage values in accordance with Indigenous tradition; and
 - ii) the views of the relevant persons in relation to the control measures.
- 7) Adopt appropriate measures in response to the claim from the Buurabalayji Thalanyji Aboriginal Corporation as to the need for collaboration with BTAC on the identification, management and protection of the Thalanyji people's cultural features of the environment that may be affected by the activity.
- 8) Ensure that the proposed spotter vessel with two trained and experienced marine fauna observers on board is utilised at all times during the survey to ensure effective detection of blue whales.

Signed



31 July 2023

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Attachment A – Legislative Framework

Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009

9 Submission of an environment plan

- (1) Before commencing an activity, a titleholders must submit an environment plan for the activity to the Regulator.

9AA Checking completeness of submitted environment plan

Within 5 business days after an environment plan is submitted to the Regulator under regulation 9, resubmitted in response to an invitation under regulation 9AC or resubmitted under subregulation 11C(2), the Regulator must decide provisionally whether the plan includes material apparently addressing all the provisions of Division 2.3 (Contents of an environment plan).

Note: The provisional decision is not a decision whether to accept the plan.

9AB Publishing environment plan and associated information

If the Regulator's provisional decision under regulation 9AA is that the environment plan includes material apparently addressing all the provisions of Division 2.3 (Contents of an environment plan), the Regulator must publish on the Regulator's website as soon as practicable:

- (a) the plan with the sensitive information part removed; and
- (b) the name of the titleholders who submitted the plan; and
- (c) a description of the activity or stage of the activity to which the plan relates; and
- (d) the location of the activity; and
- (e) a link or other reference to the place where the accepted offshore project proposal (if any) is published; and
- (f) details of the titleholders' nominated liaison person for the activity.

Note: If the plan is a seismic or exploratory drilling environment plan, the Regulator must also publish an invitation for public comment on the plan: see regulation 11B.

9A Further information

- (1) If a titleholders submits an environment plan, the Regulator may request the titleholders to provide further written information about any matter required by these Regulations to be included in an environment plan.
- (2) The request must:
 - (a) be in writing; and
 - (b) set out each matter for which information is requested; and

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- (c) specify a reasonable period within which the information is to be provided.
- (3) In providing information requested by the Regulator, the titleholders must resubmit to the Regulator the environment plan with the information incorporated, whether or not the titleholders also provides the information separately.
- (4) The Regulator must have regard to information that was requested by the Regulator, and provided by the titleholders in a resubmitted environment plan within the period specified or within a longer period agreed to by the Regulator.

10 Making decision on submitted environment plan

- (1) Within 30 days after the day described in subregulation (1A) for an environment plan submitted by a titleholders:
 - (a) if the Regulator is reasonably satisfied that the environment plan meets the criteria set out in regulation 10A, the Regulator must accept the plan; or
 - (b) if the Regulator is not reasonably satisfied that the environment plan meets the criteria set out in regulation 10A, the Regulator must give the titleholders notice in writing under subregulation (2); or
 - (c) if the Regulator is unable to make a decision on the environment plan within the 30 day period, the Regulator must give the titleholders notice in writing and set out a proposed timetable for consideration of the plan.
- (1A) For the purposes of subregulation (1), the day is:
 - (a) the day the Regulator publishes the plan (with the sensitive information part removed) under regulation 9AB; or
 - (b) if the environment plan is a seismic or exploratory drilling environment plan—the day the Regulator receives the documents under paragraph 11B(3)(b) and, if relevant, paragraph 11B(3)(c).

Note 1: Those paragraphs are about documents that must be given to the Regulator after the end of a 30-day period for public comment on a seismic or exploratory drilling environment plan. Regulation 11B requires the Regulator to consider certain public comments on a seismic or exploratory drilling environment plan in making a decision to take action under this regulation.

Note 2: A seismic or exploratory drilling environment plan is taken to have been withdrawn (so the Regulator need not act under this regulation in relation to it) if the Regulator does not receive the documents under paragraph 11B(3)(b) and, if relevant, paragraph 11B(3)(c): see subregulation 11B(7).

- (2) A notice to a titleholders under this subregulation must:
 - (a) state that the Regulator is not reasonably satisfied that the environment plan submitted by the titleholders meets the criteria set out in regulation 10A; and

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- (b) identify the criteria set out in regulation 10A about which the Regulator is not reasonably satisfied; and
 - (c) set a date by which the titleholders may resubmit the plan.
- (3) The date referred to in paragraph (2)(c) must give the titleholders a reasonable opportunity to modify and resubmit the plan.
- (4) Within 30 days after the titleholders has resubmitted the modified plan:
 - (a) if the Regulator is reasonably satisfied that the environment plan meets the criteria set out in regulation 10A, the Regulator must accept the plan; or
 - (b) if the Regulator is still not reasonably satisfied that the environment plan meets the criteria set out in regulation 10A, the Regulator must:
 - (i) give the titleholders a further notice under subregulation (2); or
 - (ii) refuse to accept the plan; or
 - (iii) act under subregulation (6); or
 - (c) if the Regulator is unable to make a decision on the environment plan within the 30 day period, the Regulator must give the titleholders notice in writing and set out a proposed timetable for consideration of the plan.
- (5) If the titleholders does not resubmit the plan by the date referred to in paragraph (2)(c), or a later date agreed to by the Regulator, the Regulator must:
 - (a) refuse to accept the plan; or
 - (b) act under subregulation (6).
- (6) For subparagraph (4)(b)(iii) and paragraph (5)(b), the Regulator may do either or both of the following:
 - (a) accept the plan in part for a particular stage of the activity;
 - (b) accept the plan subject to limitations or conditions applying to operations for the activity.
- (7) A decision by the Regulator to accept, or refuse to accept, an environment plan is not invalid only because the Regulator did not comply with the 30 day period in subregulation (1) or (4).

10A Criteria for acceptance of environment plan

For regulation 10, the criteria for acceptance of an environment plan are that the plan:

- (a) is appropriate for the nature and scale of the activity; and
- (b) demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable; and

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- (c) demonstrates that the environmental impacts and risks of the activity will be of an acceptable level; and
- (d) provides for appropriate environmental performance outcomes, Environmental performance standards and measurement criteria; and
- (e) includes an appropriate implementation strategy and monitoring, recording and reporting arrangements; and
- (f) does not involve the activity or part of the activity, other than arrangements for Environment monitoring or for responding to an emergency, being undertaken in any part of a declared World Heritage property within the meaning of the EPBC Act; and
- (g) demonstrates that:
 - (i) the titleholders has carried out the consultations required by Division 2.2A; and
 - (ii) the measures (if any) that the titleholders has adopted, or proposes to adopt, because of the consultations are appropriate; and
- (h) complies with the Act and the regulations.

11A Consultation with relevant authorities, persons and organisations, etc

- (1) In the course of preparing an environment plan, or a revision of an environment plan, a titleholders must consult each of the following (a relevant person):
 - (a) each Department or agency of the Commonwealth to which the activities to be carried out under the environment plan, or the revision of the environment plan, may be relevant;
 - (b) each Department or agency of a State or the Northern Territory to which the activities to be carried out under the environment plan, or the revision of the environment plan, may be relevant;
 - (c) the Department of the responsible State Minister, or the responsible Northern Territory Minister;
 - (d) a person or organisation whose functions, interests or activities may be affected by the activities to be carried out under the environment plan, or the revision of the environment plan;
 - (e) any other person or organisation that the titleholders considers relevant.
- (2) For the purpose of the consultation, the titleholders must give each relevant person sufficient information to allow the relevant person to make an informed assessment of the possible consequences of the activity on the functions, interests or activities of the relevant person.
- (3) The titleholders must allow a relevant person a reasonable period for the consultation.
- (4) The titleholders must tell each relevant person the titleholders consults that:
 - (a) the relevant person may request that particular information the relevant person provides in the consultation not be published; and

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- (b) information subject to such a request is not to be published under this Part.

Division 2.3—Contents of an environment plan

12 Contents of an environment plan

An environment plan for an activity must include the matters set out in regulations 13, 14, 15 and 16.

13 Environment assessment

Description of the activity

- (1) The environment plan must contain a comprehensive description of the activity including the following:
 - (a) the location or locations of the activity;
 - (b) general details of the construction and layout of any facility;
 - (c) an outline of the operational details of the activity (for example, seismic surveys, exploration drilling or production) and proposed timetables;
 - (d) any additional information relevant to consideration of Environmental impacts and risks of the activity.

Note: An environment plan will not be capable of being accepted by the Regulator if an activity or part of the activity, other than arrangements for Environment monitoring or for responding to an emergency, will be undertaken in any part of a declared World Heritage property—see regulation 10A.

Description of the environment

- (2) The environment plan must:
 - (a) describe the existing environment that may be affected by the activity; and
 - (b) include details of the particular relevant values and sensitivities (if any) of that environment.

Note: The definition of environment in regulation 4 includes its social, economic and cultural features.

- (3) Without limiting paragraph (2)(b), particular relevant values and sensitivities may include any of the following:
 - (a) the world heritage values of a declared World Heritage property within the meaning of the EPBC Act;
 - (b) the national heritage values of a National Heritage place within the meaning of that Act;
 - (c) the ecological character of a declared Ramsar wetland within the meaning of that Act;

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- (d) the presence of a listed threatened species or listed threatened ecological community within the meaning of that Act;
- (e) the presence of a listed migratory species within the meaning of that Act;
- (f) any values and sensitivities that exist in, or in relation to, part or all of:
 - (i) a Commonwealth marine area within the meaning of that Act; or
 - (ii) Commonwealth land within the meaning of that Act.

Requirements

- (4) The environment plan must:
 - (a) describe the requirements, including legislative requirements, that apply to the activity and are relevant to the environmental management of the activity; and
 - (b) demonstrate how those requirements will be met.

Evaluation of Environmental impacts and risks

- (5) The environment plan must include:
 - (a) details of the environmental impacts and risks for the activity; and
 - (b) an evaluation of all the impacts and risks, appropriate to the nature and scale of each impact or risk; and
 - (c) details of the control measures that will be used to reduce the impacts and risks of the activity to as low as reasonably practicable and an acceptable level.
- (6) To avoid doubt, the evaluation mentioned in paragraph (5)(b) must evaluate all the environmental impacts and risks arising directly or indirectly from:
 - (a) all operations of the activity; and
 - (b) potential emergency conditions, whether resulting from accident or any other reason.

Environmental performance outcomes and standards

- (7) The environment plan must:
 - (a) set environmental performance standards for the control measures identified under paragraph (5)(c); and
 - (b) set out the environmental performance outcomes against which the performance of the titleholders in protecting the environment is to be measured; and
 - (c) include measurement criteria that the titleholders will use to determine whether each environmental performance outcome and environmental performance standard is being met.

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14 Implementation strategy for the environment plan

- (1) The environment plan must contain an implementation strategy for the activity in accordance with this regulation.
- (2) The implementation strategy must:
 - (a) state when the titleholders will report to the Regulator in relation to the titleholders' environmental performance for the activity; and
 - (b) provide that the interval between reports will not be more than 1 year.

Note: Regulation 26C requires a titleholders to report on environmental performance in accordance with the timetable set out in the environment plan.

- (3) The implementation strategy must contain a description of the Environment management system for the activity, including specific measures to be used to ensure that, for the duration of the activity:
 - (a) the environmental impacts and risks of the activity continue to be identified and reduced to a level that is as low as reasonably practicable; and
 - (b) control measures detailed in the environment plan are effective in reducing the environmental impacts and risks of the activity to as low as reasonably practicable and an acceptable level; and
 - (c) environmental performance outcomes and standards set out in the environment plan are being met.
- (4) The implementation strategy must establish a clear chain of command, setting out the roles and responsibilities of personnel in relation to the implementation, management and review of the environment plan, including during emergencies or potential emergencies.
- (5) The implementation strategy must include measures to ensure that each employee or contractor working on, or in connection with, the activity is aware of his or her responsibilities in relation to the environment plan, including during emergencies or potential emergencies, and has the appropriate competencies and training.
- (6) The implementation strategy must provide for sufficient monitoring, recording, audit, management of nonconformance and review of the titleholders' environmental performance and the implementation strategy to ensure that the environmental performance outcomes and standards in the environment plan are being met.
- (7) The implementation strategy must provide for sufficient monitoring of, and maintaining a quantitative record of, emissions and discharges (whether occurring during normal operations or otherwise), such that the record can be used to assess whether the Environmental performance outcomes and standards in the environment plan are being met.
- (8) The implementation strategy must contain an oil pollution emergency plan and provide for the updating of the plan.

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- (8AA) The oil pollution emergency plan must include adequate arrangements for responding to and monitoring oil pollution, including the following:
- (a) the control measures necessary for timely response to an emergency that results or may result in oil pollution;
 - (b) the arrangements and capability that will be in place, for the duration of the activity, to ensure timely implementation of the control measures, including arrangements for ongoing maintenance of response capability;
 - (c) the arrangements and capability that will be in place for monitoring the effectiveness of the control measures and ensuring that the environmental performance standards for the control measures are met;
 - (d) the arrangements and capability in place for monitoring oil pollution to inform response activities.
- (8A) The implementation strategy must include arrangements for testing the response arrangements in the oil pollution emergency plan that are appropriate to the response arrangements and to the nature and scale of the risk of oil pollution for the activity.
- (8B) The arrangements for testing the response arrangements must include:
- (a) a statement of the objectives of testing; and
 - (b) a proposed schedule of tests; and
 - (c) mechanisms to examine the effectiveness of response arrangements against the objectives of testing; and
 - (d) mechanisms to address recommendations arising from tests.
- (8C) The proposed schedule of tests must provide for the following:
- (a) testing the response arrangements when they are introduced;
 - (b) testing the response arrangements when they are significantly amended;
 - (c) testing the response arrangements not later than 12 months after the most recent test;
 - (d) if a new location for the activity is added to the environment plan after the response arrangements have been tested, and before the next test is conducted—testing the response arrangements in relation to the new location as soon as practicable after it is added to the plan;
 - (e) if a facility becomes operational after the response arrangements have been tested and before the next test is conducted—testing the response arrangements in relation to the facility when it becomes operational.
- (8D) The implementation strategy must provide for monitoring of impacts to the environment from oil pollution and response activities that:

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- (a) is appropriate to the nature and scale of the risk of environmental impacts for the activity; and
 - (b) is sufficient to inform any remediation activities.
- (8E) The implementation strategy must include information demonstrating that the response arrangements in the oil pollution emergency plan are consistent with the national system for oil pollution preparedness and response.
- (9) The implementation strategy must provide for appropriate consultation with:
- (a) relevant authorities of the Commonwealth, a State or Territory; and
 - (b) other relevant interested persons or organisations.
- (10) The implementation strategy must comply with the Act, the regulations and any other environmental legislation applying to the activity.

15 Details of titleholders and liaison person

- (1) The environment plan must include the following details for the titleholders:
- (a) name;
 - (b) business address;
 - (c) telephone number (if any);
 - (d) fax number (if any);
 - (e) email address (if any);
 - (f) if the titleholders is a body corporate that has an ACN (within the meaning of the Corporations Act 2001)—ACN.
- (2) The environment plan must also include the following details for the titleholders' nominated liaison person:
- (a) name;
 - (b) business address;
 - (c) telephone number (if any);
 - (d) fax number (if any);
 - (e) email address (if any).
- (3) The environment plan must include arrangements for notifying the Regulator of a change in the titleholders, a change in the titleholders' nominated liaison person or a change in the contact details for either the titleholders or the liaison person.

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16 Other information in the environment plan

The environment plan must contain the following:

- (a) a statement of the titleholders' corporate environmental policy;
- (b) a report on all consultations under regulation 11A of any relevant person by the titleholders, that contains:
 - (i) a summary of each response made by a relevant person; and
 - (ii) an assessment of the merits of any objection or claim about the adverse impact of each activity to which the environment plan relates; and
 - (iii) a statement of the titleholders' response, or proposed response, if any, to each objection or claim; and
 - (iv) a copy of the full text of any response by a relevant person;
- (c) details of all reportable incidents in relation to the proposed activity.

Environment Protection and Biodiversity Conservation Act 1999

3A Principles of ecologically sustainable development

The following principles are principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, Environment, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent Environment degradation;
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- (e) improved valuation, pricing and incentive mechanisms should be promoted.

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Attachment B

- a. The EP, comprising:
 - i. Scarborough 4D B1 Marine Seismic Survey Environment Plan (Revision 7, June 2023);
 - ii. Scarborough 4D Baseline (B1) Marine Seismic Survey (MSS) Oil Pollution First Strike Plan (Revision 0, August 2021); and
 - iii. Sensitive Stakeholder Information Report – Scarborough 4D B1 Marine Seismic Survey Environment Plan (Revision 7, June 2023).
 - iv. Material referenced in the EP that was important evidence for making the case that impacts and risks will be managed to ALARP and acceptable levels.
- b. The Program
- c. Policies and guidelines:
 - i. NOPSEMA Assessment policy (N-04000-PL0050);
 - ii. NOPSEMA Environment plan assessment policy (N-04750-PL1347);
 - iii. NOPSEMA Financial assurance for petroleum titles policy (N-04730-PL1780);
 - iv. NOPSEMA Environment plan decision making guideline (N-04750-GL1721);
 - v. NOPSEMA Financial assurance for petroleum titles guideline (N-04730-GL1381);
 - vi. NOPSEMA Consultation with Commonwealth agencies with responsibilities in the marine area guideline (N-06800-GL1887);
 - vii. NOPSEMA Consultation in the course of preparing an environment plan (N-04750-GL2086);
 - viii. Department of the Environment, Water, Heritage and the Arts, Significant Impact Guidelines 1.1 – Matters of National Environment Significance, EPBC Act Policy Statement (2013);
 - ix. Department of Agriculture, Water, and the Environment, 'Indirect consequences' of an action: section 572E of the EPBC Act (2013); and
 - x. Department of the Environment, Water, Heritage and the Arts, EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales: Industry Guidelines (September 2008);
- d. Guidance:
 - i. NOPSEMA Environment plan content requirements guidance note (N-04750-GN1344);
 - ii. NOPSEMA Petroleum activities and Australian Marine Parks guidance note (N-04750-GN1785);
 - iii. NOPSEMA Oil pollution risk management guidance note (N-04750-GN1488);
 - iv. NOPSEMA Operational and scientific monitoring programs information paper (N-04750-IP1349);

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- v. NOPSEMA Acoustic impact evaluation and management information paper (N-04750-IP1765);
 - vi. Department of the Environment, Engage Early – Guidance for proponents on best practice Indigenous engagement for Environment assessments under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (February 2016)
 - vii. The Interim Engaging with First Nations People and Communities on Assessments and Approvals under Environment Protection and Biodiversity Conservation Act 1999 (interim guidance) (2023);
- e. Procedures:
- i. NOPSEMA Environment plan assessment standard operating procedure (N-04750-SOP1369).
- f. Other relevant documents and records:
- i. relevant plans of management, recovery plans, conservation advice and other guidance for matters protected under the EPBC Act including:
 - A. Commonwealth of Australia, Conservation Management Plan for the Blue Whale 2015–2025 including Guidance on Key Terms within the Blue Whale Conservation Management Plan (2021) and Blue Whale Conservation Management Plan – FAQs published by NOPSEMA.
 - B. Commonwealth of Australia, Director of National Parks, Australian Marine Parks - North-west Marine Parks Network Management Plan 2018.
 - C. Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North-west Marine Region; and
 - ii. Aboriginal cultural heritage advice in relation to the proposed Scarborough 4D B1 Marine Seismic Survey, Report prepared by Extent Heritage Pty Ltd for NOPSEMA, 18 October 2022
 - iii. the scientific literature cited in the EP
 - iv. Findings and Conclusions of the assessment team as recorded in NOPSEMA's Regulatory Management System
- g. Relevant persons correspondence received post-submission of the EP