

Acceptance of Barossa Development Drilling and Completions Environment Plan

Document No: A1036721

Date: 4/01/2024

1. On 15 December 2023, I, [REDACTED] Environment Manager – Drilling and Spill Risk 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) (**Environment Regulations**), to accept, the Barossa Development Drilling and Completions Environment Plan (Document No: BAD-200-0003, Revision 6, dated 15 November 2023) (**EP**). The EP was submitted by Santos NA Barossa Pty Ltd (ACN 109 974 932) (**titleholder**), to enable the titleholder to undertake development drilling and completions activities within Commonwealth Petroleum Production Licence NT/L1 (**activity**).
2. The reasons for my decision are set out below. All references to a regulation (**reg**) are to the Environment Regulations unless otherwise stated.

Legislative framework

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

Background

4. On 06 October 2021, the titleholder submitted the EP (Document No: BAD-200-0003, Revision 1, dated 05 October 2021) to NOPSEMA in accordance with reg 9.
5. On 15 October 2021, the EP (Document No: BAD-200-0003, Revision 1, dated 05 October 2021) was found to be complete for assessment in accordance with reg 9AA and published by NOPSEMA on NOPSEMA's website in accordance with reg 9AB.
6. On 29 November 2021 and 24 January 2022, NOPSEMA made requests for further information, pursuant to reg 9A. These requests for further information identified areas where further information was necessary about matters required by the regulations before a decision could be made against the reg 10A criteria.
7. On 14 March 2022, I made a decision under reg 10 to accept then Revision 3 of the EP. However, on 21 September 2022, this decision was set aside by the Federal Court on the basis that NOPSEMA could not have been lawfully satisfied that the EP demonstrated that "each and every relevant person had been consulted" in the course of preparing the plan as required by Division 2.2A of the Environment

Regulations and that the measures (if any) that the titleholder had adopted, or proposes to adopt, because of the consultations are appropriate.¹

8. On 6 October 2022, 12 November 2022 and 6 November 2023, NOPSEMA made additional requests for further information, pursuant to reg 9A. These requests for further information identified areas where further information was necessary about matters required by the regulations before a decision could be made against the reg 10A criteria.
9. On 25 August 2023, NOPSEMA issued a not reasonably satisfied notice requiring the titleholder to modify and resubmit the EP, pursuant to reg 10. The notice identified areas where NOPSEMA was not reasonably satisfied the EP met the criteria in reg 10A and set a date by which the titleholder may resubmit the plan.
10. In response to these requests, the titleholder re-submitted the EP on five occasions, incorporating additional information pursuant to reg 9A(3) and modifications pursuant to reg 10. The EP that is the subject of this decision was received on 15 November 2023, and is identified as Document No: BAD-200-0003, Revision 6, dated 15 November 2023.

Materials

11. The materials which NOPSEMA considered in making this decision are set out in **Attachment C**. Where relevant to the decision, the materials are identified in the reasons below.

Decision overview

12. The issue before me was whether the Environment Plan (EP) should be accepted pursuant to reg 10 of the Environment Regulations. In making this decision, I have taken into account and considered the advice and recommendations from NOPSEMA's assessment team, and the reasons for judgment in the *Tipakalippa* proceedings.
13. Prior to considering whether I was reasonably satisfied that the EP met the criteria in reg 10A, I considered whether the EP complied with Division 2.3, which sets out the matters which must be included in the EP.
14. I was satisfied that the EP contained the matters in Division 2.3. My reasons are set out at [19] – [39] below.
15. In accordance with reg 5G(2) of the Regulations, I must not accept an EP unless I am reasonably satisfied that the titleholder is compliant with subsection 571(2) of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (the OPGGS Act) in relation to the petroleum activity, and the compliance is in a form that is acceptable to NOPSEMA. On review of the titleholder's financial assurance declaration and confirmation forms, I was reasonably satisfied that the titleholder had demonstrated financial assurance in accordance with the requirements of reg 5G(2).
16. I then considered whether I was reasonably satisfied that the EP meets each of the criteria in reg 10A.

¹ See *Tipakalippa v NOPSEMA (No 2)* [2022] FCA 1121; (2022) 406 ALR 41; see also *Santos NA Barossa Pty Ltd v Tipakalippa* [2022] FCAFC 193; (2022) 296 FCR 124.

17. 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:
- give the titleholder the opportunity to resubmit the EP; or
 - refuse to accept the EP; or
 - accept the EP in part for a particular stage of the activity; or
 - accept the EP subject to limitations or conditions applying to operations for the activity.
18. I considered that the criteria in reg 10A were all satisfied. My reasons are set out at [40] – [140] below.

Findings

Does the Environment Plan comply with Division 2.3?

19. Regulation 12 of the Environment Regulations requires that an EP must include the matters set out in regulations 13, 14, 15 and 16. As I was satisfied that the EP met regulations 13-16 (for the reasons set out individually below), I was satisfied that reg 12 was met and the EP complied with Division 2.3.

Environmental assessment: regulation 13

Regulation 13(1) – Description of the petroleum activity

20. Section 2 of the EP is titled 'Activity description' and included the following information:
- the description of the activity, which is the drilling and completion of up to eight development wells within the area covered by Commonwealth Petroleum Production Licence NT/L1. The activity also includes the installation of a subsea vertical (Christmas) tree upon each well and the ongoing management (inspection, monitoring, maintenance and repair) of the complete wells (noting that future commissioning and production phases must be provided for in separate EPs). The Operational Area is located approximately 131 km from the nearest shoreline (Tiwi Islands, Northern Territory) and approximately 285 km north-northwest of Darwin. Water depths in the Operational Area range from approximately 204 m to 376 m;
 - the location of the petroleum activity is clearly set out in the EP by high quality contextual maps containing the relevant petroleum production licence, operational area and temporary petroleum safety zone (Section 2.1) and coordinates of the approximate location of each development well (Table 2.2);
 - the activity will be undertaken using a moored mobile offshore drilling unit (**MODU**), a light well intervention vessel, which may be used for well intervention if required and installation of subsea vertical (Christmas) trees, and a support vessel(s) used to re-supply and for other logistical and operational activities, with representative vessel specifications for each type of vessel provided in the EP (Section 2.2);
 - information considered relevant for the consideration of environmental impacts and risks of the petroleum activity. Key aspects of the description included the following:
 - timing and duration of the petroleum activity, including a description of the stages of the activity, which may occur any time between 2023 and 2028, with the estimated duration of

drilling being approximately 90 days per well, and the installation of subsea infrastructure expected to have a total duration of approximately 13 days at each drill centre (three drill centres). Continuous operations are planned during drilling and completion activities (24 hours per day, seven days per week). Vessel-based activities (such as ROV operations) for ongoing well management could occur any time following well completion for a short duration (days) per well;

- ii. general details of the construction and layout of the facility and infrastructure involved in the petroleum activity, including the MODU, support vessels, helicopters, wells and subsea equipment (Section 2.2);
- iii. a description of the target hydrocarbon (Barossa condensate) and its physical/chemical characteristics (Section 7.5.3);
- iv. planned emissions and discharges from the petroleum activity (Section 6), including noise emissions, light emissions, atmospheric emissions, seabed and benthic habitat disturbance, operational discharges (from the MODU and project vessels), and drilling and completions discharges, as well as interactions with other marine users; and
- v. the EP also evaluates unplanned release of solid objects, interactions with marine fauna, introduction of marine species, as well as unplanned chemical and hydrocarbon discharges (Section 7), ranging from a marine diesel oil (**MDO**) spill in a vessel collision scenario to a condensate release in a loss of well control (**LOWC**) scenario.

21. Based on the findings above, I was reasonably satisfied that the EP contained a comprehensive description of the petroleum activity that met the requirements of reg 13(1).

Regulation 13(2) and (3) – Description of the environment that may be affected

22. Regulations 13(2) and (3) require that the EP describe the existing environment that may be affected by the activity, including the relevant values and sensitivities (if any) of that environment. The EP addressed each of these matters in Section 3 and Appendix C of the EP. In particular, the EP described and included the following information:

- a. a thorough description of the physical and biological environment, and details of relevant values and sensitivities, that may be affected by the petroleum activity, including under emergency conditions is defined by an Operational Area and a broader environment that may be affected (**EMBA**) defined by the maximum extent of possible contact with hydrocarbons (within the depth range between 0-10 m) at low concentrations (Table 7.10; Figure 3-1), based on stochastic modelling of the worst-case spill scenario;
- b. 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* (**EPBC Act**);
- c. values and sensitivities within the Operational Area have been identified and described, including:
 - i. that the Operational Area does not overlap with any Australian Marine Parks (**AMPs**), State marine parks, management areas and reserves, Commonwealth heritage places, Wetlands of international or national importance, or any biologically important areas (**BIAs**) for EPBC Act listed species;

- ii. the Operational Area intersects the key ecological feature (**KEF**) of the Shelf Break and Slope of the Arafura Shelf, as defined in the North Marine Bioregional Plan, which is a unique seafloor feature with ecological properties of regional significance;
- iii. presence of listed threatened species, listed threatened ecological communities, and listed migratory species under the EPBC Act, including 10 threatened and/or migratory fish, sharks and ray species; six threatened and/or migratory marine reptile species; eight threatened and/or migratory marine mammal species; eleven threatened and/or migratory shorebirds and seabird species; and no listed threatened ecological communities; and
- iv. social, economic and cultural features of the environment within the Operational Area have been identified and described (where identified) relating to cultural heritage, commercial fisheries, subsistence fisheries, tourism and recreation, commercial shipping, defence and oil and gas activities, specifically:
 - A. four Commonwealth-managed fisheries were identified as overlapping with the Operational Area, including the Northern Prawn Fishery, Southern Bluefin Tuna Fishery, Western Skipjack Tuna Fishery and Western Tuna and Billfish Fishery. The Northern Prawn Fishery was identified as having a potential for interaction within the Operational Area;
 - B. five NT-managed fisheries were identified as overlapping with the Operational Area, including the Aquarium Fishery, Offshore Net and Line Fishery, Timor Reef Fishery, Spanish Mackerel Fishery and Pearl Oyster Fishery. The Timor Reef Fishery and Offshore Net and Line Fishery were identified as having a potential for interaction with the Operational Area;
 - C. no subsistence Indonesian fishing activities are expected to be presented within the Operational Area;
 - D. tourism and recreation activities (including charter boat activities) are not expected to be present within the Operational Area;
 - E. no other oil and gas developments or facilities are located within the Operational Area. In addition, no designated commercial shipping fairways are located within the Operational Area;
 - F. there are no designated military/defence exercise areas that intersect with the Operational Area; and
 - G. no Native Title claims or determinations, or Indigenous Land Use Agreements (**ILUAs**) were identified within the Operational Area. In addition, no Indigenous archaeology was identified within the Operational Area (Section 3.2.8);
- d. values and sensitivities within the EMBA, have been identified and described, including:
 - i. AMPs, specifically the Oceanic Shoals AMP, Arafura AMP, Ashmore Reef AMP and Cartier Island AMP. The Oceanic Shoals AMP is the closest AMP to the activity, located 33 km from the Operational Area;
 - ii. State marine parks, specifically the Scott Reef Nature Reserve, located 1,004 km from the Operational Area;
 - iii. wetlands of international importance, specifically the Ashmore Reef Ramar Site, located 796 km from the Operational Area;

- iv. KEFs of the EMBA, include the Ancient Coastline at 125 m Depth Contour, Ashmore Reef and Cartier Island and Surrounding Commonwealth Waters, Continental Slope Demersal Fish Communities, Carbonate Bank and Terrace System of the Sahul Shelf, Seringapatam Reef and Commonwealth Waters in the Scott Reef Complex, Carbonate Bank and Terrace System of the Van Diemen Rise, Pinnacles of the Bonaparte Basin, Shelf Break and Slope of the Arafura Shelf and Tributary Canyons of the Arafura Depression;
- v. BIAs for EPBC Act listed species, including the foraging BIA for the whale shark, migration and foraging BIAs for the pygmy blue whale, foraging, breeding, nursing and calving BIAs for the dugong, foraging BIA for the loggerhead turtle, nesting, foraging, internesting , internesting buffer and mating BIAs for the green turtle, nesting, internesting, internesting buffer and foraging BIAs for the hawksbill turtle, internesting and foraging BIAs for the flatback turtle, foraging BIA for the olive ridley turtle, and breeding BIAs for various seabirds;
- vi. presence of listed threatened species, listed threatened ecological communities, and listed migratory species under the EPBC Act, including 14 threatened and/or migratory fish, sharks and ray species, nine threatened and/or migratory marine reptile species, 12 threatened and/or migratory marine mammal species, 34 threatened and/or migratory shorebirds and seabird species and no listed threatened ecological communities; and
- vii. social, economic and cultural features of the EMBA have been identified and described relating to cultural heritage, subsidence fisheries, tourism and recreation, commercial shipping, oil and gas and defence activities, specifically:
 - A. five Commonwealth-managed fisheries were identified as overlapping with the EMBA, including the Northern Prawn Fishery, Southern Bluefin Tuna Fishery, Western Skipjack Tuna Fishery, Western Tuna and Billfish Fishery and North-West Slope Trawl Fishery (Table 3.9). The North West Slope Trawl Fishery and Northern Prawn Fishery were identified as having a potential for interaction within the EMBA;
 - B. eight NT-managed fisheries were identified as overlapping with the EMBA, including Coastal Line Fishery, Aquarium Fishery, Demersal Fishery, Offshore Net and Line Fishery, Timor Reef Fishery, Spanish Mackerel Fishery, Small Pelagic Development Fishery and Pearl Oyster Fishery (Table 3.9). All of these fisheries were identified as having a potential for interaction within the EMBA;
 - C. two West Australian-managed fisheries were identified as overlapping the EMBA, including the Mackerel Managed Fishery and Northern Demersal Scalefish Fishery (Table 3.9);
 - D. subsidence Indonesian fishing may be present within the EMBA;
 - E. tourism and recreation activities (including charter boat activities) may be present within the EMBA;
 - F. the Santos-operated Bayu-Undan platform is located within the EMBA, approximately 409 km to the south-west of the Operational Area;
 - G. the EMBA intersects the North Australian Exercise Area, a designated Department of Defence practice area;
 - H. a number of commercial shipping fairways intersect the EMBA; and

- i. First Nations people's cultural features in the EMBA have been identified and described (Section 3.2.8), both tangible and intangible aspects, including information about First Nation cultural beliefs and connection with sea country, within and adjacent to the environment that may be affected by the Activity. No Native Title claims or determinations, or ILUAs were identified within the EMBA. In addition, no Indigenous archaeology was identified within the EMBA.

23. Based on the findings above, I was reasonably satisfied that the EP met the requirements in regulation 13(2) and (3).

Regulation 13(4) – Requirements

24. I noted that the EP provided a detailed table at Appendix B identifying various Commonwealth, State and Territory legislative requirements that apply to the activity. In addition, various parts of the EP, in particular Section 6 and Section 7 provide descriptions of the legislative requirements that apply to the activity and how they are relevant to the environmental management of the activity.

25. I was therefore reasonably satisfied that the EP met requirements of regulation 13(4).

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

26. Section 6 and Section 7 of the EP detailed the environmental impacts and risks, including those arising from potential emergency conditions whether resulting from accident or any other reason, for the petroleum activity. The details of the environmental impacts and risks associated with receptors such as threatened/migratory/local fauna, physical environment/habitat, threatened ecological communities, protected areas, socio-economic receptors, and cultural features for;

a. planned activities such as:

- i. noise emissions, light emissions, atmospheric emissions, seabed and benthic habitat disturbance, interaction with other marine users, operational discharges, drilling and completions discharges and contingency spill response operations; and

b. unplanned events such as:

- i. release of solid objects, introduction of invasive marine species, marine fauna interaction, non-hydrocarbon and chemical release, minor hydrocarbon release, hydrocarbon spill (condensate and MDO).

27. The EP included 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 5 and includes assigning a consequence rating (defined in Table 5.2) for all impacts and risks and a likelihood rating for unplanned events (defined in Table 5.3), which together were used to categorise planned and unplanned activities into a rating for the acceptability of the impact or risk (matrix provided in Table 5.4). For impacts to cultural features, in the form of impacts to marine species that are either a cultural food source or are considered culturally significant to First Nations people, the titleholder assessed impacts with reference to the consequence assessment for threatened/migratory/local fauna. Where cultural features are linked to a specific place, the titleholder assessed impacts with reference to the consequence assessment for physical environment, threatened ecological communities or protected areas, as applicable. Where concerns were raised by individuals

about cultural and spiritual beliefs that do not link to a specific location or place, the titleholder evaluated impact and risk acceptability with consideration for assessment of impacts from analogous activities (e.g., historical drilling, trawl fishing activity, industrial shipping) and considered culturally appropriate measures in response to concerns raised by individuals (Section 5.4).

28. A description was provided in Section 5.5 about how the titleholder demonstrates that the impacts and risks will be managed to as low as reasonably practicable (**ALARP**). The outcome of the process for the impacts and risks identified in Table 6-1 and Table 7-1, with the impacts and risks generated by the activity being considered to be 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 and Section 7 of the EP;
29. The EP included details of the control measures that will be used to reduce the impacts and risks of the petroleum activity to ALARP and an acceptable level (Section 6 and Section 7). Control measures have been justified through evaluation considering additional, alternative or improved controls.
30. The evaluation addressed matters of national environmental significance (**MNES**) protected under the EPBC Act, including World Heritage properties, National Heritage properties, *Ramsar* wetlands, listed threatened species and communities, listed migratory species, Commonwealth marine areas, and the Great Barrier Reef Marine Park. The other MNES protected under the EPBC Act are not applicable to the proposed petroleum activity, including nuclear actions and water resources affected by coal seam gas development and large coal mining development.
31. The EP presented facts and evidence in support of the evaluations presented, which included, but is not limited to, the following:
 - a. In relation to noise emissions:
 - i. the EP evaluates the impacts of underwater noise emissions associated with the petroleum activity, which are predominantly from the MODU, vessels, helicopters, flaring and geophysical equipment (associated with positioning equipment (transponders)) (Section 6.1). The EP references current, contemporary scientific literature and applicable modelling studies to inform the evaluation, as well as providing predictions of received levels of underwater noise in relation to biologically relevant thresholds; and
 - ii. a number of listed threatened and/or migratory cetacean species were identified as potentially occurring within the Operational Area, however no BIAs for cetaceans were identified to overlap with the Operational Area. The nearest BIA is the pygmy blue whale migration BIA, which is approximately 171 km from the Operational Area. The known distribution range for the pygmy blue whale is located 51 km from the Operational Area. Relevant recovery plans and conservation advice, including the Conservation Management Plan for the Blue Whale, have been considered in the noise impact evaluation;
 - b. In relation to atmospheric emissions:
 - i. the EP evaluated the impacts of greenhouse gas (**GHG**) emissions associated with the petroleum activity, including emissions generated by the MODU, vessels, helicopters and well flowback (flaring) (Section 6.3). The EP includes estimates of the total direct GHG emissions from the petroleum activity (Table 6.8) and evaluates the potential impacts of GHG emissions.

- The evaluation recognises the petroleum activities' contribution to the global scale of GHG emissions and acknowledges the cumulative nature of global GHG emissions; and
- ii. the EP clarifies that the extraction of Barossa gas for onshore processing is not included as part of the petroleum activity and therefore there are no GHG emissions associated with gas processing, consumption, or combustion which would be considered indirect consequences of the petroleum activity;
- c. In relation to unplanned release of hydrocarbons (condensate and MDO):
- i. the EP (Section 7.5) evaluates the credible hydrocarbon spill scenarios that could occur during the petroleum activity, including a vessel collision resulting in a rupture of a fuel tank, a release of hydrocarbons following a loss of well integrity, and a loss of containment during bunkering. The worst-case spill scenario identified would be a loss of well integrity resulting in a release of up to 129,000 m³ of Barossa condensate (Group 1) over a period of 90 days. The greatest fuel oil loss scenario was determined to be a 6-hour surface release of 250m³ of MDO, representing a loss of fuel tank integrity following a vessel collision. The maximum credible discharge volume from a bunkering incident was identified as an instantaneous release of 10 m³ of MDO;
 - ii. the EMBA was defined based on stochastic modelling of the worst-case spill scenario, a subsea release of 129,000 m³ of Barossa condensate over 90 days. Barossa condensate is a low viscosity, non-persistent hydrocarbon that rapidly spreads and thins if released on the sea surface. As a result, the volatile components of condensate slicks on the sea surface would be subject to rapid evaporation. The persistent (heavier) fraction of the condensate is said to make up some 7% of the fresh condensate and would be subject to other, slower, breakdown and decay processes. The fate of the condensate released subsurface would be subject to a different mix of weathering processes in comparison to floating condensate. Part of the subsurface released condensate would entrain or dissolve in the water column and would be transported away by prevailing ocean currents which may carry it in different directions than surface slicks which would be subject to a greater degree of wind-driven transport. Evaporation of subsurface-released condensate will depend greatly on the proportion that reaches the surface after rising through the water column, with any condensate that reaches the surface subject to spreading, thinning, atmospheric weathering, and wind- and current-driven transport;
 - iii. the EMBA is the potential spatial extent of surface, in-water, and shoreline accumulation hydrocarbons at low concentrations (Table 7.10; Figure 3-1) and reflects the range of socio-economic considerations for spill response planning and scientific monitoring. The EMBA has been developed based on multiple weather and metocean conditions, therefore conservatively covers a much larger area than the area that is likely to be affected during any single spill event. That is because the EMBA represents the total extent of all the locations where low hydrocarbon thresholds (Table 7.10) could be exceeded from all modelling runs (aggregate of 300 hypothetical spills);
 - iv. the EMBA presented in the EP identifies a surface hydrocarbon slick at or above 10 g/m² extending up to 162 km west from the release location during transitional seasons, up to 122 km west-south-west in summer months and up to 126 km west-south-west during winter. Entrained hydrocarbons at or above the threshold concentration of 100 ppb within 0 to 10 m water depth, may extend up to 484 km west of the release location (transitional and winter

seasons). Dissolved aromatic hydrocarbons at or above the 50 ppb threshold may extend up to 39 km east-northeast from the release location in summer, up to 43 km east-northeast in transitional seasons and up to 39 km west south-west in winter. Shoreline accumulated hydrocarbons above threshold concentration of 100 g/m² were not predicted to occur at any location in any season; and

- v. the outputs of the spill modelling were used to assess the environmental risk, by delineating which areas of the marine environment could be exposed to hydrocarbon levels exceeding hydrocarbon threshold concentrations (Table 7.10). A description was provided of the physical and chemical pathways and potential impacts of exposure to receptors in the event of a hydrocarbon spill (Section 7.5).

d. In relation to cultural feature of the environment:

- i. each impact and risk assessment in Section 6 and Section 7 of the EP, adequately evaluates the potential for the activity to directly or indirectly affect First Nations cultural features of the environment, including, but not limited to:
 - A. cultural fishing and hunting activities;
 - B. culturally significant marine species;
 - C. culturally significant sites; and
 - D. connection to sea country.
- ii. the evaluation of impacts and risks to cultural features has been informed by information that the titleholder gathered from First Nations relevant persons through the consultation process in preparation of the EP. This included feedback provided from First Nations relevant persons in relation to the identification of cultural features that may be present in the EMBA, such as species that may be of cultural significance to First Nations people (i.e., marine turtles, whales, fish, dugongs).

32. Based on the findings above, I was reasonably satisfied that the EP met the requirements of regulation 13(5) and (6).

Regulation 13(7) – Environmental performance outcomes and standards

33. I considered the environmental performance outcomes (EPOs), environmental performance standards (EPSs) and measurement criteria provided in Section 6 and Section 7 of the EP and the OPEP and was satisfied that the:

- a. EPOs have been set which define performance for the management of the environmental aspects of the petroleum activity to ensure that environmental impacts and risks will be of an acceptable level. For example:
 - i. No significant impacts to other marine users (EPO-01).
 - ii. No loss of containment of hydrocarbon to the marine environment (EPO-03).
 - iii. No unplanned objects, emissions or discharges to sea or air (EPO-04).
 - iv. No injury or mortality to EPBC Act listed marine fauna (EPO-05);
 - v. No significant changes to air, sediment and water quality (EPO-06); and

- vi. No significant impacts to cultural features from the activity (EPO-09);
 - b. EPSs have been set for control measures identified as being necessary to reduce the environmental impacts and risks of the petroleum activity to ALARP and acceptable levels. For example:
 - i. Vessel(s) comply with Santos' Protected Marine Fauna Interaction and Sighting Procedure (EA-91-II- 00003) which ensures compliance with Part 8 of Environment Protection and Biodiversity Regulations 2000 which includes controls for minimising the risk of collision with marine fauna (BAC-CM-001-EPS-01).
 - ii. Intermediate fuel oil or heavy fuel oil will not be used during the activity (BAD-CM-020-EPS-01).
 - iii. Santos will complete activity pre-commencement stakeholder notifications as per Table 8.4 of the EP (BAD-CM-022-EPS-01).
 - iv. The contaminant limit concentrations in barite used for the drilling meets the standards of:
 - mercury (Hg) – 1 mg/kg dry weight in stock barite; and
 - cadmium (Cd) – 3 mg/kg dry weight in stock barite (BAD-CM-031-EPS-01);
 - v. High efficiency burner heads and a specialist noise silenced flare will be utilised during well flowback to ensure effective flaring of hydrocarbons (BAD-CM-033-EPS-03).
 - vi. Personnel are prohibited from recreational fishing activities on MODU or vessels (BAD-CM-035-EPS-01).
 - vii. The maximum volume of MGO/MDO stored in a single tank shall not exceed 250m³ (BAD-CM-048-EPS-01).
 - viii. Cultural training completed by all site-based workforce (Santos employees and contractors) by end of their first rotation offshore or first rotation on the MODU; and every 12 months thereafter; and cultural heritage monitors to provide an introduction to the activity to the seas and any First Nations spiritual beings at commencement of drilling operations (BAD-CM-049).
 - ix. Monitoring of support vessel fuel consumption and identification of fuel use efficiency opportunities (BAD-CM-050-EPS-01).
 - c. measurement criteria provided will allow the titleholder to determine whether each EPO and EPS is being met for the duration of the petroleum activity. For example:
 - i. Completed operational reports demonstrating that only approved drilling chemicals have been used.
 - ii. Current international air pollution prevention certificate.
 - iii. Completed risk assessment demonstrating MODU, equipment and vessels are 'low risk'.
 - iv. Notice to Mariners placed with Australian Hydrographic Office outlining Petroleum Safety Zone and time frames of the activity.
 - v. Relief well capability register confirms MODU availability for the duration of each campaign.
34. Based on the findings above, I was reasonably satisfied that the EP met the requirements of regulation 13(7).

Implementation strategy for the EP: regulation 14

35. In relation to the requirements in reg 14 regarding the implementation strategy, the EP includes:

- a. an implementation strategy (Section 8 of the EP) for the activity in accordance with regulation 14 of the Environment Regulations (reg 14(1));
- b. the timing for when the titleholder will report to NOPSEMA in relation to the titleholder's environmental performance for the activity, with the interval between reports not being more than one year. Section 8.7 outlines the routine reporting obligations to NOPSEMA, including annual environmental performance reporting (reg 14(2));
- c. a description of the environmental management system (EMS) for the activity in Sections 8.1 of the EP, including specific measures to be used to ensure that, for the duration of the activity, the environmental impacts and risks of the activity continue to be identified and reduced to a level that is ALARP, control measures described in the EP are effective in reducing the environmental impacts and risks of the activity to ALARP and an acceptable level, and EPOs and EPSs set out in the EP are being met. The EP review process and management of change process are described in Section 8.8.3 and Section 8.8.2, respectively (reg 14(3));
- d. establishment of a clear chain of command, setting out the roles and responsibilities of personnel in relation to the implementation, management and review of the EP, including during emergencies or potential emergencies. Section 8.3 outlines the organisational structure for the petroleum activity and the roles and responsibilities of key project team members. The chain of command and roles and responsibilities of key personnel involved in spill preparation and response are defined in the OPEP (reg 14(4));
- e. 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 EP, including during emergencies or potential emergencies, and has the appropriate competencies and training). Section 8.4 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. The OPEP defines the emergency response training and minimum competency levels of personnel with responsibilities for emergency response, and defines the Source Control IMT structure and capability requirements (reg 14(5));
- f. provision for sufficient monitoring, recording, audit, management of non-conformance and review of the titleholder's environmental performance and the implementation strategy to ensure that the EPOs and EPSs in the EP are being met. In particular, Section 8.9 outline the process for audits and inspections, and management of non-conformances (reg 14(6));
- g. 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 EP are being met. In particular, Table 8.6 outlines the approach to monitoring and record keeping for emissions and discharges (reg 14(7));
- h. an OPEP with provision for the updating of the plan (reg 14(8));
- i. the OPEP outlines appropriate 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 (including, for example, monitor and evaluate, source control for a vessel spill, source control for a loss of well containment and oiled wildlife response);
 - 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, WOMP, Oil Pollution Emergency Plan, Source Control Emergency Response Plan (**SCERP**), Australian Marine Oil Spill Centre (**AMOSC**) membership, Oil Spill Response Limited (**OSRL**) membership, Wild Well Control (**WWC**) membership, emergency response vessel providers master services agreements, aviation services master services agreement, response personnel through labour hire contract services agreements, oil spill trajectory modelling contract, tracking buoy service provider contract, satellite imagery service provider contract, Operational and Scientific Monitoring Plan (**OSMP**) service provider contract, signatory to the Australian Petroleum Production & Exploration Association (**APPEA**) Memorandum of Understanding (**MoU**) for well services, agreements with remotely operated vehicle (**ROV**) providers and monitoring availability of larger vessels through ship brokers;
 - 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 (Scientific Monitoring Team and OSMP service providers) (reg 14(8AA));
- j. 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 5.5 of the OPEP provides details of the emergency and oil spill response testing and exercises, including specific details on the testing of the primary response arrangements for source control (reg 14(8A));
- k. the arrangements for testing the response arrangements, including a description 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 (Section 5.5 of the OPEP) (reg 14(8B));
- l. the OPEP describes a system for managing the schedule of tests for response arrangements and capability (Section 5.5). Examples of the testing provisions include, but not limited to:
- i. source control - testing access availability to relief well drilling MODUs monthly during the drilling campaign;
 - ii. source control - testing access to source control emergency response personnel annually during the drilling campaign;
 - iii. operational monitoring – testing access to monitoring vessels annually; and
 - iv. operational monitoring – testing access to aerial surveillance aircraft and trained observers annually (regulation 14(8C));
- m. the OPEP 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 (reg 14(8D));

- n. the arrangements in the OPEP are consistent with the national system for oil pollution preparedness and response (reg 14(8E));
- o. provision 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 (Section 8.10). In particular, Section 8.10.1 of the EP outlines the arrangements for ongoing consultation and engagement with First Nations groups (reg 14(9)); and
- p. the implementation strategy complies with the Act, the regulations and any other environmental legislation applying to the activity (outlined in Section 8) (reg 14(10)).

36. Based on the findings above, I am reasonably satisfied that the EP met the requirements of reg 14.

Details of titleholder and liaison person: regulation 15

37. I considered the EP (particularly Section 1.5) and found that it includes:

- a. details for the titleholder, including name, business address, contact details and Australian Company Number or ACN (within the meaning of the Corporations Act 2001) (reg 15(1));
- b. details for the titleholder's nominated liaison person including name, business address and contact details (reg 15(2)); and
- c. arrangements for notifying NOPSEMA of a change in titleholder, a change in the titleholder's nominated liaison person or a change in the contact details for either the titleholder or the liaison person in Section 1.5.2 (reg 15(3)).

38. Based on the findings above, I am reasonably satisfied that the EP met the requirements of reg 15.

Other information in the EP: regulation 16

39. I considered that the EP met reg 16 as it contains:

- a. the titleholder's "Environment, Health and Safety Policy" (Appendix A);
- b. the information required under reg 16(b), specifically a report on all consultations under regulation 11A of any relevant person by the titleholder in Section 4, Appendix E, Appendix F, Appendix I and Appendix J of the EP and the Barossa Development Drilling and Completions Sensitive Information Report (Sensitive Information Report), including:
 - i. a summary of each response made by a relevant person (see Table 4.13 and Appendix E). The titleholder has provided a summary of responses received from relevant persons, such that relevant claims or objections can be adequately identified;
 - ii. an assessment of the merits of any objection or claim raised during relevant persons consultation (see Table 4.13 and Appendix E). The titleholder has identified claims and objections raised by relevant persons and assessed the merit of each objection or claim about the adverse impact of the activity described in the EP. Where there was merit to relevant claims or objections regarding the adverse impact of the activity to which the EP relates, the titleholder has considered the claims against the content of the EP to ensure relevant management measures have been included (see Table 4.13 and Appendix E). The consultation has progressed to resolve objections and claims made by relevant persons as far as reasonably

- practicable. The titleholder's assessment of merit and all responses to objections and claims were reasonable and supported by evidence;
- iii. a statement of the titleholder's response, or proposed response, if any, to each objection or claim (see Table 4.13 and Appendix E). Where there has been a claim or objection identified, the titleholder has provided a response or proposed response to each objection or claim that has been raised;
 - iv. a copy of the full text of any response by a relevant person was included in the Sensitive Information Report; and
- c. details of any reportable incidents in relation to the proposed activity in Section 8.7.1 of the EP.

Should the Environment Plan be accepted?

40. Regulation 10 requires that when making my decision as to whether the EP should be accepted, refused or accepted in part or with conditions, I must consider the further information that the titleholder had provided under reg 9A(3). The information that I considered was contained in the various resubmitted EPs, which resulted in the EP.
41. Against this background (and having considered the materials at **Attachment C**), I made the following findings against each criterion.

The EP is appropriate to the nature and scale of the activity: regulation 10A(a)

42. I noted that Section 2 of the EP includes a description of the scope and bounds of the activity. The activity is described in sufficient detail to inform subsequent impact and risk assessment processes, including planned emissions and discharges, and potential unplanned discharges and releases resulting from emergency conditions. The EP provides more detail on the activity components with the greatest potential to generate impacts and risks to the environment.
43. I considered that Section 3 of the EP contained a thorough description of the environment, and appropriately considers relevant values and sensitivities (including matters protected under Part 3 of the EPBC Act). The description of the EMBA includes areas that may be affected by potential emergency conditions in the event of an oil pollution incident which is conservatively defined through stochastic modelling of the worst-case spill scenario. The level of detail included in the EP is appropriately scaled to the nature of the impacts and risks. A greater level of detail is included in the EP on the environment that may be affected by planned operations (Operational Area), compared with the broader environment that may be exposed to low levels of hydrocarbon (in the unlikely event of a worst-case hydrocarbon release). Specifically, the EP includes:
- a. a logical process that is applied to identify and describe the matters protected under Part 3 of the EPBC Act that may be present within the EMBA. The EP utilises relevant information to adequately inform and support the descriptions, such as information available on The Department of Climate Change, Energy, Environment and Water (**DCCEEW**) website such as plans of management, threat abatement plans, threatened species recovery plans and marine bioregional plans (Section 3 and Section 3.2.6.1); and
 - b. a description of the key physical, biological, social, economic, and cultural features, values and sensitivities of the environment of the Commonwealth marine area. In particular, the EP applies a

logical process to identify and describe the key physical, biological, social, economic, and cultural features, values and sensitives of the environment that overlap with the EMBA. The EP utilises relevant references and information sources to adequately inform and support the descriptions, such as contemporary peer reviewed scientific literature and other authoritative sources (Section 3).

- c. a description of First Nations cultural features and heritage values of the EMBA (Section 3.2.8), In particular:
 - i. the description in the EP includes consideration of both tangible and intangible aspects and is supported by multiple sources of relevant and suitable information. For example, the EP includes details of onshore native title claims, determinations and ILUAs made under the *Native Title Act 1993*, cultural values related information published in 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 EP also provided opportunities through relevant person consultation to inform the description of the potential for First Nations cultural features within the EMBA; and
 - ii. consultation with relevant persons has built on the knowledge of cultural features of the environment available through published literature. The cultural features raised by First Nations relevant persons during consultation for this activity are described in Section 3.2.8. The cultural features identified include, but are not limited to:
 - A. cultural fishing and hunting activities;
 - B. culturally significant marine species;
 - C. culturally significant sites; and
 - D. connection to sea country.

44. I also noted that a sufficiently robust method, consistent with internationally recognised standard ISO 31000:2018 Risk Management, has been applied in the EP for the identification and evaluation of environmental impacts and risks of the petroleum activity (Section 5.2). The detail and rigour applied to the impact and risk assessments (Section 6 and Section 7) is commensurate to the magnitude of the impacts and risks related to the petroleum activity, and the level of analysis and evaluation is proportionate to the nature and scale of the environmental impacts and risks generated by the petroleum activity.

45. I considered that the EP demonstrates that the evaluation of impacts and risks has informed the selection of suitable control measures appropriate for the nature and scale of the activity (Section 6 and Section 7). For example, specific control measures for higher order environmental impacts and risks have been addressed via the inclusion of EPOs, EPSs and measurement criteria (as per regulation 13(7)) and are addressed further below.

46. The EP includes sufficient information on the legislative requirements that are relevant to the activity (Appendix B). In addition, the environmental impact and risk assessments (Section 6 and Section 7) include a description of how the relevant requirements are met throughout the life of the activity.

47. Based on the findings above, I was reasonably satisfied that the EP met the requirements of reg 10A(a).

The EP demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable: regulation 10A(b)

48. Having regard to the EP I considered that:

- a. Section 5 of the EP describes the process applied to evaluate whether impacts and risks are reduced to ALARP. Section 6 and Section 7 of the EP presents a clear, systematic, defensible and reproducible process for the evaluation of all impacts and risks, which details the control measures to be implemented, including an evaluation of additional potential control measures, and justifies why control measures are either adopted or rejected (with reasoned conclusions) to demonstrate that the environmental impacts and risks of the activity will be reduced to ALARP. The evaluation of the adoption of control measures is based on environmental benefits and the consideration of the feasibility and cost/sacrifice of implementation. The control measures adopted are considered sufficient for the impacts and risks presented;
- b. I considered that the titleholder has applied the environmental risk assessment process (described in Section 5) appropriately for planned aspects of the activity, in particular for higher order hazards associated with the activity, such as drilling related discharges and underwater noise emissions. For such higher order impacts and risks, I accepted that the exploration of alternative, additional or improved control measures had been evidenced, and that the control measures adopted demonstrate that environmental impacts will be reduced to ALARP;
- c. unplanned aspects of the activity are described in Section 7 of the EP, including the release of solid objects, introduction of invasive marine species, marine fauna interaction, non-hydrocarbon and chemicals release, minor hydrocarbon release and hydrocarbon spill (MDO and condensate). These aspects are appropriately described and evaluated to give confidence that the control measures selected are appropriate and risks are reduced to ALARP;
- d. the evaluation of impacts and risks has informed the selection of suitable control measures to either reduce the consequence/severity or likelihood of impacts and risks. The control measures outlined in Section 6 and Section 7 of the EP are sufficiently detailed to demonstrate they will be effective in reducing the impacts and risks for the duration of the activity. The level of detail in the ALARP assessment is commensurate to the nature and scale of the potential impacts and risks. For higher order impacts and risks, the exploration of alternative, additional or improved control measures is evident by the titleholder. The EP has demonstrated, through reasoned and supported arguments that there are no other practical control measures that could reasonably be taken to reduce impacts and risks any further;
- e. the EP considers information gathered from the consultation process (see Table 4.13) when demonstrating impacts and risks are or will be reduced to ALARP, such as feedback from the Department of Defence (Section 3.2.7.5 and Section 6.5), requirements for notifications (Section 6.5, Section 7.7 and Table 8.4), and information provided on the cultural features of the environment by First Nations relevant persons (Section 3.2.8, Section 6 and Section 7). Each impact and risk evaluated in Section 6 and Section 7 of the EP (i.e., demonstration of ALARP tables) addresses the range of matters raised by relevant persons; and
- f. in some instances, the titleholder adopted additional control measures or improved existing control measures in response to information obtained from relevant persons during consultation. For

example, the titleholder adopted an additional control measure (BAD-CM-049) for workforce cultural training and cultural heritage monitors to provide an introduction to the activity to the seas and any First Nations spiritual beings at commencement of drilling operations.

49. Based on the findings above and those outlined below at [50]-[58], I was reasonably satisfied that the EP met the requirements of reg 10A(b).

The EP demonstrates that the environmental impacts and risks of the activity will be of an acceptable level: regulation 10A(c)

50. I considered that the EP demonstrated that the environmental impacts and risks of the activity will be of an acceptable level, specifically I found that:

- a. Section 6 and Section 7 of the EP applies a clear, systematic, defensible, and reproducible process for demonstrating how environmental risks will be of an acceptable level. The process is commensurate with the nature and scale of the activity and the severity of its impacts and risks. The statements and conclusions drawn by the titleholder in the EP have been sufficiently supported with scientific literature. For example, the titleholder has applied 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. Section 5.6 of the EP describes the process undertaken by the titleholder to determine acceptable levels of impact and risk for the petroleum activity, including through consideration of the principles of ESD, internal context, external context and other requirements;
- c. the EP demonstrates that the level of acceptability has been met for this petroleum activity, through the following criteria:
 - i. the consequence of a planned event is ranked as I (Negligible - no impact or negligible impact) or II (Minor – detectable but insignificant change to local population, industry or ecosystem factors) (see Table 5.2) ; or a risk of impact from an unplanned event is ranked Very Low to Medium (see Table 5.4);
 - ii. an assessment has been completed to determine that sufficient information or studies have been considered to validate the consequence assessment;
 - iii. the principles of ecologically sustainable development have been assessed;
 - iv. the acceptable levels of impact and risks have been informed by relevant species recovery plans, threat abatement plans and conservation advice;
 - v. performance outcomes, control measures and associated performance standards are consistent with legal and regulatory requirements;
 - vi. performance outcomes, control measures and associated performance standards are consistent with the Santos Environment, Health and Safety Policy;
 - vii. performance outcomes, control measures and associated performance standards are consistent with industry standards; and
 - viii. Relevant Persons' feedback has been considered when determining performance outcomes, control measures and associated performance standards taken into consideration performance

outcomes, control measures and associated performance standards have been demonstrated to reduce the impact or risk to ALARP.

- d. the EP demonstrates that the petroleum activity is not likely to have a significant impact on MNES protected under the EPBC Act, including World Heritage properties, National Heritage properties, *Ramsar* wetlands, listed threatened species and communities, listed migratory species, Commonwealth marine areas, and the Great Barrier Reef Marine Park;
- e. the EP includes appropriate and accurate content to demonstrate that the proposed activity is not inconsistent with relevant key documents such as recovery plans, conservation advice and management plans relevant to the activity, which are outlined in Section 3.2.6.2. An assessment of the activity against the relevant objectives and action areas in these plans is provided throughout Section 6 and Section 7 of the EP to demonstrate that the activity is not inconsistent with key documents. For example, the noise evaluation (Section 6.1) demonstrated that the petroleum activity will be managed in a manner that is not inconsistent with the Conservation Management Plan for the Blue Whale and the Recovery Plan for Marine Turtles in Australia; and
- f. in relation to planned aspects of the activity (Section 6), predictions have been made regarding impacts and risks to the environment that are considered suitably conservative and result in the inclusion of appropriate controls given the nature of the activity. For example, the environmental assessment includes consideration of aspects typical for drilling activities, such as light emissions, noise emissions, seabed and benthic habitat disturbance, atmospheric emissions, interference with other marine users, operational discharges (i.e. sewage, grey water, putrescible waste, deck and bilge water and brine or cooling water) and drilling and completions discharges (i.e. drill cuttings, drilling fluids, cement, subsea well fluids, formation water and residual bulk product).

51. In relation to GHG emissions, I considered that the EP demonstrated that this specific impact will be of an acceptable level because:

- a. the EP evaluated the impacts of GHG emissions associated with the petroleum activity, including emissions generated by the MODU, vessels, helicopters and well flowback (flaring) (Section 6.3). The EP includes estimates of the total direct GHG emissions from the petroleum activity and evaluates the potential impacts of GHG emissions. The evaluation recognises the petroleum activity's contribution to the global scale of GHG emissions and acknowledges the cumulative nature of global GHG emissions;
- b. the EP clarifies that the extraction of Barossa gas for onshore processing is not included as part of the petroleum activity. As such, I accepted that there are no GHG emissions associated with gas processing, consumption or combustion, which would be considered indirect consequences of the petroleum activity. Subsequent and future petroleum activities must first be subject to their own assessment and approval under the Environment Regulations, prior to extraction of Barossa gas for onshore processing, transport, sale and combustion;
- c. a summary of the estimated total greenhouse gas emissions for the petroleum activity is provided at Table 6.8 of the EP. Total greenhouse gas emissions attributable to the petroleum activity are 183,608 tCO₂e, which represents approximately 0.04% of the total annual Australian GHG emissions (based on Australian GHG emissions from August 2021 to September 2022) (Section 6.3.2). Atmospheric emissions from the activity were assessed as having a negligible consequence level. I agreed with the impact evaluation presented in the EP;

- d. the EP considers current published and reputable literature regarding GHG emissions and climate change, as well as Australia's updated Nationally Determined Contribution (NDC) under the Paris Agreement. The EP presented a case that the petroleum activity is not inconsistent with Australia's target to reduce GHG emissions by 43% below 2005 levels by 2030, on a path leading to net zero by 2050 (Section 6.3);
 - e. the EP explains that the titleholder, at a corporate level, has committed to a long-term target to achieve net-zero Scope 1 and 2 absolute emissions by 2040 for all of its projects which includes the petroleum activity;
 - f. the EP describes a range of control measures to reduce greenhouse gas emissions from the petroleum activity, including, but not limited to:
 - i. well flowback procedures – reduce well flowback to minimum required to clean up wells, i.e., testing to remove solids and mud invasion but not performing extended deliverability testing (BAD-CM-033);
 - ii. well flowback procedures – utilise high efficiency burner heads and a specialist noise silenced flare (BAD-CM-033);
 - iii. MODU planned maintenance system (BAD-CM-040);
 - iv. vessel planned maintenance system (BAD-CM-041); and
 - v. monitoring of support vessel fuel consumption (BAD-CM-050); and
 - g. the EP demonstrates that with the implementation of the proposed management measures, GHG emissions from the petroleum activity will have a negligible impact (consequence level I) and therefore will be managed to an acceptable level.
52. In relation to noise emissions, I considered that the EP demonstrated that this specific impact to threatened and migratory whales (such as injury or significant behavioural disturbance) will be of an acceptable level because:
- a. the Operational Area does not overlap with any BIAs for threatened and migratory whales. The closest BIA to the Operational Area is the pygmy blue whale migration BIA, located 171 km from the Operational Area. No other BIAs for threatened and migratory whales are located within the EMBA. Therefore, I was satisfied that the EP was not inconsistent with the Conservation Management Plan for the Blue Whale 2015–2025 made under section 269A of the EPBC Act, Guidance on Key Terms within the Blue Whale Conservation Management Plan (2021), Blue Whale Conservation Management Plan – FAQs published by NOPSEMA, Marine Bioregional Plan for the North-west Marine Region and the Marine Bioregional Plan for the North Marine Region;
 - b. the noise evaluation (Section 6.1) has been informed by contemporary peer-reviewed literature and internationally accepted impact evaluation thresholds;
 - c. 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 patterns of whales, to demonstrate that the environmental impacts of the activity will be managed to an acceptable level;

- d. the EP evaluates the potential for permanent threshold shift (**PTS**) and temporary threshold shift (**TTS**) in hearing and behavioural disturbance to whales, due to underwater noise exposure from the activity;
 - e. the EP addresses impacts and risks from underwater noise to whales, in particular pygmy blue whales. The EP explains that the predicted distances to PTS and TTS from modelling are based upon exposure for 24-hours by a stationary receptor, which is conservative given it is not a realistic scenario based on the predicted movement patterns of whales. The EP concludes that PTS and TTS are not expected to occur for whales transiting through the Operational Area;
 - f. the activity will not have an unacceptable level of impact on blue whale foraging because the Operational Area is not located in a designated pygmy blue whale foraging area (as defined in the Blue Whale Conservation Management Plan);
 - g. the EP demonstrates, based upon scientifically supported predictions and the location of the activity outside designated BIAs for pygmy blue whales, that the likelihood of encountering blue whales in the area within which received noise levels may result in PTS, TTS and behavioural disturbance is low. If greater than expected numbers of whales are observed in the area, the EP provides for adaptive management whereby the titleholder will initiate and follow its change and revision processes (which I consider in reg 10A(e) below); and
 - h. the EP demonstrates that the petroleum activity is not expected to injure or result in biologically significant behavioural disturbance to threatened and migratory whales, including blue whales.
53. In relation to drilling and completions discharges, I considered that the EP demonstrated that this specific impact will be of an acceptable level because:
- a. the EP (Section 6.7) evaluated the impacts of drilling and completions discharges (including drilling fluids, cuttings, cement, subsea fluids, well completion discharges, formation water, miscellaneous chemicals, tank cleaning discharges and residual bulk products) on water quality, benthic habitat, and threatened, migratory or local fauna;
 - b. the impact evaluation has been informed by contemporary peer-review literature and dispersion modelling of drilling fluids and cuttings;
 - c. appropriate consideration has been given to Article 9 of the *Minamata Convention on Mercury*,² in relation to the management of drilling discharges that may contain mercury (specifically, mercury present in barite: see pp 639, 643 and Table B-1). I note that appropriate control measures have been adopted for contaminant limit concentrations in barite (BAD-CM-031), an appropriate decision framework is in place for managing bulk powders at the end of drilling campaign (Table 6.13);
 - d. the EP describes a range of control measures to reduce impacts of drilling and completions discharges, including, but not limited to:
 - i. chemical selection procedure (BAD-CM-007);
 - ii. cuttings management system (BAD-CM-028);
 - iii. inventory control procedure (BAD-CM-029);

² *Minamata Convention on Mercury*, signed 10 October 2013 [2022] ATS 7 (entered into force 7 March 2022).

- iv. oil content measurement procedure (BAD-CM-031);
 - v. well flowback procedures (BAD-CM-033);
 - vi. mud pit wash residue discharge controls (BAD-CM-045); and
 - vii. decision list for managing bulk powders and brines remaining on the MODU at the end of the drilling campaign (BAD-CM-046);
- e. the EP demonstrates that with the implementation of the proposed management measures, drilling and completions discharges will have a minor impact (consequence level II), and therefore will be managed to an acceptable level.

54. In relation to impacts and risks to cultural features of the environment, I considered that the EP (Section 6 and Section 7) demonstrated that this will be of an acceptable level because:

- a. the EP adequately evaluates the potential for the petroleum activity to directly or indirectly affect First Nations cultural features of the environment, including, but not limited to:
 - i. cultural fishing and hunting activities;
 - ii. culturally significant marine species;
 - iii. culturally significant sites; and
 - iv. connection to sea country.
- b. the evaluation of impacts and risks to cultural features was informed by information that the titleholder gathered from First Nations relevant persons through the consultation process in preparation of the EP. This included feedback provided from First Nations relevant persons in relation to the identification of cultural features that may be present in the EMBA, such as species that may be of cultural significance to First Nations people (i.e., marine turtles).
- c. the impact and risk evaluations (Section 6 and Section 7) outline that:
 - i. for impacts to cultural features, in the form of impacts to marine species that are either a cultural food source or are considered culturally significant to First Nations people, with reference to the assessment for threatened/migratory/local fauna, the titleholder determined that the maximum consequence level from planned aspects of the activity is minor (consequence level II) and unplanned aspects of the activity is moderate (consequence level III);
 - ii. for impacts to cultural features that are linked to a specific place, with reference to the assessment for physical environment/habitat, threatened ecological communities and protected area (as applicable), the titleholder determined that the maximum consequence level from planned aspects of the activity is minor (consequence level II) and from unplanned aspects of the activity is moderate (consequence level III). I noted that there were no Native Title claims or determinations, ILUAs, Indigenous archaeology, or culturally significant sites identified within the Operational Area or EMBA;
 - iii. where concerns were raised by individuals about cultural and spiritual beliefs that do not link to a specific location or place, the titleholder determined that there is no evidence to support actual adverse effects from spiritual beings in response to impacts on people or the environment from these activities, with reference to the fact that almost 900 wells have been drilled previously in the region, and there is also significant historical and ongoing industrial

shipping and fish trawling activities in the EMBA (Section 6.1.2.5). In response to these concerns, the titleholder has adopted a control measure (BAD-CM-049) based on Dr Corrigan's recommendations, who was informed by a number of senior and authoritative Tiwi Islanders as to culturally appropriate responses.

d. the EP demonstrates that with the implementation of the proposed management measures (as outlined in Section 6 and Section 7 of the EP), that impacts and risks to cultural features of the environment, will be managed to acceptable levels.

55. In relation to unplanned aspects of the activity (Section 7) I was satisfied that the EP gives appropriate consideration to the introduction of invasive marine species, release of solid objects, marine fauna interaction, non-hydrocarbon and chemicals release, minor hydrocarbon release, and hydrocarbon spill (MDO and condensate). Uncertainty has been addressed in the evaluation of oil pollution incidents through the application of appropriately conservative stochastic modelling and recognition of assumptions made, and the scalability of spill response options have been considered. The evaluation of risks posed by spill scenarios includes consideration of potential impacts to the receptors outlined in the description of the environment (Section 3) and informs the selection of appropriate spill response options.

56. The EP provides an appropriate evaluation of impacts and risks specific for the nature and location of the activity and relevant environmental receptors. The evaluation is commensurate to the level of impact or risk presented and provides justifiable conclusions that impacts and risks will be managed to an acceptable level (Section 6 and Section 7). The impact and risk evaluations demonstrate that the acceptable level will be met, and that the EPO will be achieved.

57. Information provided during relevant persons consultation is appropriately considered, evaluated, and incorporated into the EP. The titleholder has considered information gathered from the consultation process when demonstrating impacts and risks will be managed to an acceptable level. For example, impacts of noise emissions from the activity was raised during consultation, which the titleholder considered in the demonstration of acceptability for this impact. Each impact and risk evaluated in Section 6 and Section 7 of the EP addresses the range of matters raised by relevant persons.

58. Based on the findings above, I was reasonably satisfied that the EP met the requirements of regulation 10A(c).

The EP provides for appropriate environmental performance outcomes, environmental performance standards, and measurement criteria: regulation 10A(d)

59. Section 6 and Section 7 (and summarised in Table 8.1 and Table 8.2) of the EP contains the EPOs, EPSs and measurement criteria for impacts and risks of the petroleum activity.

60. The EP provides appropriate EPOs that I considered:

- a. are relevant to identified environmental impacts and risks for the petroleum activity;
- b. read in conjunction with associated EPS, establish measurable levels for management of environmental aspects of the petroleum activity;

- c. when read in conjunction with the relevant environmental impact/risk evaluation and adopted management measures, demonstrate that the environmental impacts and risks will be managed to an acceptable level; and
- d. are considered consistent with the principles of ESD, considering items a-d above.

61. The EP provides appropriate EPSs that:

- a. are clearly linked to control measures for all impacts and risks; and
- b. for each control measure, contain statements of performance which clarify how the control measure is to function in order to effectively reduce and mitigate impacts and risks; and
- c. have clear measurement criteria that link to the EPS and will provide a record that the EPS has been met.

62. I considered that the EPOs, EPSs and measurement criteria are clearly linked and complementary of one another. For each environmental aspect, an EPO is set against which performance in protecting the environment will be managed, multiple EPS state the performance required of relevant control measures, and corresponding measurement criteria are identified to determine whether EPO/EPS are being met.

63. The OPEP contains the EPOs, EPSs and measurement criteria for response preparedness and implementation. These are also provided for the proposed response strategies outlined in the OPEP.

64. Based on the findings above, I was reasonably satisfied that the EP met the requirements of reg 10A(d).

The EP includes an appropriate implementation strategy and monitoring, recording and reporting arrangements: regulation 10A(e)

65. Regulation 10A(e) requires that I be reasonably satisfied that the implementation strategy, and the monitoring, recording and reporting arrangements were appropriate.

66. I noted that the implementation strategy outlined in Section 8 provides a range of systems, practices and processes (outlined in further detail below) which I was satisfied provided for all impacts and risks to continue to be managed to ALARP and acceptable levels for the duration of the activity.

67. I noted the titleholder has adopted a number of measures for the implementation strategy (see Section 8.11) in response to consultation with relevant persons which included, but was not limited to:

- a. no planned crew change flights over the Tiwi Islands (including Seagull Island) unless required for safe operations or emergency response;
- b. the titleholder will, through relevant Land Councils and other relevant persons, consult to identify and implement worthwhile First Nations initiatives that could include, but are not necessarily be limited to:
 - i. employment of cultural awareness community observers, who will conduct cultural awareness inductions for field-based staff across each of the major work packages;
 - ii. support of ranger programs and studies to help First Nations people preserve environmental and cultural features and values on their country;

- iii. seeking to facilitate employment opportunities for First Nations people as trainee health, safety and environmental (**HSE**) advisors for drilling and completions activities, subject to the availability and participation of First Nations trainees, with a view to them obtaining HSE qualifications and competencies to enable future ongoing employment in HSE. Further, the titleholder plans to discuss the way in which it might be able to facilitate presentations by the trainee advisers to their communities about HSE management of the drilling and completions activities;
 - iv. periodic community townhalls across regional locations relevant to the Barossa Project, to provide Project updates and to provide an opportunity for feedback from cultural awareness community observers to assist in the development of any potential improvement programs; and
 - v. facilitate trips to the drilling site, at intervals (as necessary), taking into account cultural advice as to the most appropriate clan members to attend such trips.
68. I was satisfied that the management of change (**MOC**) process was adequately described in Section 8.8.2 and was appropriate because:
- a. management of changes relevant to the scope of the activity, will be managed in accordance with reg 17;
 - b. the titleholder has established internal management of change procedures that it will follow when assessing changes to the activity. The procedure determines whether a revision of the EP is required and whether that revision is to be submitted to NOPSEMA for consideration;
 - c. changes will be risk assessed to determine the significance of any potential new environmental impacts or risks not provided for in the EP;
 - d. accepted management of changes, become part of the in-force EP or OPEP, and will be tracked on a register and communicated to the workforce; and
 - e. Section 8.8.3 provides a reasonable description of the titleholder's learning and knowledge sharing processes.
69. Section 8.1 of the EP describes the titleholder's environmental management system, the Santos Management System. I was satisfied that this was appropriate as the system provides a structured framework of documentation (policies, standards, processes, procedures, tools and control measures) that set common expectations governing how all employees and contractors will work.
70. I was satisfied that the EP (Section 8.4) included appropriate training and competency requirements relevant to the EP with all personnel on the MODU and project vessels required to be competent to perform assigned positions. The OPEP outlines additional training and competency requirements for relevant personnel specific to spill response. Inductions are provided to relevant personnel and covers a range of topics including, but not limited to environmental sensitivities (specific to the activity location), EP commitments, incident reporting and notifications, management of change process, oil pollution emergency response, and First Nations cultural heritage awareness. Overall, appropriate commitment is made to training to ensure that all employees and contractors have suitable competencies.
71. The key roles and responsibilities of personnel involved in the implementation, management and review of the EP are appropriately outlined in Section 8.3. The roles and responsibilities for personnel involved in oil spill preparation and response are outlined in the OPEP (Section 5.2).

72. An appropriate OPEP has been provided that includes arrangements that are suitable, given the spill scenarios presented, and addresses each of the EP content requirements in regulation 14. Specifically:
- a. the OPEP details the oil pollution response control measures that will be used to reduce the impacts and risks of the activity to ALARP and an acceptable level, the arrangements for responding to and monitoring oil pollution to inform response activities, the arrangements for updating and testing the oil pollution response arrangements and control measures, and provides for the monitoring of impacts to the environment from oil pollution and response activities; and
 - b. the OPEP provides the oil pollution arrangements and control measures in an operational deployment context.
73. I noted that monitoring, recording and reporting arrangements are adequately described in Section 8.7, including activity notifications, environmental performance reporting and incident reporting arrangements. I considered that these arrangements were appropriate as these sections detailed that the information collected will:
- a. be based on the EPOs, controls, standards and measurement criteria in the EP; and
 - b. include records of emissions and discharges to the ocean and atmosphere.
74. The EP also provides for appropriate auditing, review and management of non-conformances in Section 8.9. For example, the titleholder will undertake an assurance review against the EP and/or OPEP at least annually, in addition to monthly HSE inspections. Non-conformances are entered into an incident and action tracking management system and assigned corrective actions that are monitored and closed out in a timely manner (using a management escalation process).
75. The EP provides for the implementation of ongoing consultation arrangements in Section 8.10, with planned activity notifications to relevant persons outlined in Table 8.4. I considered that these arrangements were appropriate because the titleholder:
- a. has committed to continue to update First Nations relevant persons via community information sessions and updates to Land Councils and Aboriginal Corporations;
 - b. is seeking to establish a network of First Nations consultative committees to support consultation for other proposed regional activities, building on the consultation model developed by the representatives of the Mulurryud Consultative Committee;
 - c. provides a mechanism to subscribe to its website which can be utilised by relevant persons and those interested in the activity to remain up to date on the activity. The titleholder will provide quarterly updates on the activity via its website; and
 - d. during the life of the EP, will continue to accept, assess and respond to post acceptance consultation feedback.
76. In light of the findings above, I considered the ongoing consultation arrangements described in the EP, as required by regulation 14(9), are appropriate.
77. Based on the findings above, I was reasonably satisfied that the EP met the requirements of reg 10A(e).

The EP does not involve the activity, or part of the activity, other than arrangement 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: regulation 10A(f)

78. As I stated above at [21] I was satisfied that the EP clearly describes the boundaries of the petroleum activity (Section 2 and 3) which demonstrates that no part of the activity will be undertaken in any part of a World Heritage Property within the meaning of the EPBC Act.

79. In those circumstances, I am reasonably satisfied that the EP met the requirements of reg 10A(f).

The EP demonstrates that the titleholder has carried out the consultations required by Division 2.2A, and the measures (if any) that are adopted because of the consultations are appropriate: regulation 10A(g)

80. Regulation 10A(g) has two components which the EP 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 titleholder 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 regs 11A(2)-(4)) (subparagraph (i)); and
- b. second, that the titleholder adopted, or proposed to adopt, appropriate measures because of those consultations (subparagraph (ii)).

81. Regulation 11A provides that:

(1) In the course of preparing an environment plan, or a revision of an environment plan, a titleholder 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 titleholder considers relevant.

(2) For the purpose of the consultation, the titleholder 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 titleholder must allow a relevant person a reasonable period for the consultation.

(4) The titleholder must tell each relevant person the titleholder consults that:

- (a) the relevant person may request that particular information the relevant person provides in the consultation not be published; and
- (b) information subject to such a request is not to be published under this Part.

82. The Act and Regulations do not define what constitutes 'consultation' for the purposes of reg 11A (and therefore satisfaction of reg 10A(g)(i)). However, there must first be identification of the relevant persons to be consulted, followed by consultation, the purpose of which is to ensure that the titleholder has ascertained, understood and addressed all the environmental impacts and risks that might arise from its proposed activity.
83. Whether the steps and actions taken by a titleholder amount to 'consultation' will vary depending upon the particular circumstances, and must reflect the characteristics of the relevant persons affected by the titleholder's proposed activity. However, consultation does not require every opportunity to be afforded. It also does not mean that, where those being consulted do not consider they have been properly consulted, 'consultation' has not been carried out. Overall, I must be reasonably satisfied that consultation undertaken was appropriate and adapted to the nature of the relevant persons, and that reasonable opportunity to participate in the preparation of the EP was given.
84. NOPSEMA received a number of communications directly from relevant persons raising issues and/or expressing concerns with and objections to the activities covered by the EP. Those communications raised a majority of the same issues, concerns and objections as were raised during the consultation with the titleholder required by regulation 11A, and are addressed in my reasons below regarding whether regulation 10A(g) is met. Where the communications raised objections or concerns that were not a relevant consideration for the EP assessment, I have not had regard to these.
85. Section 4 of the EP provides descriptions of the consultation processes and the rationale used to determine who and how to consult with relevant persons, including the approach to provision of 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, and to allow the relevant person a reasonable period for the consultation.
86. Section 4 of the EP describes a clear process for the identification and broad capture of relevant persons in accordance with regulation 11A(1). I considered that the process was appropriate, because it included:
- a. reference to multiple sources of information, such as publicly available materials (e.g., management plans for AMPs), review of databases and registers (such as commercial fishing catch and effort data), published guidance (such as Australian Fisheries Management Authority (AFMA) consultation guidance), as well as advice from authorities and other relevant persons;
 - b. consideration of published guidance developed by relevant persons detailing their functions, interests, or activities and how and when they wish to be consulted on activities. For example, the titleholder refers to guidance published by the Western Australian Fishing Industry Council (WAFIC) in relation to consultation with commercial fishing licence holders in WA-managed fisheries where licence holders will only be affected by an unplanned event;

- c. details and evidence of the steps taken by the titleholder to create awareness of the petroleum activity and the consultation process, to encourage potentially relevant persons that the titleholder may not be aware of, to make themselves known to the titleholder (Section 4.5.2), which were thorough and widespread. For example, the titleholder published notices in national, state and local newspapers, ran geotargeted social media and radio advertising, held four drop-in consultation sessions at Darwin Convention Centre, and two pop-up stall sessions at Darwin Mall. Representatives of the titleholder also attended two arts events organised by Larrakia Nation at Minil Beach in Darwin. In addition, the titleholder developed a dedicated Barossa Gas Project Hub on its website (publicly available from 25 March 2023), which included information regarding the purpose and approach to consultation, environmental approval process, overview of the Barossa Gas project, summary of the drilling and completions activity, description of the environment that may be affected by the activity, overview of environmental impacts and risks associated with the activity, the proposed management measures, details on how to provide feedback and contact details of the titleholder. The website also provided links to an Information Booklet on the activity, online self-nomination form for potentially relevant persons to complete and a FAQ document (which I noted was modified and updated during the course of the consultation process). Links and/or a QR code to the website was included in published notices and social media campaigns (Table 4.5). Public advertisements (social media, print and radio) encouraged interested parties to visit the dedicated Barossa Gas Project hub website for more information on the activity (Table 4.6, Table 4.7, Table 4.8 and Table 4.9);
 - d. additional details of how the process identified First Nations relevant persons, including through engagement with relevant government authorities and First Nations representative bodies (Section 4.5.2.2);
 - e. details of the approach to identify relevant persons outside Australia in a manner proportionate to the remote likelihood of any effect on the functions, interests or activities of international persons or organisations (Section 4.5.2.1); and
 - f. details of how the titleholder made an assessment to determine whether an individual or organisation who has self-identified as a relevant person, is or is not, considered to be a relevant person for the purposes of regulation 11A, having regard to each person's stated functions, interests and activities (Section 4.5.2).
87. I considered that the nature of the activity, description of the environment and the possible impacts and risks of the activity have been appropriately taken into account determining whether the activity may be relevant to authorities, or determining whose functions, interests and activities may be affected. This is because:
- a. the titleholder has considered the nature and scale of the activity and all of the possible impacts and risks of the activity when determining relevant persons (Sections 2, 6, and 7); and
 - b. the titleholder considered all of the known environmental 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. For example, while most planned impacts are confined to offshore locations in the order of 50 km from the Operational Area (e.g., light emissions from flaring), the titleholder has conservatively applied oil pollution risk modelling to the identification of relevant persons.

88. I also considered the content of Section 4 and the sensitive information part of the EP and that the titleholder's approach to the provision of sufficient information allowed the relevant persons to make informed assessments of the possible consequences of the activity on their functions, interests or activities and a reasonable period for the consultation was provided. I formed this view because:

- a. the EP 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 impacts and risks that may affect them. The titleholder has tailored the information to suit the needs of the different types of relevant persons and provided information in a form which I am satisfied is readily assessable and appropriate for the relevant person being consulted, including an Information Booklet, presentations, posters, verbal (oral) briefings, videos and other graphics (maps and photos);
- b. the titleholder sufficiently informed relevant persons of the purpose of consultation, including advising relevant persons of the titleholder's obligations for consultation. This included sharing the reasons for the consultation and providing a copy of NOPSEMA's consultation brochure, "Consultation in the course of preparing an environment plan", as part of consultation;
- c. the information provided by relevant persons throughout the consultation process has assisted the titleholder to ascertain, understand and address all the environmental impacts and risks that might arise from its proposed activity; and
- d. the titleholder commenced consultation with relevant persons in June 2021, followed by additional consultation undertaken with relevant persons commencing in April 2023. Consultation has continued throughout the course of preparing the EP, and after the *Tipakalippa* proceedings, providing sufficient time for relevant persons to consider the information provided and make an informed response. I noted that the consultation process provided various opportunities for relevant persons to be identified or to self-identify and engage in the consultation process.

89. Having considered the detailed description of the consultation process in the EP, for the reasons set out in [84]-[88] above, I consider that the approach adopted by the titleholder for identifying relevant persons was appropriate. I also considered that the titleholder has provided sufficient information which allowed for relevant persons to participate in informed consultation. Further, given the period of time afforded by the titleholder for consultation and the evidence of multiple engagements with relevant persons, including multiple opportunities for the relevant persons to provide information to the titleholder, that a reasonable period for the consultation has been given. My more detailed reasons are set out below.

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

90. 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.

91. Table 4.4 in Section 4.5.2 of the EP outlines the process for the identification of Commonwealth and State and Territory Departments and/or agencies in the marine, environment and industry fields, which I considered to be appropriate. Table 4.11 in Section 4.5.3 provides the titleholder's assessment of the Commonwealth, State and Northern Territory Departments and agencies that are considered to be a relevant person under regulation 11A(1)(a)-(c).

92. 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.
93. I considered that sufficient information was provided to allow these relevant persons to make an informed assessment of the possible consequences of the activity on the functions, interests or activities. In particular, the titleholder provided relevant persons with information relevant to the functions, interests or activities of the relevant person in the form of an Information Booklet (see Appendix F.2). The Information Booklet contained an overview of the activity, the environment that may be affected, potential environmental impacts and risks and proposed control measures. In addition, the Information Booklet contained information about who is a relevant person, the purpose of consultation and the entitlements of relevant persons in respect of consultation. The titleholder commenced consultation with relevant persons under regulation 11A(1)(a)-(c), in June 2021, followed by additional consultation between April 2023 and June 2023. Relevant persons were initially provided with approximately 30 days to respond, and consultations continued with relevant persons where requested. I considered that relevant persons under regulation 11A(1)(a)-(c) were provided with a reasonable period for the consultation.
94. I noted that the consultation emails sent to each relevant person in 2021, contained the following statement in accordance with reg 11A(4):
- “The EP will be published in full on the NOPSEMA webpage Industry environment plans (nopsema.gov.au) with the exception of sensitive information received during this engagement process and transcripts of correspondence between stakeholders and Santos. This information is provided to NOPSEMA for consideration during the assessment, but is not published for public review. If you do not wish for your comments to be published in this EP, or wish to provide your comments anonymously, please make this known to Santos”.*
95. I noted that the consultation emails sent to relevant persons in 2023, contained the following statement:
- “Santos has identified you as a relevant person with whom Santos is required to consult. Relevant persons are entitled to: ... request that particular information provide during consultation not be published. If you do ask this, Santos will respect that request and the information will not be published. Information we need to give to NOPSEMA to assess our plan will be provided in a separate confidential report (rather than in the published EP)”.*
96. Finally, 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 or claims relating to the activity. Where feedback was received, the EP identified this and indicated what changes were made to the EP in response. For example, a large part of the feedback was that certain bodies should be notified of things or provided documents when they occur or become available. The EP 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.
97. Considering the matters at [90]-[96] above, I was satisfied that the EP demonstrates that the titleholder has carried out the consultations required by Division 2.2A in respect of reg 11A(1)(a)-(c) and the

measures (if any) that the titleholder 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)

98. Relevant persons under reg 11A(1)(d) are defined as '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.'

99. I considered that the EP 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 EP 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 in a manner consistent with the objects of the Regulations and the EPBC Act. The EP 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 (Section 4.4). A description of the functions, interests or activities of those persons or organisations identified as relevant persons under reg 11A(1)(d) is provided in Table 4-11.

100. The EP identified and considered the following broad categories within the scope of reg 11A(1)(d):

- a. academic and research organisations, such as Australian Institute of Marine Science (**AIMS**), Australian Marine Sciences Association – NT (**AMSA-NT**) and WorldFish Timor-Leste (**WorldFish**);
- b. commercial fishing, such as licence holders in Commonwealth-managed Northern Prawn Fishery, and licence holders in NT-managed Timor Reef Fishery;
- c. environmental conservation organisations, such as Environment Centre Northern Territory (**ECNT**), West Timor Care Foundation (**WTCF**) and Australian Marine Conservation Society – NT (**AMCS-NT**);
- d. First Nations peoples and groups, such as Tiwi Land Council (**TLC**), Northern Land Council (**NLC**), and Tiwi Island clan groups and traditional owners;
- e. infrastructure operators; Darwin port and NT ports and marine;
- f. industry associations; Northern Prawn Fishery Industry Pty Ltd (**NPFI**), Northern Territory Seafood Council (**NTSC**) and WAFIC;
- g. local government authorities;
- h. energy industry, such as Eni Australia Ltd and INPEX Ichthys Pty Ltd;
- i. recreational fishers;
- j. marine and coastal tourism operators, such as Arafura Bluewater Charters and Bathurst Island Lodge/Tiwi Island Retreat;

101. The EP documented the titleholder's consideration of a number of persons and organisations that self-identified through the consultation process. I noted that:

- a. in some instances, the titleholder determined that their functions, interests, or activities may be affected by the activity, such as the Keep Top End Coasts Healthy, Sea Turtle Foundation and Conservation Council of WA (**CCWA**); and

- b. in other cases, the titleholder concluded that their functions, interests or activities were not affected by the activity (e.g., individual located in Darwin).

102. I will first explain my conclusions on First Nations people and groups, and then my conclusions on other 'relevant persons' categories identified at [100] above.

First Nations people and groups

103. I considered that the titleholder's methodology, as identified in the EP, is consistent with the purpose and intention behind reg 11A, NOPSEMA's guideline on Consultation in the course of preparing an environment plan (12 May 2023), and recent Federal Court authority on the interpretation of this provision, such as *Santos NA Barossa Pty Ltd v Tipakalippa [2022] FCAFC 193; (2022) 296 FCR 124*, namely, to ensure that the titleholder had 'ascertained, understood and addressed all the environmental impacts and risks that might arise from its proposed activity'.

104. I noted that the titleholder has tailored their approach to First Nations consultation to particular persons, including how the information was given to allow the "relevant person" to assess the possible consequence of the proposed activities on their functions, interests or activities. See my reasons in the following paragraph at [105].

105. I was satisfied that the consultation process provided for broad capture of ascertainable First Nations persons and organisations who may have their functions, interests or activities affected because:

- a. the identification of First Nations relevant persons has been informed appropriately by the operational aspects of the activity and the associated impacts and risks, including the highly unlikely scenario of an oil pollution incident. The titleholder considered the conservatism of the oil spill modelling, the remote likelihood of the event occurring and the control measures that would be implemented in the event of a spill when determining whether the functions, interests or activities of First Nations relevant persons would be affected. The titleholder reasonably concluded that the likelihood of First Nations communities along the Northern Australia NT/WA coastline having an interest (if such groups do have sea country or other interests) that may be affected by the activity becomes increasingly unlikely with increasing distance from the Operational Area. Where there was some, albeit minimal, potential for impacting on the functions, interests or activities of relevant persons the consultation approach was appropriate for the vast geographic area of enquiry associated with a remote probability unmitigated worst case oil pollution event. All considered, the titleholder's method provided appropriately for the identification and consultation with the Tiwi Island clan groups as the First Nations people who are the most geographically proximate to the activity location. I noted that the Operational Area for the activity is located approximately 131 km from the nearest shoreline (Tiwi Islands) and 252 km from Croker Island (Figure 4-1). Further, I noted that the EMBA does not overlap (or in the vicinity) of any native title claims or determinations, ILUAs or heritage sites (Figure 3-19). I noted that there remained a substantial separation between the outer limits of the EMBA and the mainland WA/NT coastlines. Based on the information presented in the EP I considered it unlikely that there would be sea country interests affected by the activity, beyond those identified through consultation, in any case, I considered the broad scale enquiry sufficient to provide for those with functions, interests or activities that may be affected by the activity to self-identify as relevant persons and come forward with any particular information to be considered;

- b. the process appropriately identifies representative bodies under the *Native Title Act 1993* and the *Aboriginal Land Rights (NT) Act 1976*. Accordingly, the titleholder identified a number of Land Councils as relevant persons, including the Tiwi Land Council (**TLC**), Northern Lawn Council (**NLC**) and Kimberley Land Council (**KLC**). The Land Councils were consulted in their own right and encouraged to advise of other First Nations groups or individuals with whom the titleholder should consult. I noted that no additional relevant persons were identified by the Land Councils;
 - c. the process outlines a set of criteria (Table 4.4 and Section 4.5.2.2) for identifying First Nations groups and people based on if the EMBA overlaps or is in the vicinity of the following: native title claims pending or determined, ILUAs, recognised sacred sites, Indigenous Protected Areas (**IPAs**), or other land rights that extend offshore;
 - d. it included additional steps to generate public awareness of the activity and allow First Nations relevant persons to self-identify to be consulted. This included a large scale, targeted advertising campaign involving, widespread print (national, state and local newspapers), radio and social media advertising between 25 March 2023 and 22 April 2023, and again between 17 May 2023 and 15 June 2023) (see Table 4.7 and Table 4.8). Further steps were taken including leveraging existing channels of communication, hosting associated drop-in consultation sessions in Darwin (which were advertised multiple times for each round) and pop-stalls in Darwin Mall, and attending two Arts in the Grass events organised by Larrakia Nation (Table 4.5). Opportunities were provided over multiple months for First Nations groups or individuals to self-identify as relevant persons. These opportunities successfully elicited responses from First Nations groups who were subsequently consulted by the titleholder as relevant persons (see paragraph [106]). I noted that the steps taken by the titleholder to promote awareness of the activity to allow for the identification of First Nations relevant persons were comprehensive and suited to the target audience; and
 - e. while I recognised there were limitations to each of the individual enquiry methods, the combination of approaches implemented, when considered holistically, reasonably provided for traditional owners with a connection to sea country, which may constitute an interest for the purposes of reg 11A(1)(d), to be identified and consulted as a relevant person.
106. The EP provides that the titleholder undertook expanded consultation with First Nations relevant persons commencing in December 2022. The First Nations people and groups that have been identified as relevant persons in the EP, include two native title representative bodies (i.e., NLC and KLC), TLC, and Tiwi Island clan groups and traditional owners. I recognise that the Croker Island Clans self-identified as relevant persons, and were subsequently identified as relevant persons by the titleholder under regulation 11A(1)(e) (see my reasons at [127]-[135]).
107. In relation to the titleholder's consultations with First Nations relevant persons, I considered the summary of consultation provided at Section 4.7 and the full text consultation records provided in the sensitive information part of the EP. I was reasonably satisfied that the consultations required by Division 2.2A have been carried out with these relevant persons because:
- a. the methods applied to consultation with these relevant persons were appropriate and reasonably adapted to the nature of the interests of these relevant persons. In particular:
 - i. the titleholder's approach to consultation with these relevant persons was appropriately adapted in response to preferences/requests expressed by relevant persons, where reasonably practicable and appropriate given the potential for the activity to affect the functions, interests

or activities of the Relevant Person. The titleholder considered preferences/requests expressed by relevant persons on a case-by-case basis, having regard to the timing of the preference/request relative to the consultation deadlines that had been communicated. In circumstances where relevant persons expressed interest in engaging in the consultation process and provided feedback on their preferred method for the consultation, the titleholder accepted that feedback and adapted their approach to engaging with them based on their preferred method, where it was reasonably practicable and appropriate.

- ii. The titleholder adopted a tailored approach to consultation with Tiwi Island clans and Traditional Owners. As a result of specific requests and feedback expressed by Tiwi Island clans and Traditional Owners during community engagement sessions in February 2023 in Milikapiti, Pirlangimpi and Wurrumiyanga, the titleholder implemented the following tailored consultation approach for Tiwi Island clans and Traditional Owners:
 - A. consultation activities were conducted face-to-face in the form of clan meetings;
 - B. clan meetings were arranged for each clan at a location convenient for that clan (members of other clans attended with clan trustee consent);
 - C. clan meetings were scheduled with four weeks' prior written notice (see Table 4.12);
 - D. use of visual aids, videos and animations in presenting information (including information of a more technical nature) to improve accessibility and comprehension (Appendix I);
 - E. representatives of the titleholder and subject matter experts explained the activity, and impacts and risks of the activity during in person presentations, assisted by video content, and PowerPoint slides and responded to questions;
 - F. for each consultation session, the titleholder developed short videos explaining the purpose of the session and key information relating to the consultation process, how feedback could be provided, privacy obligations and non-publication requests. I noted that parts of these videos were recorded by a local Tiwi man in Tiwi language;
 - G. after each consultation session, titleholder representatives and subject matter experts were available to answer additional questions or provide further information to clan members and individuals;
 - H. a leading turtle expert attended the February, March, and April/May 2023 sessions to provide information and answer questions about potential impacts on marine life, specifically turtles. The expert was available before and after these sessions for discussions with clan group members;
 - I. an independent, qualified interpreter assisted the titleholder at the April/May (where available) and June 2023 sessions to provide translation, as required. The titleholder also used local interpreters where qualified interpreters were not available through the Aboriginal Interpreter Service (AIS);
 - J. written consultation materials tailored for Tiwi Islands clan groups and Traditional Owners were produced and distributed or made available at consultation sessions, including a fact sheet and maps (Appendix I);

- K. a FAQ document in response to questions posed by Tiwi Islands clan groups and Traditional Owners was prepared and distributed or made available and this was updated throughout the consultation process and published on the titleholder's website (Appendix I);
 - L. on occasions, the titleholder assisted in organising transport for Tiwi Island clan members who were having difficulty attending the consultation sessions due to road closures; and
 - M. on occasions, the titleholder rescheduled consultation sessions to accommodate 'sorry business' on the Tiwi Islands;
- iii. the purpose of the consultation and the opportunity being afforded was communicated by the titleholder to these relevant persons using clear, simple and directly expressed terms that were aligned with the intent of consultation under reg 11A being to enable the titleholder to better understand environmental impacts and risks that relevant persons consider that the activity will cause or lead to, and to refine or change the measures it proposes to address those impacts and risks. I note that relevant persons were provided with the NOPSEMA consultation brochure and made aware that the invitation to participate in consultation provides an opportunity for relevant persons to inform the titleholder of, and share with them, the nature of cultural interests that they may have within the environment that may be affected by the activity. I noted that the NOPSEMA consultation brochure was distributed to Tiwi Island clan groups and Traditional Owners at the June 2023 consultation sessions (Appendix I); and
- iv. further, I noted that the consultation process considered availability and accessibility issues of relevant persons and made provision for travelling to regional locations to meet with relevant persons. For example, representatives of the titleholder travelled to Tiwi Islands on multiple occasions (Appendix I) to identify and meet potentially relevant persons at widely advertised meetings.
- b. the titleholder has provided sufficient information to these relevant persons to allow them to make an informed assessment of possible consequences of the activity on their functions, interests or activities. In particular:
- i. the titleholder has provided 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 titleholder provided the Tiwi Island clans and Traditional Owners with a simplified information booklet on the activity with the environmental impacts and risks associated with the activity, the proposed management measures, and the location and extent of the EMBA clearly depicted. The titleholder also used clear, simple, and directly expressed terms in meetings and presentations to the relevant persons. Materials provided were appropriate for the nature and scale of the activity and its impacts and risks. Tiwi Island clan members were provided simplified presentations at clan consultation meetings, along with other materials, such as posters and videos. In addition, the titleholder provided First Nations relevant persons with a copy of the NOPSEMA consultation brochure;
 - ii. 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. The titleholder responded to requests for meetings and made itself available to meet to provide

- presentations and answer questions. This included provision of multiple face-to-face verbal briefings and presentations supported with information in pictorial or graphic form for Tiwi Island clans and Traditional Owners;
- iii. where relevant persons raised queries, objections or claims regarding the adverse impacts of the activity during the consultation process, the full text consultation records in the sensitive information part of the EP demonstrate that the titleholder provided them with responses to each of their queries, objections or claims. Further to this, when these relevant persons made reasonable requests for additional support to assist them with understanding the information provided so they could make an informed assessment of consequence, the titleholder met these requests. For example, funding the attendance of an independent leading turtle expert at consultation meetings with Tiwi Island clans and Traditional Owners;
 - iv. accurate and comprehensive information was provided to these relevant persons about the activity that was relevant and necessary for allowing an informed assessment. For example, the consultation details within the EP (including the full text records in the sensitive information part) demonstrate that the information that was provided to these relevant persons included clear details regarding the nature of the activity (e.g., location, timing, activity overview etc.), the planned and unplanned environmental impacts and risks associated with the activity, the extent of the environment that may be affected by all environmental impacts and risks of the activity, the environmental values and sensitivities known to occur within the environment that may be affected by the activity, and the control measures that the titleholder is proposing to implement to manage environmental impacts and risks to ALARP and acceptable levels; and
 - v. the titleholder adapted its approach to consultation in a manner to accommodate the cultural requests of Tiwi Island clans and Traditional Owners. I also note that relevant persons were made aware that they could request the establishment of cultural protocols with the titleholder for the purposes of sharing information in a culturally appropriate and safe way, if required.
- c. the titleholder has allowed a reasonable period for the consultation with these relevant persons. In particular:
- i. the titleholder provided relevant persons with a reasonable period to consider the information and provide feedback on how their functions, interests or activities may be affected by the activity. For example, consultation with Tiwi Island clans and Traditional Owners commenced in December 2022 and there has been an iterative process of information provision and repeated opportunities to provide feedback in writing or verbally at follow-up meetings. The titleholder held repeated, in-person meetings in a range of locations, including but not limited to, Milikapiti, Pirlangimpi, and Wurrumiyanga on the Tiwi Islands and in Darwin. In order to ensure timely notification to meet consultation expectations of the community, the titleholder used newspaper (NT Times) and social media advertisements (geotargeted to the Tiwi Islands) to notify of consultation sessions at least four weeks in advance of each session;
 - ii. in circumstances where limited or no responses from a relevant person were received by the titleholder, the EP demonstrates that the titleholder made reasonable efforts to consult the relevant person to understand how their functions, interests or activities may be affected. For example, consultation records in the sensitive information report, show that the titleholder attempted to contact the Land Councils on multiple occasions, using multiple methods (e.g.,

telephone calls, emails and/or requests for face-to-face meetings) and over a reasonable timeframe (e.g., multiple months);

- iii. I considered the rationale presented by the titleholder to support its case that a reasonable period was provided for First Nations relevant persons to participate in consultation for this EP. Section 4.6.3 of the EP details that the titleholder process included a minimum of 30 days consultation period. I note that the numerous iterations of the EP have resulted in the consultation period for the EP extending significantly beyond that period. Further, I note that the judicial commentary in the *Tipakalippa* proceedings stipulates that the consultation process must be capable of being discharged within a reasonable time; and
- iv. I note that the titleholder consultation approach also included a 30-day public awareness campaign, commencing from 25 March 2023 to seek out Relevant Persons and to raise public awareness of the Barossa Gas Project generally. This was followed by a comprehensive 30-day public awareness campaign, which ran from 17 May to 15 June 2023, specifically seeking feedback from Relevant Persons.

108. I was aware that First Nations relevant persons raised feedback or concerns regarding the adequacy of the consultation process. Whether or not a relevant person agrees that they have been adequately consulted is not determinative of whether I am satisfied regulation 10A(g) is met. Rather, I need to consider all the facts and circumstances of the consultation. My consideration of the feedback and concerns regarding the adequacy of the consultation was as follows:

- a. some Tiwi Island clan members represented by the Environmental Defenders Office raised concerns about the information provided being too technical or complex and therefore not suitable for a Traditional Custodian audience that speak English as a second or third language and may not be able to understand the content being delivered if qualified interpreters were not used. Having considered the information that was provided, I found that the titleholder addressed the claims with tailored information in readily accessible forms (e.g., videos and posters as well as face-to-face meetings with multiple translators and repeated meeting opportunities with qualified translators). I also found that the titleholder provided opportunities for Tiwi Island clan members to receive additional support with facilitating their understanding of the information provided to them, such as by funding the attendance of independent environmental scientists at consultation meetings, offering to financially support the provision of independent third-party advice and making relevant project personnel and subject matter experts available to attend consultation meetings to assist with explaining information in further detail and answering any questions. I was satisfied that the way the information was presented, and the opportunities provided to clarify and explain the activity, were suitable and appropriate; and
- b. some Tiwi Island clan members represented by the Environmental Defenders Office raised concerns with the timeframe for consultation not being sufficient given the required time to consider the information provided during the consultations, discuss it with family and clan members and provide instructions back to the Environmental Defenders Office. I note that the titleholder engaged with Tiwi Island people in January 2023 with face-to-face sessions at three locations around the Tiwi Islands (Milikapiti, Pirlangimpi and Wurrumiyanga), seeking advice on how they wish to be consulted. The consultation process commenced in February 2023 with community engagement sessions for Tiwi Island clans. I noted that 756 clan members were recorded as attending the three sessions. Follow-up clan consultation sessions were held for those same clans in April and again in

May 2023, with 820 clan members recorded as attending the three sessions. Further, face-to-face consultation sessions were again held in June 2023, with 679 clan members recorded as attending the three sessions. The EP makes it clear that over the period of February to June 2023 there were numerous ongoing opportunities provided by the titleholder to Tiwi Island clan members to come forward, seek information, discuss this with their family groups, and then subsequently provide information to the titleholder. I found that the concerns about the timeframes raised by the Tiwi Island clan members represented by the Environmental Defenders Office proved to be unfounded given the many months of engagement by the titleholder and the iterative process of information provision and various opportunities to provide feedback in writing or verbally at meetings. I also noted that the overall period for consultation (from when the Tiwi Islands clan member was contacted and an offer to meet made until the submission of the EP) was over 11 months.

109. I note that there is evidence in the consultation records that the titleholder have advised First Nations relevant persons that they may request that particular information they provide is not published in accordance with regulation 11A(4) and it is evident that these requests have been addressed by the sensitive material that was not to be published with the EP.
110. I was, accordingly, reasonably satisfied that reg 10A(g)(i) was met.
111. Having found that reg 10A(g)(i) was satisfied, I then considered whether the titleholder adopted, or proposed to adopt, appropriate measures in light of those consultations. I was reasonably satisfied that the measures adopted as a result of the consultations were appropriate for the following reasons:
- a. the EP includes a summary of any feedback, objections or claims raised by First Nations relevant persons in Section 4.7 and Appendix E, as well as the titleholder's assessment of merits of any feedback, objections or claims and its response, and corresponding measures;
 - b. the EP demonstrates the titleholder has considered any feedback provided from First Nations relevant persons regarding cultural features of the environment and the proposed approach to management of the environmental impacts and risks of the activity relating to the protection of cultural features and heritage values.
 - c. the titleholder has adopted control measures in response to the consultation to ensure impacts and risks are acceptable and ALARP. For example, the titleholder adopted the following control measures:
 - i. cultural training completed by all site-based workforce (Santos employees and contractors) by end of their first rotation offshore or first rotation on the MODU; and every 12 months thereafter (BAD-CM-049); and
 - ii. cultural heritage monitors to provide an introduction to the activity to the seas and any First Nations spiritual beings at commencement of drilling operations (BAD-CM-049).
 - d. the titleholder has adopted several additional measures as a result of the consultations which are appropriate. These measures include:
 - i. no planned crew change flights over the Tiwi Islands (including Seagull Island) unless required for safe operations or emergency response;

- ii. the titleholder will, through relevant Land Councils and other relevant persons, consult to identify and implement worthwhile First Nations initiatives that could include, but are not necessarily be limited to:
 - A. employment of cultural awareness community observers, who will conduct cultural awareness inductions for field-based staff across each of the major work packages;
 - B. support of ranger programs and studies to help First Nations people preserve environmental and cultural features and values on their country;
 - C. seeking to facilitate employment opportunities for First Nations people as trainee HSE advisors for drilling and completions activities, subject to the availability and participation of First Nations trainees, with a view to them obtaining HSE qualifications and competencies to enable future ongoing employment in HSE. Further, the titleholder plans to discuss the way in which it might be able to facilitate presentations by the trainee advisers to their communities about HSE management of the drilling and completions activities;
 - D. periodic community townhalls across regional locations relevant to the Barossa Project, to provide Project updates and to provide an opportunity for feedback from cultural awareness community observers to assist in the development of any potential improvement programs; and
- iii. facilitate trips to the drilling site, at intervals (as necessary), taking into account cultural advice as to the most appropriate clan members to attend such trips.

112. On the basis outlined above, I was reasonably satisfied that the measures adopted by the titleholder because of the consultations are appropriate, and reg 10A(g)(ii) was met.

113. Accordingly, for the reasons set out above, I am reasonably satisfied that consultation as per the requirements of reg 10A(g), insofar as they relate to First Nations (individuals and/or groups/entities) has been satisfied.

Other 'relevant persons' under regulation 11A(1)(d)

114. The EP clearly identifies who has been identified as a relevant person, includes details of the rationale the titleholder 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 EP includes reference to multiple sources of information used by the titleholder 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.

115. Table 4.11 of the EP provides a comprehensive overview of the identification and assessment of the relevant persons 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 titleholder considered all 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 titleholder considered the nature and scale of the activity and all of the possible impacts and risks of the activity when determining relevant persons.
116. I considered the titleholder's approach to identifying relevant persons located outside of Australia in Section 4.5.2.1 of the EP to be appropriate. This is because in determining whether persons and organisations located outside of Australia may be affected by the activity, the titleholder took into account the nature and scale of the activity, and the likelihood and magnitude of impacts to persons and organisations located outside of Australia. I noted that:
- a. the Operational Area is located entirely within Commonwealth waters; however, the EMBA extends into international waters (Figure 3-1);
 - b. there are no planned impacts identified from the activity that may affect the functions, interests or activities of persons and organisations located outside of Australia;
 - c. in relation to unplanned events, such as an oil pollution incident, the titleholder considered the conservatism of the oil spill modelling, the preventative controls in place to reduce the likelihood of the event occurring and the source control measures that would be implemented in the event of a spill. I agreed with the titleholder's conclusion that there is only a remote likelihood that the functions, interests and activities of persons and organisations located outside of Australia may be affected by the activity. I considered that the titleholder sought to reasonably ascertain relevant persons located outside of Australia, in a manner proportionate to the remote likelihood of any effect on the functions, interests or activities of those persons or organisations; and
 - d. a number of international persons or organisations (such as WTCF, WorldFish, ATSEA-2 Project, Association of Marine Tourism Timor-Leste (**AMT-TL**)), self-nominated as relevant persons in response to the titleholder's domestic advertising campaigns. In addition to this, the titleholder conducted an international advertising campaign geotargeting locations including Indonesia and Timor-Leste. The advertisements were published in various languages, including Indonesian, Tetum and English, and contained links to the titleholder's EP summary website. I note that no further persons or organisations self-nominated as relevant persons, following the international advertising campaign.
117. A number of environmental conservation group have been identified in the EP as relevant persons, including, the ATSEA-2 Project, AMCS-NT, CCWA, ECNT, Greenpeace Australia Pacific (**Greenpeace**), Keep Top End Coasts Healthy, Sea Turtle Foundation, West Timor Care Foundation and World Wildlife Fund (**WWF**).
118. I was satisfied that the process of identifying these other relevant persons was sufficient and appropriate to the activity. I note that consultation extended to those groups or organisations advertising a direct interest in the activity, including those with publicly stated position of opposition (e.g., ECNT).
119. Having identified these relevant persons, I considered the information that had been provided to them in accordance with reg 11A(2).
- a. I considered that the information provided was sufficient, in particular:

- i. the EP 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;
- ii. the titleholder informed relevant persons of the purpose of consultation, including advising relevant persons of the titleholder's regulatory obligations relating to consultation;
- iii. the consultation provided information about the environment and potential impacts to allow relevant persons to make an informed assessment of the possible consequences of the activity on their functions, interests or activities. For example, an activity specific Drilling and Completions Information Booklet (see Appendix F.2) was provided to relevant persons. The consultation package included an overview of the regulatory approval process and requirements, an activity and location summary with maps (including other aspects of the project, such as the Barossa Gas Export Pipeline, water depth, distance to key regional features, petroleum safety zone details and estimated timing and duration. The Information Booklet included a summary of the regional environment and a regional socio-economic summary, in particular in relation to the EMBA. Finally, it also outlined all impact and risk of the activity as evaluated in the EP, each with a summary of expected/ potential impacts as well as a discussion of selected management control measures to manage the impacts and risks. The booklet concludes with an appropriately formulated explanation of relevant person consultation and request for involvement and feedback on the proposed activity;
- iv. the consultation provided relevant persons with the opportunity to provide input and engage in a genuine two-way dialogue, as per the NOPSEMA consultation guideline. I noted that offers were made to meet and discuss with relevant persons and steps were taken by the titleholder to create awareness of the activity and to encourage potentially relevant persons to make themselves known to the titleholder. In some instances, non-government groups or organisations have presented claims that they have not been provided with sufficient information or a reasonable period for the consultation. Considering the record of consultation, I am satisfied that the consultation obligation has been discharged with these groups and a reasonable opportunity has been provided for them to participate in the consultation. While the consultation process with non-government groups or organisations was protracted and mutually agreed resolutions have not always been achieved, I was satisfied that there was still a two-way dialogue in which relevant persons were given sufficient information and allowed reasonable time for them to make an informed assessment of the possible consequences of the activity on their functions, interests or activities and relevant matters raised through the consultation have been addressed in the EP;
- v. the consultation method appropriately aligned consultation effort according to the potential for impacting on a relevant person's functions, interests and activities; and the degree to which the relevant person functions, interests and activities are affected. The EP states that the only consultation required is in relation to an unplanned hydrocarbon spill that could reach Indonesian or Timor-Leste waters in worst case circumstances. I note that the probability of this is remote, and the degree to which RP functions, interests and activities would be affected highly uncertain and dependent on the particular nature of the incident, conditions at the time, and the implementation of available mitigations to reduce the extent, severity and duration of a spill.

- vi. Further, the titleholder used different materials to support the provision of information that was suited to the relevant person being consulted, such as posters, pictures, videos and maps. In some instances, relevant persons requested additional information to be provided, or for the provision of translated consultation materials in foreign languages for the individuals they represented (e.g., AMT-TL, ATSEA-2 Project, WTC and WorldFish). The titleholder considered these requests but was of the view that sufficient information and a reasonable period had already been provided, commensurate with the remote potential for their functions, interests or activities being affected by the activity. In this regard, I agreed that the potential for the relevant persons functions, interests or activities to be affected was remote and having considered the record of consultation, the titleholder's response to these organisations and rationale for declining certain requests, I was satisfied that the consultation obligation has been discharged with these groups. Further detail regarding my reasoning is provided at [120];
 - vii. the titleholder has considered relevant persons' views of what constitutes sufficient information and has considered requests for additional information by relevant persons. The titleholder responded to requests made by relevant persons, either through provision of additional information in relation to impacts and risks of the activity, and advice that the EP was publicly available on the NOPSEMA website, or by clarifying the scope of the activity and where impacts and risks related to the broader project but were not impacts of the activity to which this EP relates. Noting some areas of concern related to the broader Barossa project and subsequent phases of development. For example, GHG emissions from the processing, combustion and consumption of Barossa gas; for these the titleholder committed to assessing the impacts and risks from greenhouse gas emissions and the reduction of impacts and risks to as low as reasonably practicable and acceptable levels in the Barossa Production Operations EP; and
 - viii. the titleholder has provided responses to reasonable requests for information, and where information has not been provided, there is a reasonable basis as to why this is the case; and although there are examples where the titleholder did not provide certain relevant persons with additional information requested (e.g., scientific literature and modelling reports, copy of the latest version of the EP), I was satisfied that sufficient information was made available to the relevant person including: a link to the publicly available EP; the Consultation Drilling and Completions Information Booklet; numerous email responses tailored to a relevant person's objections and claims raised; as well as the measures the titleholder proposes to adopt as a result of the consultation undertaken. I considered that provision of further information in these circumstances appeared to be beyond what is required to make an informed assessment of the possible consequences of the activity on respective functions, interests or activities.
- b. I am satisfied that a reasonable period was provided for the consultations. This is because:
- i. the EP (Section 4.6.3) describes the approach taken to determining a reasonable period for consultation that is based on a principle of 30-days and case-by-case consideration of the relevant person's particular circumstances and includes consideration of the nature, scale and complexity of the activity. I note that in most instances, the consultation period extended beyond the 30-days;
 - ii. the process for relevant persons consultation provided for the titleholder to take into account any availability and accessibility issues of relevant persons;

- iii. I note that a period of multiple months was provided for consultation on this activity, from the date of initiating consultation with relevant persons to the date of the most recent EP submission to NOPSEMA, to support the case that the period allowed for consultation has been reasonable; and
- iv. the titleholder 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 titleholder was proactive in sending reminders to relevant persons about impending dates for providing any response.

120. I was aware that International relevant persons raised feedback or concerns regarding the adequacy of the consultation process. I considered these concerns in a similar way to my approach at paragraph [108]:

- a. some International relevant persons raised concerns about the information provided not being suitable to inform an assessment of the consequences of the activity on their functions, interests or activities, suggesting that translations should be provided for the materials. The titleholder indicated it considered these requests on a case-by-case basis and decided that translating materials was not required. While such requests do not appear unreasonable when considered outside any particular context, having considered the limited degree to which there was potential for the activity to affect these relevant persons functions, interests of activities, and noting the relevant person engaged with and responded to materials available in English, I was satisfied the relevant persons were provided with sufficient information. I also note that the request for translation was to inform individuals beyond the relevant person being consulted in its own right and thus not strictly necessary to meet the titleholder's obligation under Regulation 11A. Further, these relevant persons did engage with the materials provided in English and also provided responses in English. The consultation with international relevant persons commenced in mid-April 2023 and the last correspondence was in mid-July 2023, with nothing further raised after this point. The updated EP was last updated and submitted in mid-November 2023. I noted that, the titleholder did provide interpreters when requested on the Tiwi islands where there was potential for the planned operations of the activity to interact with relevant person functions, interests and activities, which suggests that the approach the titleholder employed was scaled and adapted according to the degree for potential impacts on relevant person functions, interests and activities.
- b. some International relevant persons raised concerns with the level of detail provided in the information to them. There were requests for detailed modelling studies on oil spill trajectory and potential socioeconomic impacts, and detailed environmental risk and impact studies on marine parks and species in the Arafura Timor Seas region, as well as reviews of potential conflicts with existing marine protected species legislation, regulations and the objectives, activities and implementation of relevant management plans in the region. The titleholder indicated it considered these requests on a case-by-case basis and decided that they were not valid within the context of this particular activity given the conservatism of the oil spill modelling, the remote likelihood of the event occurring and the control measures that would be implemented in the event of a spill. The level of detail in information requested by these relevant persons was not in keeping with the nature and scale of the potential risks to them and their functions, interests, and activities from the activity and therefore not necessary for the relevant person to make an informed assessment of the consequences of the activity on their functions, interests or activities.

- c. I was therefore satisfied the relevant persons were provided with sufficient information.
121. Taking the above into account, I am satisfied that a reasonable period for consultation had been given (as per reg 11A(3)).
122. I accepted that reg 11A(4) was satisfied because relevant persons were informed (in similar terms to those at [93] above), that they may request that particular information provided during consultation not be published and information subject to such a request was not published.
123. 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 EP, and effectively informed the identification of environmental values and sensitivities to ensure impacts and risks are reduced to ALARP and acceptable levels. 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 titleholder's processes for demonstrating that the environmental impacts and risks of the activity will be reduced to ALARP 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; and
 - b. the titleholder's assessment of merit and all responses to objections and claims are reasonable and supported by evidence, and the measures adopted (if any) because of the consultation are appropriate. In some cases, the titleholder's 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 ALARP and acceptable levels.
124. In relation to environmental conservation groups, I considered the summary of consultation provided at Section 4.7 and Appendix E presents a suitable demonstration that the titleholder has provided sufficient information over a reasonable period of time, for the relevant persons to participate in consultation and make an informed assessment of the possible consequences of the activity on their functions, interests or activities. The record demonstrates a protracted engagement with these relevant persons on this activity. The full text of consultation records provided in the Sensitive Information Report indicate that the relevant persons have demonstrated an understanding of the activity, engaged with the information, asked questions and raised a number of objections and claims. The EP demonstrates that the titleholder has assessed the merits of the objections and claims raised and provided a response.
125. I was satisfied that the measures which the titleholder adopted in response to the consultation were appropriate. Accordingly, I was satisfied that the EP met the requirements of reg 10A(g)(ii).
126. Considering the matters discussed above, I was satisfied that, in relation to relevant persons as defined by reg 11A(1)(d), the EP demonstrates that the titleholder has carried out the consultations required by Division 2.2A and the measures (if any) that the titleholder 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)

127. Reg 11A(1)(e) states that a titleholder must consult with 'any other person or organisation that the titleholder considers relevant'. The titleholder consulted with the following 'other persons or organisations' that it considered to be relevant:
- a. Croker Island Clans (via Mulurryud Consultative Committee); and
 - b. individual (Darwin).
128. I was reasonably satisfied that consultations with the individual (Darwin) met the requirements in reg 11A(2)-(4). The EP demonstrates that consultation took the form of emails over a reasonable period (ranging from April 2023 until July 2023). The information provided to the relevant persons was sufficient to make an informed assessment of the possible consequences of the activity on their functions, interest or activities. I am satisfied that sufficient information was made available to the relevant person including: a link to the publicly available EP; the Information Booklet and the numerous email responses tailored to the relevant person's objections and claims raised.
129. Section 4.5 of the EP outlines the process applied by the titleholder in identifying relevant persons, which I considered to be appropriate. The titleholder made an assessment as to whether the activity to be carried out under the EP may be relevant to persons or organisations. In the case of Croker Island clans, the titleholder considered information contained in the North Marine Parks Network Management Plan 2018, *Yarmirr v Northern Territory and Others (No 2)* (1998) 82 FCR 533 concerning native title in respect of the sea and sea-bed in the Croker Island region and correspondence from the Environmental Defenders Office on behalf of its Croker Island-based client, in determining whether Croker Island clans' functions, interests or activities may be affected by the activity. Whilst the titleholder's consideration of native title determinations is informative about whether those persons have functions, interests and activities that may be affected by the petroleum activity, this is not determinative of the existence of those attributes. I was prepared to accept the titleholder's reasoning provided in Section 4.6.6 of the EP, regarding the identification of Croker Island clans as relevant persons under regulation 11A(1)(e).
130. In relation to the titleholder consultations with Croker Island clans, I considered the summary of consultation provided at Section 4.7 and the full text consultation records provided in the sensitive information part of the EP. I was reasonably satisfied that consultations with these persons met the requirements in reg 11A(2)-(4) because:
- a. the methods applied to consultation with these relevant persons were appropriate and reasonably adapted. In particular:
 - i. the titleholder's approach to consultation with these relevant persons was undertaken according to their preferred method of engagement as far as reasonably practicable. I noted that prior to undertaking regulation 11A consultation, the titleholder attended Croker Island on 13 July 2023 and held discussions with Croker Island people, providing these people with information on the Barossa Gas project and seeking the level of interest in consultation sessions. The titleholder held subsequent meetings with Croker Island clan members on 1 and 8 September 2023 in Darwin. Following this, cultural advisers to the titleholder supported Croker Island Elders and cultural leaders in establishing the Mulurryud Consultative Committee through a process of self-determination (Section 4.6.6). The titleholder recognises the

- Mulurryud Consultative Committee as a representative forum for the purpose of regulation 11A consultation, which I accepted was an appropriate approach for these relevant persons, having considered the purpose and membership of the Mulurryud Consultative Committee outlined in the Committee's Charter (provided in the sensitive information part of the EP);
- ii. the purpose of consultation and the opportunity being afforded was communicated to the Mulurryud Consultative Committee in a way which satisfied me that they had an understanding of the purpose of consultation and the role which they would have in the two-way dialogue. The titleholder made the Committee aware that the invitation to participate in consultation provides an opportunity to inform the titleholder of the nature of cultural interests that they may have within the environment that may be affected by the activity. I noted that on 15 September 2023, the titleholder met with the Mulurryud Consultative Committee and the transcript of the meeting (provided in the sensitive information part of the EP) demonstrates that the Committee asked questions related to impacts and risks of the activity, and responded to questions from the titleholder; and
 - iii. in addition, opportunities were provided over multiple months for other groups or individuals to self-identify as relevant persons in response to public notices, advertising, geo-targeted social media campaigns, leveraging existing channels of communication, and hosting community information sessions in Darwin;
- b. the titleholder has provided sufficient information to these relevant persons to allow them to make an informed assessment of possible consequences of the activity on their functions, interests or activities. In particular:
- i. tailored information has been provided to these relevant persons in a readily accessible form and format. For example, the Mulurryud Consultative Committee were provided with videos on the Barossa project and the drilling and completions activity. Information was also delivered to the Committee in verbal format supported by maps and other graphics;
 - ii. additional information was provided iteratively, and consultation was adapted in response to the feedback received from the Mulurryud Consultative Committee to allow them to make an informed assessment of the possible consequences of the proposed activity on their functions, interests, or activities. The titleholder responded to the questions and actions arising from the meeting with the Mulurryud Consultative Committee. In considering the full text records of consultation provided in the sensitive information part of the EP, I noted that the Mulurryud Consultative Committee were satisfied with the responses from the titleholder; and
 - iii. accurate and comprehensive information was provided to the Mulurryud Consultative Committee about the activity that was relevant and necessary for allowing an informed assessment. The consultation details within the EP (including the full text records in the sensitive information part) demonstrate that the information that was provided to the Mulurryud Consultative Committee included clear details regarding the nature of the activity (e.g. location, timing, types of equipment etc.), the planned and unplanned environmental impacts and risks associated with the activity, the extent of the environment that may be affected by all environmental impacts and risks of the activity, the environmental values and sensitivities known to occur within the environment that may be affected by the activity, and the control measures that the titleholder's proposing to implement to manage environmental

impacts and risks to ALARP and acceptable levels. I noted that, the Mulurryud Consultative Committee asked specific questions to the titleholder about the impacts and risks of the activity, and how they would be managed;

- c. the titleholder has allowed a reasonable period for the consultation with these relevant persons. In particular:
 - i. engagement with Croker Island clans commenced as early as July 2023 and consultation with the Mulurryud Consultative Committee commenced in September 2023. There has been a process of information provision and various opportunities to provide feedback in writing or verbally at meetings;
 - ii. I note that the titleholder's consultation approach also included a 30-day public awareness campaign, commencing from 25 March 2023 to seek out relevant persons and to raise public awareness of the Barossa Gas project generally. This was followed by a comprehensive 30-day public awareness campaign, which ran from 17 May to 15 June 2023, specifically seeking feedback from relevant persons;
- d. I note that there is evidence in the consultation records that the titleholder advised the Mulurryud Consultative Committee that they may request that particular information they provide is not published in the EP, in accordance with regulation 11A(4). It is evident that the request from the Mulurryud Consultative Committee for confidential information not be published in the EP, has been addressed by the titleholder. I considered the confidential material contained in the sensitive information part of the EP.

131. I noted that in some instances, feedback and concerns were raised regarding the adequacy of the consultation process. In particular, individuals of the Minjilang community represented by the Environmental Defenders Office, presented concerns to the titleholder, which I have considered in a similar way to my approach at paragraph [108]:

- a. concerns were raised in relation to the titleholder's consultation process with Croker Island clans. I noted that the titleholder consulted with the Mulurryud Consultative Committee, as a representative forum for the purpose of regulation 11A consultation, in accordance with the manner in which the Mulurryud Consultative Committee requested to be consulted. I accepted that this was an appropriate approach for consultation with Croker Island clans having considered the purpose and membership of the Committee, outlined in the Committee's Charter (provided in the sensitive information part of the EP). I also note statements made by, or on behalf of the Committee (Sensitive Information Report, pp 519ff) regarding how, and with whom, consultations should be conducted and that this sought that consultation be conducted with the "elders who sit on the Mulurryud Consultative Committee". Whilst the Environmental Defenders Office made several representations about how consultations should, in their opinion, be conducted with the Croker Island people (contained within the same part of the Sensitive Information Report), I did not find them to be persuasive or to detract from the consultation that was actually conducted by the titleholder;
- b. concerns were raised that the information provided was not sufficient for the individual to make an informed assessment of the possible consequences of the activity on their functions, interests or activities. Having considered the information that was provided, I found that the titleholder had provided the individual with a copy of the Barossa Drilling and Completions Information Booklet

and a link to the titleholder's EP summary website. I was satisfied that the way the information was presented, in this Booklet and on the titleholder's website, was suitable and appropriate; and

- c. concerns were raised that the timeframe for consultation was not reasonable. The titleholder commenced the consultation process in April 2023. Since that time, there has been ongoing opportunities provided by the titleholder for individuals to identify themselves and provide information to the titleholder. I found that the concerns about the timeframes were raised by the individual late in the consultation process, after numerous opportunities were afforded to provide the titleholder with feedback (including offers to meet with the titleholder);

132. I also considered that the measures adopted as a result of the consultations were appropriate for the purposes of reg 10(g)(ii). This is because:

- a. the EP includes a summary of any feedback, objections or claims raised by these relevant persons in Section 4.7, as well as the titleholder's assessment of merits of any feedback, objections or claims and its response, and corresponding measures. In considering the full text records of consultation provided in the sensitive information part of the EP, I noted that the Mulurryud Consultative Committee raised no objections or claims about the adverse impact of the activity;
- b. the EP includes evidence that demonstrates the titleholder has considered any feedback provided from these relevant persons regarding description of the environment and the proposed approach to management of the environmental impacts and risks of the activity;
- c. the titleholder has adopted control measures in response to the consultation to ensure impacts and risks are acceptable and ALARP. For example, the titleholder adopted the following control measures:
 - i. cultural training completed by all site-based workforce (Santos employees and contractors) by end of their first rotation offshore or first rotation on the MODU; and every 12 months thereafter (BAD-CM-049); and
 - ii. cultural heritage monitors to provide an introduction to the activity to the seas and any First Nations spiritual beings at commencement of drilling operations (BAD-CM-049).
- d. The titleholder has adopted several additional measures as a result of the consultations which are appropriate. These measures include:
 - i. the titleholder will, through relevant Land Councils and other relevant persons, consult to identify and implement worthwhile First Nations initiatives that could include, but are not necessarily be limited to:
 - ii. employment of cultural awareness community observers, who will conduct cultural awareness inductions for field-based staff across each of the major work packages;
 - iii. support of ranger programs and studies to help First Nations people preserve environmental and cultural features and values on their country;
 - iv. seeking to facilitate employment opportunities for First Nations people as trainee HSE advisors for drilling and completions activities, subject to the availability and participation of First Nations trainees, with a view to them obtaining HSE qualifications and competencies to enable future ongoing employment in HSE. Further, the titleholder plans to discuss the way in which it

might be able to facilitate presentations by the trainee advisers to their communities about HSE management of the drilling and completions activities;

- v. periodic community townhalls across regional locations relevant to the Barossa Project, to provide Project updates and to provide an opportunity for feedback from cultural awareness community observers to assist in the development of any potential improvement programs; and
- vi. facilitate trips to the drilling site, at intervals (as necessary), taking into account cultural advice as to the most appropriate clan members to attend such trips.

133. Section 4.7 and Appendix E of the EP provides the titleholder's assessment of merit and all responses to objections and claims, which are reasonable and supported by evidence, and that measures adopted (if any) because of the consultation are appropriate.

134. I also acknowledged the ongoing consultation commitment in the EP. 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.

135. I was therefore reasonably satisfied that reg 10A(g) was met in relation to 'relevant persons' as defined by reg 11A(1)(e).

The EP complies with the Act and Regulations: regulation 10A(h)

136. I considered the EP and was satisfied that it was compliant with the Act and Regulations, in particular that:

- a. the EP does not allow for any equipment that is not to be used for future production to be left on the seabed at the completion of the activity and includes provision for the inspection, maintenance, monitoring, and repair of subsea infrastructure installed for future production, consistent with the requirements of section 572 of the OPGGS Act (see Section 2.3.9). All wells have been designed to allow for future removal. Final decommissioning of the well and other subsea infrastructure at the end of field life will be subject to a separate EP.
- b. consultation with relevant persons (Section 4) has informed the titleholder in its obligations under sections 280 of the OPGGS Act that the proposed petroleum activity will 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 titleholder's rights and obligations.

137. For the reasons set out above (at [19] – [39]) I was satisfied that the EP addressed the content requirements of regs 13-16 of the Environment Regulations with enough clarity, consistency and detail commensurate to the nature and scale of the activity.

138. The titleholder has submitted the EP in writing as required by reg 9(6) of the Environment Regulations.

139. The EP commits to complying with the requirements in regulations 26, 26A, 26AA, 26B, 26C, 27, 28 and 29 regarding various notifications and reporting to NOPSEMA as well as storage and access to records (Section 8).

140. Based on the above, I was reasonably satisfied that the EP met the requirements of reg 10(h).

Other considerations

Principles of ecological sustainable development (ESD)

141. 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 ESD set out in section 3A of the EPBC Act. I considered that the EP was consistent with the principles of ESD, as provided below:

- a. Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the 'integration principle'):
 - i. the EP includes the titleholder's evaluation of the socio-economic, cultural and ecological features of the EMBA by the activity and consultation with relevant persons which demonstrates an integrated approach to considering all environmental features, including relevant social, cultural and economic features that make up the definition of environment under regulation 4. Further, the EP includes an evaluation of the potential impacts and risks of the petroleum 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. 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 environmental degradation (the 'precautionary principle'):
 - i. the EP detailed the titleholder's 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 suitable approaches for addressing scientific uncertainty associated with predictions of environmental impacts and risks. Consideration was also given in the EP to the effectiveness of management measures in ensuring the petroleum activity will not result in serious or irreversible environmental harm, specifically it was noted that the petroleum activity will not have a significant impact on a MNES and will not result in serious or irreversible environmental damage.
- c. 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 (the 'intergenerational principle'):
 - i. the EP identifies measures the titleholder has adopted to minimise the environmental impacts and risks of the petroleum activity. The titleholder applied a mitigation hierarchy, such that where avoidance was not possible, control measures were adopted to ensure impacts and risks are managed to ALARP and an acceptable level. I considered this was consistent with the intergenerational principle.

- d. The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the 'biodiversity principle'):
- i. the EP included the titleholder's 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 titleholder 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 Environmental Significance) for matters protected under Part 3 of the EPBC Act;
 - ii. there is evidence in the EP that the titleholder undertook a robust evaluation of environmental impacts and risks using appropriate impact assessment tools (such as oil spill 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. the EP contains an assessment against relevant requirements of statutory instruments to demonstrate that the activity would not be inconsistent with these instruments (such as the Conservation Management Plan for the Blue Whale);
 - iv. the environmental impact and risk evaluations and EPOs in the EP collectively demonstrate that the activity will be managed such that impacts and risks to biological diversity and the ecological integrity of the Commonwealth marine area will be of an acceptable level; and
 - v. I concluded that the petroleum activity will not have a significant impact on MNES protected under the EPBC Act including World Heritage properties, National Heritage properties, *Ramsar* wetlands, listed threatened species and communities, listed migratory species, Commonwealth marine areas, and the Great Barrier Reef Marine Park.
- e. Improved valuation, pricing and incentive mechanisms should be promoted (the 'valuation principle'):
- i. the EP construct is such that the titleholder is required to bear the costs relating to environmental management of the activity, to ensure that environmental impacts and risks are managed to ALARP and to an acceptable level. I considered that the onus is on the titleholder to protect ecological services and capital associated with the EMBA of the activity, and to the extent that the valuation principle is relevant for an individual activity, the EP demonstrates compliance with Australian government legislation and policy requirements relating to environmental management.

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

142. The Program endorsed under section 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.
143. In implementing the Program, NOPSEMA conducts assessments of EPs against the requirements of the Program, which includes meeting the acceptance criteria and content requirements under the Environment Regulations. 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.

144. I considered matters protected under Part 3 of the EPBC Act, including listed threatened and migratory species and the Commonwealth marine area, and was reasonably satisfied that the activity under the EP met the requirements of the Program on the basis that:
- a. the activity will not result in unacceptable impacts on listed threatened species and is not inconsistent with relevant recovery plans and threat abatement plans for listed threatened species. I have considered these documents when determining the acceptability of the EP where impacts to listed threatened species may arise;
 - b. there are control measures in place to ensure that impacts to the Commonwealth marine area will be of an acceptable level, having regard to relevant policy documents, gazettal instruments, bioregional plans, wildlife conservation plans, plans of management and EPBC Act guidance documents on the DCCEEW website; and
 - c. there are control measures in place to ensure that the petroleum activity will not result in unacceptable impacts to a migratory species or an area of important habitat for a migratory species, having regard to relevant policy documents, wildlife conservation plans and guidelines on the DCCEEW website.

The Program: indirect consequences of an action

145. 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 gives consideration to the policy to determine where indirect consequences may be considered an 'impact' of a petroleum activity. This consideration is on a case-by-case basis against the particular circumstances of the petroleum activity in accordance with the criteria set out in the policy.
146. In assessing the EP, I had regard to the indirect consequences policy, in particular in relation to indirect GHG emissions. I noted the titleholder's assessment of the indirect consequences policy at Appendix B2 of the EP, and gave consideration as to whether the petroleum activity is a substantial cause of GHG emissions from the processing, consumption and combustion of Barossa gas, and are facilitated to a major extent by the petroleum activity, within the contemplation of the titleholder, and are a reasonably foreseeable consequence of the petroleum activity.
147. Having regard to the indirect consequences policy and the assessment team's findings and conclusions, I agreed that:
- a. the activity the subject of this EP does not involve or authorise the extraction of gas for onshore processing and is therefore not authorised by the EP (if accepted);
 - b. while the activity is a necessary pre-cursor to the extraction of gas, further activities are required prior to the point any gas can be extracted, processed, consumed or combusted and will themselves be subject to a separate assessment and approval process; and
 - c. future activities require their own EP under the Environment Regulations including consideration of the indirect consequences policy and appropriate coverage of impacts for each activity, based on the case specific circumstances. Therefore, I consider that emissions from gas processing, consumption and combustion of Barossa 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.

The Program: cumulative environmental impacts

148. In the context of the Program, cumulative impacts refers to the direct and indirect impacts of a number of different petroleum 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.
149. NOPSEMA considered the potential for cumulative environmental impacts to the Commonwealth marine area as required by the Program. NOPSEMA is reasonably satisfied that the environmental impacts of the petroleum activity combined with existing and future pressures on the Commonwealth marine area would be of an acceptable level, because:
- a. the EP considered the potential cumulative impacts of drilling up to eight development wells within the Operational Area, including cumulative disturbance to marine sediment quality and benthic communities, and cumulative noise impacts to marine fauna from elevated noise levels associated with multiple noise emitting sources (i.e., MODU and project vessels). The impact evaluations in combination with the associated control measures provide confidence that impacts of the petroleum activity, when considered in the context of other anthropogenic pressures, will be of an acceptable level; and
 - b. the EP considered the potential cumulative impacts of other petroleum activities proposed for the Barossa project, including the Barossa Gas Export Pipeline Installation. The Barossa Gas Export Pipeline Installation activity may result in cumulative impacts due to both a spatial and temporal overlap with this petroleum activity (Barossa Development Drilling and Completions). These impacts have been described and assessed in the EP. NOPSEMA notes that other petroleum activities proposed for the Barossa project (such as subsea infrastructure installation) will be subject to separate EPs, of which NOPSEMA will consider as part of the EP assessment, the potential for cumulative impacts to the Commonwealth marine area.

Conclusion

150. For the reasons set out above, I was reasonably satisfied that the EP met the following criteria set out in sub-regulation 10A of the Environment Regulations and should therefore be accepted:
- a. the EP is appropriate for the nature and scale of the activity; and
 - b. the EP demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable; and
 - c. the EP provides for appropriate EPOs, EPSs, and measurement criteria; and
 - d. the EP includes an appropriate implementation strategy and monitoring, recording and reporting arrangements; and
 - e. the EP 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; and

- f. the EP demonstrates that:
 - i. the titleholder has carried out the consultations required by Division 2.2A; and
 - ii. the measures (if any) that the titleholder has adopted, or proposes to adopt, because of the consultations are appropriate; and
- g. the EP complies with the Act and the regulations.

Signed



Environment Manager – Drilling and Spill Risk

04 January 2024

Attachment A: Relevant terms

151. In this statement, the words and phrases have the following meaning:
- a. The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* is referred to as the OPGGS Act.
 - b. The National Offshore Petroleum Safety and Environmental Management Authority is referred to as NOPSEMA.
 - c. The *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* are referred to as the Environment Regulations.
 - d. The Environment Plan (EP) means the Barossa Development Drilling and Completions Environment Plan (Document No: BAD-200-0003, Revision 6, dated 15 November 2023).
 - e. The *Environment Protection and Biodiversity Conservation Act 1999* is referred to as the EPBC Act.
 - f. The titleholder means Santos NA Barossa Pty Ltd.
 - g. The term 'petroleum activity' means the Barossa Development Drilling and Completions activity.
 - h. The term 'environment' means:
 - i. ecosystems and their constituent parts, including people and communities; and
 - ii. natural and physical resources; and
 - iii. the qualities and characteristics of locations, places and areas; and
 - iv. the heritage value of places; and includes
 - v. the social, economic and cultural features of the matters mentioned in paragraphs (i), (ii), (iii) and (iv).
 - i. The term 'environmental impact' means any change to the environment, whether adverse or beneficial, that wholly or partially results from an activity.
 - j. The term 'control measure' means a system, an item of equipment, a person or a procedure, that is used as a basis for managing environmental impacts and risks.
 - k. The term 'environmental management system' includes the responsibilities, practices, processes and resources used to manage the environmental aspects of an activity.
 - l. The term 'environmental performance' means the performance of a titleholder in relation to the environmental performance outcomes and standards mentioned in an environment plan.
 - m. The term 'environmental performance outcome' (EPO) means a measurable level of performance required for the management of environmental aspects of an activity to ensure that environmental impacts and risks will be of an acceptable level.
 - n. The term 'environmental performance standard' (EPS) means a statement of the performance required of a control measure.
 - o. The term 'principles of ecologically sustainable development' (ESD) means the principles of ESD set out in Section 3A of the EPBC Act.
 - p. The term 'relevant person' has the meaning provided under regulation 11A of the Environment Regulations.

- q. The term 'Operational Area' is taken to be the operational area for the petroleum activity as defined in Section 2.1.2 of the EP.
- r. The Program Report – Strategic Assessment of the environmental management authorisation process for petroleum and greenhouse gas storage activities administered by the National Offshore Petroleum Safety and Environmental Management Authority under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 that was endorsed on 7 February 2014, is referred to as the Program.
- s. The term 'as low as reasonably practicable' is referred to as 'ALARP'.
- t. Terms used in this Statement of Reasons which are defined in the Environment Regulations or the OPGGS Act have the same meaning as under the Environment Regulations or OPGGS Act.

Attachment B: Legislative framework

152. All offshore petroleum activities that are undertaken for the purpose of petroleum recovery, other than on an appraisal basis, are required to have an Offshore Project Proposal (OPP) accepted by NOPSEMA under the Environment Regulations or an equivalent approval by the Environment Minister under the EPBC Act.
153. The OPP framework enables a proponent to achieve a whole of project authorisation; however, it does not permit offshore petroleum activities to commence until an EP (or multiple EPs) for the activities has been accepted by NOPSEMA under the Environment Regulations.
154. Additional approvals may be required before a titleholder can commence a petroleum activity. A Well Operations Management Plan (WOMP) is required to be accepted by NOPSEMA under the *Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011* for petroleum activities that involve well-related activities. A Safety Case is required to be accepted by NOPSEMA under the *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009* for facilities involved in the petroleum activity.
155. The Environment Regulations provide that:
- a. Before commencing a petroleum activity, a titleholder must submit an EP for the petroleum activity to the Regulator (regulation 9(1)).
 - b. A petroleum activity means any operation or works in an offshore area carried out for the purpose of (a) exercising a right conferred on a petroleum titleholder under the OPGGS Act by a petroleum title; or (b) discharging an obligation imposed on a petroleum titleholder by the OPGGS Act or a legislative instrument under the OPGGS Act (regulation 4).
 - c. An EP for a petroleum activity that is, or is part of, an offshore project may only be submitted if the Regulator has accepted an OPP that includes that activity or if the Environment Minister has made a decision or granted approval under the EPBC Act relating to an action that is equivalent or includes that activity (regulation 9(3)).
 - d. If a titleholder submits an EP, the Regulator may request the titleholder to provide further written information about any matter required by the Environment Regulations to be included in the EP (regulation 9A).
 - e. If a titleholder receives a request under regulation 9A, they must provide the information requested by incorporating the information into the EP and resubmitting the EP within the period specified or within a longer period agreed to by the Regulator.
 - f. If the EP is resubmitted under regulation 9A, the Regulator must have regard to that further information in making the decision under regulation 10.
 - g. Within 30 days after the day the Regulator publishes the EP (under regulation 9AB) if the Regulator is:
 - i. reasonably satisfied that the EP meets the criteria set out in regulation 10A, the Regulator must accept the EP (regulation 10(1)(a));

- ii. not reasonably satisfied that the EP meets the criteria set out in regulation 10A, the Regulator must give the titleholder notice in writing (regulation 10(2)); or
 - iii. if the Regulator is unable to make a decision on the EP within the 30 day period, the Regulator must give the titleholder notice in writing and set out a proposed timetable for consideration of the EP (regulation 10(1)(c)).
- h. A notice to a titleholder under regulation 10(2) must:
- i. state that the Regulator is not reasonably satisfied that the EP submitted by the titleholder meets the acceptance criteria set out in regulation 10A;
 - ii. identify the criteria set out in regulation 10A about which the Regulator is not reasonably satisfied; and
 - iii. set a date by which the titleholder may resubmit the EP.
- i. Pursuant to regulation 5G, NOPSEMA must not accept an environment plan unless it is reasonably satisfied that the titleholder is compliant with subsection 571(2) of the Act in relation to the petroleum activity, and the compliance is in a form that is acceptable to NOPSEMA.
- j. Regulation 10A provides the acceptance criteria the Regulator must consider in determining whether to accept an EP, and includes that the plan:
- i. is appropriate for the nature and scale of the activity;
 - ii. demonstrates that the environmental impacts and risks of the activity will be reduced to ALARP;
 - iii. demonstrates that the environmental impacts and risks of the activity will be of an acceptable level;
 - iv. provides for appropriate environmental performance outcomes (EPOs), environmental performance standards (EPSs) and measurement criteria;
 - v. includes an appropriate implementation strategy and monitoring, recording and reporting arrangements;
 - vi. 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;
 - vii. demonstrates that:
 - A. the titleholder has carried out the consultation required by Division 2.2A; and
 - B. the measures (if any) that the titleholder has adopted, or proposes to adopt, because of the consultation are appropriate; and
 - viii. complies with the OPGGS Act and the Environment Regulations.
- k. Regulation 10(6)b provides that the Regulator may accept the plan subject to limitations or conditions applying to operations for the activity.
156. The Environment Regulations provides for the authorisation of a petroleum activity, but does not authorise an oil spill, which is considered for risk evaluation and contingency planning in the EP only. Section 569 of the OPGGS Act places obligations on petroleum titleholders to control the flow and prevent the escape of petroleum within the permit area, lease area or licence area.

157. The Environment Regulations impose a duty on the titleholder to demonstrate to NOPSEMA in the EP that a proposed activity will be carried out in a manner:
- a. consistent with the principles of ecological sustainable development set in section 3A of the EPBC Act; and
 - b. by which impacts and risks of the activity will be reduced to as low as reasonably practicable (ALARP) and acceptable levels.

Attachment C: Key materials considered in making the decision

158. In making this decision, NOPSEMA considered the documents making up the EP submission in accordance with legislative requirements and NOPSEMA's policies and procedures. The key material that NOPSEMA had regard to in making this decision includes, but not limited to:
- a. The EP, comprising:
 - i. Barossa Development Drilling and Completions Environment Plan (Document No: BAD-200-0003, Revision 6, dated 15 November 2023);
 - ii. Barossa Development Drilling and Completions Oil Pollution Emergency Plan (Document No: BAA-200-0327, Revision 1, dated 21 September 2023); and
 - iii. Barossa Development Drilling and Completions Environment Plan Sensitive Information Report.
 - b. The legislative framework relevant to EP assessments, including:
 - i. the OPGGS Act;
 - ii. the Environment Regulations; and
 - iii. the Program³.
 - c. NOPSEMA Environment plan assessment policies, guidelines and guidance:
 - 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 Section 572 Maintenance and removal of property regulatory policy (N 00500 PL1903);
 - v. NOPSEMA Managing gender-restricted information (draft) (N-04750-PL2098);
 - vi. NOPSEMA Financial assurance for petroleum titles guideline (N-04730-GL1381);
 - vii. NOPSEMA Environment plan decision making guideline (N-04750-GL1721);
 - viii. NOPSEMA Consultation in the course of preparing an Environment Plan guideline (N-04750-GL2086);
 - ix. NOPSEMA Environment plan content requirements guidance note (N-04750-GN1344);
 - x. NOPSEMA Making submissions to NOPSEMA guideline (N-04000-GL0225);
 - xi. NOPSEMA Petroleum activities and Australian marine parks guidance note (N-04750-GN1785);
 - xii. NOPSEMA Consultation with Commonwealth agencies with responsibilities in the marine area guideline (N-06800-GL1887);
 - xiii. NOPSEMA Oil pollution risk management guidance note (N-04750-GN1488);
 - xiv. NOPSEMA Operational and scientific monitoring programs information paper (N-04750-IP1349);

³ <https://www.environment.gov.au/protection/assessments/strategic/offshore-petroleum-greenhouse-gas>

- xv. NOPSEMA Acoustic impact evaluation and management information paper (N-04750-IP1765)
 - xvi. NOPSEMA Petroleum activity guidance note (N-04750-GN1343);
 - xvii. NOPSEMA Source control planning and procedures information paper (N-04750-IP1979);
 - xviii. NOPSEMA Environmental bulletin — oil spill modelling (April 2019);
 - xix. NOPSEMA Blue Whale Conservation Management Plan – Frequently asked questions (November 2021); and
 - xx. NOPSEMA Consultation on offshore petroleum environment plans brochure (May 2023).
- d. Procedures:
- i. NOPSEMA Environment plan assessment standard operating procedure (N-04750-SOP1369).
- e. Other relevant documents and records:
- i. recorded findings and conclusions of NOPSEMA's assessment team regarding assessment of how the EP met the acceptance criteria set out in regulation 10A of the Environment Regulations;
 - ii. published consultation guidance by relevant persons:
 - A. Australian Fisheries Management Authority, Petroleum industry consultation with the commercial fishing industry, available at: <https://www.afma.gov.au/petroleum-industry-consultation-commercial-fishing-industry>;
 - B. Department of Agriculture, Fisheries and Forestry (DAFF), Fisheries and the environment – Offshore Petroleum and Fisheries, available at: <https://www.agriculture.gov.au/agriculture-land/fisheries/environment/opgga>;
 - C. Department of Climate Change, Energy, the Environment and Water, Interim Engaging with First Nations People and Communities on Assessments and Approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (2023);
 - iii. relevant published, peer-reviewed scientific literature, including the scientific literature cited in the EP;
 - iv. relevant policies, plans of management, recovery plans, conservation advice and other guidance for matters protected under the EPBC Act, including, but not limited to:
 - A. Department of the Environment, Water, Heritage and the Arts, Significant Impact Guidelines 1.1 – Matters of National Environmental Significance, EPBC Act Policy Statement (2013);
 - B. Department of Sustainability, Environment, Water, Population and Communities, 'Indirect consequences' of an action: Section 527E of the EPBC Act, EPBC Act Policy Statement (2013);
 - v. Department of the Environment and Energy, National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds (2020);
 - vi. Commonwealth of Australia, Recovery Plan for Marine Turtles in Australia 2017–2027 (2017);
 - vii. Commonwealth of Australia, Conservation Management Plan for the Blue Whale 2015–2025 (2015);

- viii. Department of Agriculture, Water and the Environment, Guidance on key terms within the Blue Whale Conservation Management Plan (2021);
 - ix. Commonwealth of Australia, Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans (2018);
 - x. Commonwealth of Australia, Wildlife Conservation Plan for Seabirds (2020);
 - xi. Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North-west Marine Region (2012);
 - xii. Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North Marine Region (2012);
 - xiii. Director of National Parks, North-west Marine Parks Network Management Plan (2018); and
 - xiv. Director of National Parks, North Marine Parks Network Management Plan (2018).
- f. relevant legislative requirements that apply to the activity and are relevant to the environmental management of the activity; and
 - g. relevant Federal Court authority.