

Acceptance of Barossa Development Drilling and Completions Environment Plan

Document No: A825015

Date:

6 May 2022

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) provides the following statement of reasons for its decision to accept the Barossa Development Drilling and Completions Environment Plan (EP), in accordance with regulation 10 of the *Offshore Petroleum and Greenhouse Gas Storage* (Environment) *Regulations 2009*.

Relevant terms

- 1. 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 3, dated 11/02/2022).
 - e. The Oil Pollution Emergency Plan (OPEP) means the Barossa Development Drilling and Completions Oil Pollution Emergency Plan (Document No: BAA-200 0314, Revision 1, dated 24/12/2021).
 - f. The Environment Protection and Biodiversity Conservation Act 1999 is referred to as the EPBC Act.
 - g. The titleholder means Santos NA Barossa Pty Ltd.
 - h. The term 'petroleum activity' means the Barossa Development Drilling and Completions activity.
 - i. 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).
 - j. The term 'environmental impact' means any change to the environment, whether adverse or beneficial, that wholly or partially results from an activity.



- k. 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.
- I. The term 'environmental management system' includes the responsibilities, practices, processes and resources used to manage the environmental aspects of an activity.
- m. The term 'environmental performance' means the performance of a titleholder in relation to the environmental performance outcomes and standards mentioned in an environment plan.
- n. 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.
- o. The term 'environmental performance standard' (EPS) means a statement of the performance required of a control measure.
- p. The term 'principles of ecologically sustainable development' (ESD) means the principles of ESD set out in Section 3A of the EPBC Act.
- q. The term 'relevant person' has the meaning provided under regulation 11A of the Environment Regulations.
- r. 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.
- s. 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.
- t. The term 'as low as reasonably practicable' is referred to as 'ALARP'.

Decision

- 2. On 14 March 2022, NOPSEMA made the decision pursuant to regulations 10(1)a of the Environment Regulations to accept the EP.
- 3. Acceptance of the EP permits the titleholder to undertake the petroleum activity described in the EP, which consists of a Barossa Development drilling and completions campaign (herein referred to as the Barossa Development Drilling Campaign) within Commonwealth petroleum production licence NT/L1.
- 4. In undertaking the petroleum activity, the titleholder is subject to the requirements of the Environment Regulations and relevant provisions in the OPGGS Act.
- 5. A notice of decision was provided to the titleholder on 14 March 2022, in accordance with regulation 11 of the Environment Regulations.



Authority

- 6. The decision maker for acceptance of an EP under regulation 10 of the Environment Regulations is referred to as the 'Regulator'. Where the decision relates to a petroleum activity, as it does here, regulation 4 of the Environment Regulations defines the Regulator to be NOPSEMA.
- 7. I, am the decision maker responsible for this decision. At the time of making this decision, I held the position of Environment Manager Drilling & Spill Risk within NOPSEMA. I was empowered to make the decision pursuant to delegation made by Stuart Smith, Chief Executive Officer (CEO) of NOPSEMA. Pursuant to section 666(2) of the OPGGS Act, anything done by the CEO in the name of NOPSEMA is taken to have been done by NOPSEMA.
- 8. A copy of the relevant instrument of delegation is available from NOPSEMA on request.
- 9. In this Statement of Reasons:
 - a. when I refer to NOPSEMA having made a request, I am referring to a request made by me in exercising my authority to make this decision;
 - b. when I refer to NOPSEMA having considered or had regard to a matter, whether it be expressed in those words or similar phrasing, I am referring to a matter that I have considered or taken into account in exercising the authority delegated to me to make this decision; and
 - c. when I refer to NOPSEMA making a finding of fact or accepting a submission, I am referring to a finding made by me in exercising the authority delegated to me to make this decision.
- 10. Where appropriate, in making this decision, I have considered and accepted advice and recommendations from the assessment team within NOPSEMA.

The assessment process

- 11. On 06 October 2021, the titleholder submitted the EP (Document No: BAD-200-0003, Revision 1, dated 06 October 2021) to NOPSEMA in accordance with regulation 9(1) of the Environment Regulations.
- 12. On 15 October 2021, the EP (Document No: BAD-200-0003, Revision 1, dated 6 October 2021) was found to be complete for assessment in accordance with regulation 9AA and published by NOPSEMA on NOPSEMA's website in accordance with regulation 9AB.
- 13. On 25 October 2021, NOPSEMA issued the titleholder with a letter advising of a change to the assessment timeframe under Regulation 10(1)C, with the assessment date to be completed by 29 November 2021.
- 14. On 29 November 2021, the titleholder was requested to provide further written information under Regulation 9A.
- 15. In response to the requests from NOPSEMA to provide further written information, the titleholder resubmitted the EP in accordance with regulation 9A(1) of the Environment Regulations on 30 December 2021 (Document No: BAD-200-0003, Revision 2, dated 24 December 2021).
- 16. On 24 January 2022, the titleholder was requested to provide further written information under Regulation 9A.



- 17. In response to the requests from NOPSEMA to provide further written information, the titleholder resubmitted the EP in accordance with regulation 9A(1) of the Environment Regulations on 14 February, 2022 (Document No: BAD-200-0003, Revision 3, dated 11 February, 2022).
- 18. The NOPSEMA assessment team comprised a decision maker, lead assessor and environment technical specialists with expert knowledge in environmental and marine science relevant to offshore oil and gas activities and their associated impacts and risks. The assessment included an examination of higher order impacts and risks, with the specialist NOPSEMA assessors paying particular attention to those matters. The assessment included a general assessment of the whole EP and detailed topic assessments of the EP content, as follows:
 - a. Matters protected under Part 3 of the EPBC Act.
 - b. Consultation with a focus on adequacy of consultation with relevant persons.
 - Unplanned emissions and discharge scope with a focus on the adequacy of arrangements and capability for timely and effective source control response to a low of well control event.
- 19. On 14 March 2022, pursuant to regulation 10(1)(a) of the Environment Regulations, I accepted the assessment team's recommendation that the EP submission meets all the acceptance criteria set out in regulation 10A of the Environment Regulations. In deciding to accept the EP for the activity, I have considered the findings and agree with the conclusions made by the assessment team in relation to the general assessment and each topic assessment. Notice of this decision was provided in writing to the titleholder on 14 March 2022, in accordance with regulation 11 of the Environment Regulations.

Key materials considered in making the decision

- 20. In making this decision, NOPSEMA considered the documents making up the EP submission in accordance with legislative requirements and NOPSEMA policy and procedure. The key material that NOPSEMA had regard to in making this decision includes:
 - a. The EP, comprising:
 - Barossa Development Drilling and Completions Environment Plan (Document No: BAD-200-0003, Revision 3, dated 11/02/2022);
 - ii. Barossa Development Oil Pollution Emergency Plan (OPEP) (Document No: BAA-200 0314, Revision 1, dated 24/12/2021); and
 - iii. Sensitive Stakeholder Information Report Barossa Drilling and Completions Environment Plan (Document No. BAD-200 0013, submitted 30/12/2021).
 - b. The legislative framework relevant to EP assessments, including:
 - i. the OPGGS Act;
 - ii. the Environment Regulations; and
 - iii. the Program¹.
 - c. NOPSEMA Environment plan assessment policies, guidelines and guidance:
 - i. NOPSEMA Assessment policy (N-04000-PL0050);

¹ https://www.environment.gov.au/protection/assessments/strategic/offshore-petroleum-greenhouse-gas



- ii. NOPSEMA Environment plan assessment policy (N-04750-PL1347);
- iii. Financial assurance for petroleum titles policy (N-04730-PL1780);
- iv. Financial assurance for petroleum titles guideline (N-04730-GL1381);
- v. NOPSEMA Environment plan decision making guidelines (N-04750-GL1721);
- vi. NOPSEMA Section 572 Maintenance and removal of property regulatory policy (N-00500-PL1903);
- vii. NOPSEMA Environment plan content requirements guidance note (N-04750-GN1344);
- viii. NOPSEMA Petroleum activities and Australian marine parks guidance note (N-04750-GN1785);
- ix. NOPSEMA Oil pollution risk management guidance note (N-04750-GN1488);
- NOPSEMA Operational and scientific monitoring programs information paper (N-04750-IP1349); and
- xi. NOPSEMA Petroleum activity guidance note (N-04750-GN1343)
- xii. NOPSEMA Source control planning and procedures information paper (N-04750-IP1979)
- xiii. NOPSEMA Environmental bulletin oil spill modelling (April 2019)

d. Procedures:

- i. NOPSEMA Environment plan assessment standard operating procedure (N-04750-SOP1369).
- e. Other relevant documents and records:
 - i. relevant published, peer-reviewed scientific literature, including the scientific literature cited in the EP:
 - ii. relevant policies, plans of management, recovery plans, conservation advice and other guidance for matters protected under the EPBC Act, including:
 - 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);
 - C. Department of the Environment and Energy, National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds (2020);
 - D. Commonwealth of Australia, Recovery Plan for Marine Turtles in Australia 2017–2027 (2017);
 - E. Commonwealth of Australia, Conservation Management Plan for the Blue Whale 2015– 2025 (2015);
 - F. Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North Marine Region (2012);
 - G. Department of Sustainability, Environment, Water, Population and Communities, Marine Bioregional Plan for the North-west Marine Region (2012);
 - H. National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (Cth) (SGM) made under the National Greenhouse and Energy Reporting Act 2007 (Cth) (NGERS).

Legislative framework

21. 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. 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).
- c. 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.
- d. If the EP is resubmitted under regulation 9A, the Regulator must have regard to that further information in making the decision under regulation 10.
- e. 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)).
- f. 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.
- g. 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.
- h. 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.

Consideration and findings of material facts

22. NOPSEMA took into account the following considerations and findings of material fact which contributed to the decision to accept the EP.

Requirement that the EP be submitted in writing

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

The EP meets the formal requirements in regulation 12

24. NOPSEMA is satisfied that the EP meets all the formal requirements of regulation 12 of the Environment Regulations, as it includes the matters set out in regulations 13, 14, 15 and 16 of the Environment Regulations.

Environmental assessment: regulation 13

Description of the activity

- 25. NOPSEMA considered the description of the petroleum activity in Section 2 of the EP and found that:
 - a. a comprehensive description of the petroleum activity had been provided relevant to the consideration of environmental impacts and risks of the petroleum activity, including the following:
 - the location of the petroleum activity, which is clearly set out in the EP by figures and tables, including coordinates;
 - ii. the operational area and petroleum safety zone;
 - iii. timing and duration of the activity;
 - iv. details of the equipment spread, including mobile offshore drilling unit, vessels, and helicopters
 - v. routine and non-routine emissions and discharges from the petroleum activity, including air emissions and drilling discharges; and
 - vi. unplanned discharges ranging from a diesel spill in a vessel collision scenario to a condensate spill in a loss of well control scenario.
 - b. Information relevant for the consideration of environmental impacts and risks was included in the EP. Key aspects of the description included the following:
 - the activity is located within the Commonwealth Petroleum Production Licence NT/L1. The
 operational area (defined as the entire permit area within which all activities will occur) is
 located approximately 138km north of the Tiwi islands. Water depths range from
 approximately 204m to 376m.



- ii. the activity includes drilling and completion of up to eight production wells using a semisubmersible mobile offshore drilling unit, light well intervention vessel and ongoing management of the complete wells (future commissioning and production phases must be provided for in separate EPs).
- iii. the activity may occur between 2022 2025 with the estimated duration of drilling being approximately 90 days per well, and the estimated duration of light well intervention activity being approximately seven days per well. Continuous operations are planned during drilling and completion activities (24 hours per day, seven days per week). Vessel-based activities for well management could occur anytime following well completion for a short-term duration (days) per well.

Description of the environment

- 26. NOPSEMA considered the description of the existing environment in Section 3 and Appendix C of the EP and found that:
 - a. a thorough description of the physical and biological environment and details of relevant values and sensitives, that may be affected by the petroleum activity, including under emergency conditions, had been provided.
 - b. 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 within the meaning of the EPBC Act, as described in Section 3.2.6.8 of the EP.
 - c. the description of the environment provided includes the operational area (OA) of the activity which has been defined as the entire permit area in which activities may occur, and an extended Environment that May Be Affected (EMBA) which has been conservatively defined based on stochastic modelling for an unmitigated worst case oil pollution incident to low exposure values consistent with the matters set out in NOPSEMA Bulletin Oil spill modelling.
 - d. values and sensitivities within the OA that may be affected by the petroleum activity, including under emergency conditions, have been identified and described.
 - i. The OA does not overlap any Australian Marine Parks, 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 OA intersects the Key ecological feature of the Shelf break and slope of the Arafura Shelf. The nearest shoal is the Lynedoch Bank which is located approximately 38km south-east.
 - iii. Presence of listed threatened species, listed threated ecological communities, and listed migratory species has been identified and described including 19 threatened species and 33 listed migratory species as being potentially present in the OA.
 - iv. Managed fisheries that overlap with the OA have been identified and described, including four Commonwealth managed fisheries (Northern Prawn Fishery, Southern Bluefin Tuna Fishery, Western Skipjack Tuna Fishery, Western Tuna and Billfish Fishery) and four NT-managed fisheries (Aquarium Fishery, Offshore Net and Line Fishery, Timor Reef Fishery, Spanish Mackerel Fishery).

- e. values and sensitivities within the EMBA that may be affected by the petroleum activity, including under emergency conditions, have been identified and described.
 - i. Australian Marine Parks including the Oceanic Shoals Marine Park, Arafura Marine Park, Ashmore Reef Marine Park, Cartier Island Marine Park.
 - ii. Key ecological features (KEFs) including 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, Tributary canyons of the Arafura Depression.
 - iii. Biologically important areas (BIAs) for EPBC Act-listed species including habitat critical to the survival of four EPBC Act-listed marine turtles (Green, Hawksbill, Flatback, Olive Ridley).
 - iv. Commonwealth and state/territory managed fisheries, including those identified in the OA and the North-West Slope Trawl Fishery, Coastal Line Fishery, Demersal Fishery, Mackerel Managed Fishery, Northern Demersal Scalefish Fishery.
 - v. Social, economic and cultural features of the environment have been identified and described, relating to aquaculture, traditional Indonesian fishing and Australian recreational fishing, cultural heritage, shipwrecks, tourism, shipping, telecommunication cables, petroleum industry, and defence activities.
 - vi. Presence of listed threatened species, listed threated ecological communities, and listed migratory species has been identified and described including 98 threatened species and 58 listed migratory species as being potentially present in the EMBA.

Requirements

- 27. The EP identifies the legislative requirements that apply to the petroleum activity and are relevant to the environmental management of the petroleum activity in various parts of the submission, particularly in Appendix B (description of legislative requirements relevant to the activity), section 5 (impact and risk assessment methodology), section 6 (Planned activities risk and impact assessment) and section 7 (Unplanned activities risk and impact assessment). Throughout the EP, a process is applied for evaluating acceptability of environmental impacts and risks that considers whether the petroleum activity aligns, or where applicable, is not inconsistent, with relevant legislative, environmental and other external context including the principles of ecologically sustainable development (ESD).
- 28. The EP includes a suitable description of the relevant legislative and other requirements applying to the petroleum activity, including, but not limited to, relevant plans of management under the EPBC Act, and a suitable demonstration of how these requirements will be met by the titleholder, by integrating these requirements as criteria for demonstrating that environmental impacts and risks of the activity will be of an acceptable level.

Evaluation of environmental impacts and risks

- 29. As required by regulation 13(5), the EP includes:
 - a. details of the environmental impacts and risks, including those arising from potential emergency conditions whether resulting from accident or any other reason, for the petroleum activity which are



provided in Section 6. The environmental impacts and risks associated with the petroleum activity are identified, including environmental impacts and risks associated with:

- i. receptors:
 - A. plankton;
 - B. invertebrates;
 - C. fish;
 - D. sharks and rays;
 - E. birds;
 - F. marine mammals;
 - G. marine reptiles;
 - H. commercial fisheries; and
 - I. other marine users.
- ii. planned aspects;
 - A. noise emissions;
 - B. light emissions;
 - C. atmospheric emissions (including greenhouse gas);
 - D. seabed and benthic habitat disturbance;
 - E. interactions with other marine users;
 - F. operational discharges (including deck drainage, sewage, grey water, putrescible waste, cooling water, bilge water, brine and ballast water);
 - G. drilling and completion discharges; and
 - H. contingency spill response operations.
- iii. unplanned aspects:
 - A. release of solid objects
 - B. introduction of invasive marine species;
 - C. marine fauna interaction;
 - D. non-hydrocarbon and chemicals release and
 - E. hydrocarbon spill condensate, marine diesel and minor hydrocarbon release.
- iv. an evaluation of 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 presented by the proposed activity (section 6 and Appendix D).

- b. details of the control measures that will be used to reduce the impacts and risks of the activity to ALARP and an acceptable level (section 6, and Appendix D). Control measures have been justified through evaluation considering additional, alternative or improved controls.
- 30. The EP presented facts and evidence in support of the evaluation presented, which included, but is not limited to, the following in relation to noise and light aspects (with particular focus on matters protected under Part 3 of the EPBC Act) and the unplanned aspect of hydrocarbon spill condensate, marine diesel and minor hydrocarbon release:
 - a. The EP evaluates acceptability of impacts of light emissions associated with the activity, which are predominately from the Mobile Offshore Drilling Unit (MODU), vessels and flaring. The EP provides a thorough evaluation of light impacts to marine fauna, with a focus on turtles as the key receptor of concern. The operational area does not overlap any BIA for marine turtles. The flatback turtle internesting BIA is the nearest and is over 50km away, with the nearest turtle nesting beaches ~ 130km from the operational area.
 - b. The EP evaluates acceptability of impacts of underwater noise emissions associated with the activity, which are predominantly associated with the MODU, vessels, helicopters, and flaring. The EP references current, contemporary scientific literature (and thresholds) to inform acceptability evaluation. There are no significant areas/BIAs for cetaceans within the operational area. The nearest BIA is the pygmy blue whale distribution BIA, which is 51km from the operational area.
 - c. An acceptable level of risk has been determined for each impact and risk aspect which considers relevant species recovery plans, threat abatement plans, and conservation advice.
 - d. In relation to hydrocarbon spill risks, the EMBA was defined on the basis of stochastic modelling of a worst-case loss of well control (LOWC) scenario consistent with NOPSEMA expectations. A description was provided of physical and chemical pathways and potential impacts of exposure to receptors in the event of a hydrocarbon spill, with more specific detail provided in relation to receptors within the moderate exposure value area. Special focus was given to receptors that have higher environmental values such as protected areas/BIAs/listed species; response planning was prioritised by defining Hot Spots that identify greatest intrinsic value, probability of contact, or oil concentration.
 - e. All industry-standard and relevant source control response options for worst-case LOWC scenarios were evaluated, including: emergency blowout preventer activation, capping stack deployment, relief well drilling, intervention with the subsea first response toolkit, and subsea dispersant injection. Relevant arrangements were presented for well control capability and expertise/ personnel from Wild Well Control (WWC), including arrangements for timely mobilisation of capping stack and relief well drilling rig.

Environmental Performance Outcomes and Standards

- 31. NOPSEMA considered the EPOs, EPSs and measurement criteria provided in EP section 8 and throughout the OPEP and found that:
 - a. EPOs have been set which define performance for the management of the environmental aspects of the activity to ensure that environmental impacts and risks will be of an acceptable level;



- b. EPSs have been set for control measures identified as being necessary to reduce the environmental impacts and risks of the activity to ALARP and acceptable levels; and
- measurement criteria provided will allow the titleholder to determine whether each environmental performance outcome and environmental performance standard is being met for the duration of the activity.

Implementation strategy for the EP: regulation 14

- 32. The EP contains an implementation strategy which includes content addressing the requirements of regulation 14 of the Environment Regulations, including:
 - a. titleholder performance reporting to NOPSEMA. For example, section 8.9 outlines the routine reporting obligations to NOPSEMA including annual environmental performance reporting;
 - b. a description of the environmental management system that will be used to ensure that impacts and risks continue to be identified and that control measures are effective in reducing environmental impacts and risks to ALARP and acceptable levels so that EPOs and EPSs continue to be met. In particular, section 8.1 outlines the titleholder's environmental management system and includes a management of change process (section 8.10.2) and EP review process (section 8.10.3);
 - c. an established chain of command, setting out roles and responsibilities for personnel, including during emergency conditions. In particular, section 8.5 outlines the organisation structure for the activity and the roles and responsibilities of key project team members, while the titleholder's Oil Pollution Emergency Plan (OPEP) outlines the roles and responsibilities of key personnel required to manage emergencies (section 5);
 - d. measures to ensure that personnel have awareness of roles and responsibilities and have appropriate competencies and training. In particular, EP section 8.6 and OPEP section 5.4 outline the measures that are in place for ensuring employee and contractor competency, including the necessary awareness, training and induction requirements to fulfil their duties;
 - e. provides for sufficient monitoring, recording, audit, management of non-conformance review and monitoring, recording and reporting arrangements are adequate. In particular, EP section 8.11 and OPEP section 5.5 outline the process for inspections and audits including content that describes management of non-conformances;
 - f. provides for sufficient monitoring and maintenance of emissions and discharges relevant to assessing whether EPOs and EPSs are being met. In particular, section 8.9.2 outlines the approach to monitoring and records keeping for emissions and discharges;
 - g. contains an oil pollution emergency plan and provides for the updating of the plan. The oil pollution emergency plan (OPEP) included in the submission includes adequate arrangements for responding to and monitoring oil pollution in accordance with regulation 14(8AA) and 14(8D). The submission also includes arrangements for testing the response arrangements in accordance with regulation 14(8) & 14(8B) at a schedule consistent with the requirements of regulation 14(8C). The arrangements established are consistent with the National system for oil pollution preparedness and response in accordance with regulation 14(8E).



- h. provides for appropriate ongoing consultation during the implementation of the activity with relevant persons. In particular, section 4.5 outlines the arrangements for ongoing consultation including with relevant authorities of the Commonwealth, State or Territory and other relevant interested persons or organisations.
- i. The implementation strategy complies with the Act, the regulations and any other environmental legislation applying to the activity.

Details of titleholder and liaison person: regulation 15

- 33. Details for the titleholder were included in Section 1.5 of the EP, including name, business address, contact details and Australian Company Number or ACN (within the meaning of the *Corporations Act 2001*) as well as the contact details of the titleholder's nominated liaison person.
- 34. The EP contained arrangements for notifying NOPSEMA of a change in the titleholder, the nominated liaison person, or of a change in the contact details of either.

Other information in the EP: regulation 16

- 35. NOPSEMA considered other information provided in the EP and found that:
 - a. The titleholder's "Health, Safety, Environment Policy" was provided (Appendix A);
 - b. The EP contained a report on all consultations with relevant persons under regulation 11A by the titleholder (Section 4.4). That report contains a summary of each response made by a relevant person, and assessment of the merits or claim about the adverse impact of each activity to which the EP relates and a statement of the titleholder's response, or proposed response, if any, to each objection or claim. A copy of the full text of any response by a relevant person was provided in the sensitive information report; and
 - c. The EP provides details of all reportable incidents, meaning those that have the potential to cause moderate to significant environmental damage relating to the activity, to be reported to NOPSEMA (section 8.8).

Consideration of substantive requirements of the EP

- 36. Under the environment regulations, in order to accept the EP, NOPSEMA must be reasonably satisfied that the criteria in regulation 10A are met.
- 37. There are also considerations that NOPSEMA must take into account as a consequence of other legislation, policy statements and common law principles. These include the following:
 - a. Pursuant to Australian Government documents 'Streamlining Offshore Petroleum Environmental Approvals: Strategic Assessment Report' (February 2014) and 'Streamlining Offshore Petroleum Environmental Approvals: Program Report' (February 2014), in the course of assessing the EP, NOPSEMA is required to consider certain matters under the EPBC Act.
- 38. These additional considerations are taken into account at various stages of the assessment and are further addressed at the end of the statement of reasons.



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

- 39. NOPSEMA is reasonably satisfied that the EP is appropriate to the nature and scale of the activity because:
 - a. The description of the activity is consistent with the EP content requirements set out in regulation 13(1). The activity is described in sufficient detail to inform subsequent impact and risk assessment processes, including relevant routine and non-routine emissions and discharges, and potential unplanned discharges resulting from emergency conditions.
 - b. The description of the environment is thorough, appropriately considers relevant values and sensitivities (including matters protected under Part 3 of the EPBC Act) and is consistent with the EP content requirements of regulation 13(2) and 13(3). The description of the environment extends to areas that may be affected by potential emergency conditions in the event of an oil pollution incident and is conservatively defined through stochastic modelling of worst-case spill scenarios consistent with NOPSEMA expectations.
 - c. The impact and risk assessment is commensurate to the magnitude of the hazards related to the activity, and the level of analysis and evaluation is proportionate to the nature and scale of the activity. The rigour of the environmental assessment meets the requirements of regulation 13(5). The assessment includes appropriate consideration of impacts and risks from the drilling and completions activity, including in emergency conditions as per regulation 13(6). Suitable control measures have been included as outlined in the assessment for acceptability, ALARP, EPSs and EPOs discussed below. Those controls have been addressed via the inclusion of EPOs, EPS and measurement criteria (MC) as per regulation 13(7).
 - d. Relevant person consultation has been incorporated, meeting the EP content requirements in regulation 16(b), and the requirements of regulation 11A which are further addressed below under regulation 10A(g). Responses made by relevant persons are adequately summarised and a reasonable statement of response has been provided, including provision of additional information, clarification of the petroleum activity scope, and confirmation or incorporation of relevant environmental management into the EP.
 - e. Legislative requirements as they relate to the activity are outlined in Appendix B of the EP. How legislation is relevant to the activity is defined, along with reference to the relevant sections of the EP is provided. These sections describe how the relevant requirements are met, consistent with regulation 13(4). The activity as described is consistent with the accepted Barossa Area Development Offshore Project Proposal.

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

- 40. NOPSEMA is reasonably satisfied that the EP demonstrates that the environmental impacts and risks of the activity will be reduced to ALARP because:
 - a. For all risk aspects evaluated in section 6 (planned events) and section 7 (unplanned events) of the EP, an ALARP evaluation has been included that details the control measures to be implemented, including evaluating additional potential control measures and justifying why control measures are

- either adopted or rejected in order to reach an ALARP position. The control measures adopted are considered sufficient for the nature and scale of the impacts and risks presented.
- b. The submission has applied the risk assessment process appropriately for planned aspects of the activity with commensurate focus on higher order hazards associated with the activity such as drilling discharges, the control measures adopted are reasonable for reducing impacts to the environment from the activity in the circumstances. Unplanned aspects of the activity are described in section 7 and include aspects such as dropped objects, invasive marine species, marine fauna interactions, and spill scenarios. These aspects are appropriately described and evaluated to give confidence that the controls selected are appropriate and that risk is reduced to ALARP.
- c. Control measures are provided in sufficient detail to demonstrate they will be effective in reducing the impacts and risks for the duration of the activity. The approach used for the analysis for the adoption or exclusion of control measures is sound. Particular attention was applied to the adequacy of arrangements and capability for timely and effective source control response to a loss of well control event, which were found to be suitable for the nature of the activity and hydrocarbon type.
- d. The evaluation of the adoption of control measures is sound and the ALARP process described in section 5 has been followed. The level of detail in the ALARP assessment is commensurate to the nature and scale of each of the potential impacts and risks identified in sections 6 and 7 of the EP.
- e. The EP considers information gathered from the consultation process when demonstrating impacts and risks are ALARP, such as advice relating to biosecurity arrangements, feedback from the Director of National Parks, and requirements for notifications, amongst other things. 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.

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

- 41. NOPSEMA is reasonably satisfied that the EP demonstrates that the environmental impacts and risks of the activity will be of an acceptable level because:
 - a. The evaluation methods selected have been followed and applied thoroughly and when considering the information presented in the EP with the evaluation and controls, justifiable conclusions can be reached regarding acceptable levels of impact and risk.
 - b. Acceptable levels are evaluated using information that is considered appropriate, including relevant legislation, international agreements and conventions, guidelines and codes of practice, recovery plans, conservation advice and marine park zoning objectives, as well as Santos' Environmental Management Policy, information provided by internal context and external stakeholder expectations and the principles of ESD. The assessment of each impact and risk considers these elements and makes explicit reference to ESD.
 - c. Key documents (such as recovery plans, conservation advices and management plans) are outlined in Table 3.8 of the EP and are considered for relevant receptors and applicable risk. These have been considered in the subsequent environmental assessment sections at sections 6 & 7 for planned and



- unplanned aspects to demonstrate the proposed activity is not inconsistent with the requirements contained in the key documents.
- d. In relation to planned aspects of the activity, 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 drilling activity. For example, the environmental assessment includes consideration of risk aspects typical for drilling activities, such as light emissions, noise emissions, seabed disturbance, atmospheric emissions, and a particular focus on drilling discharges.
- e. In relation to unplanned aspects, consideration has been given to dropped objects, introduction of invasive marine species, marine fauna interactions, and spill scenarios. 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 response options have been considered. The modelling undertaken considers the hydrocarbon properties (Barossa condensate is a Group 1 non-persistent hydrocarbon) and predicts no shoreline oil accumulation at the modelled exposure values. The evaluation of risks posed by spill scenarios includes consideration of potential impacts to the receptors outlined in the description of environment, and informs the selection of appropriate spill response options.
- f. The EP provides an appropriate evaluation of impacts and risks specific to 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.

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

- 42. NOPSEMA considered the EPOs provided in the EP, including the relevant EPOs that relate to direct and indirect GHG emissions and found that they were appropriate because:
 - a. Table 8-1 summarises all the relevant EPO's for the activity. Eight EPOs are identified in this section and provide suitable linkage to the range of acceptable levels identified throughout the individual environmental assessments for risk aspects of the activity described in sections 6 and 7 of the EP.
 - b. The EPOs address all of the key risk aspects presented in the submission, and address identified impacts and risks appropriately given the nature, scale and duration of the activity.
 - c. The EPOs reflect levels of performance that are required, and logically flow from the environmental assessments provided for the various risk aspects.
 - d. The EPSs provided in Table 8.2 of the EP are clear and unambiguous and able to be matched to the relevant control measures described. Overall, the EPSs provide a suitable level of detail to secure ongoing compliance throughout the activity.
 - e. Table 8.2 of the EP provides clearly stated measurement criteria.
 - f. The EPOs, EPs and MC are suitably linked and complement one another.



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

- 43. NOPSEMA is reasonably satisfied that the EP includes an appropriate implementation strategy and monitoring, recording and reporting arrangements because:
 - a. The content requirements of regulation 14 are evident and appropriately addressed. An implementation strategy is outlined, which complies with the Act, regulations and other legislative requirements as required by regulation 14(1) and 14(10).
 - b. There is evidence that all impacts and risks will continue to be reduced to ALARP and acceptable levels as required by regulations 14(3), and 14(6). Section 8 of the EP outlines the implementation strategy, including the environmental management system (EMS). Section 8.3 provides for ongoing hazard identification, assessment and control through document and record Management, Management of change (MOC) and reviews as well as audits and inspections. The implementation strategy and environmental management system provide a range of systems and processes to ensure that impacts and risks will continue to be managed to ALARP and acceptable levels.
 - c. The MOC process is described in section 8.10 of the EP. The MOC process includes consideration for further consultation depending on the nature and scale of the change. The MOC process also allows for the assessment of new information that may become available after EP acceptance, such as new management plans for Australian marine parks, new recovery plans or conservation advice for species, and changes to the EPBC Protected Matters Search Tool results. Accepted MOCs become part of the in-force EP or OPEP and are tracked on a register and made available on the Santos intranet. The MOC process is well described and supported by Figure 8.1. Section 8.11 of the EP provides a reasonable description of Santos' continuous improvement process.
 - d. Section 8.1 of the EP describes the EMS as a framework of policies, standards, processes, procedures, tools and control measures and specifically states that the EMS ensures control measures in the EP continue to be effective and that appropriate monitoring is in place (see section 8.9 and Table 8.5) to determine whether levels of performance are being met.
 - e. Appropriate training and competencies are covered in section 8.5 of the EP as required by regulation 14(4) and 14(5), and include activity inductions, and training and competency. Qualifications and training records will be sampled before and/or during an activity. All personnel on the MODU and support vessels will complete an induction that will include a component addressing their EP responsibilities. Chain of command as well as roles and responsibilities are appropriately addressed in section 8.6 of the EP. Overall, appropriate commitment is made to training to ensure that all employees and contractors have suitable competencies.
 - f. An appropriate OPEP has been provided that includes arrangements that are suitable given the spill scenarios presented, and that has addressed the EP content requirements, including regulation 14(8), 14(8AA), 14(8A), 14(8B), 14(8C) and 14(8E). As required by regulation 14(8)(D), an Operational and Scientific Monitoring Plan is included at Section 14 and Appendix J of OPEP.
 - g. Monitoring, recording and reporting arrangements are adequate, and meet the requirements of regulation14(2), 14(6) and 14(7): Reporting arrangements are described in section 8.9 of the EP and regulatory, and other notification and compliance reporting requirements are summarised in Table



- 8-4. It is noted that while section 8.9.2 (monitoring and recording of emissions and discharges) and Table 8-5 are presented at a broad level, it is clear from the control measures and performance standards in Table 8.2 that appropriate monitoring is in place for planned emissions.
- h. Section 8.11, 8.11 and 8.11 of the EP addresses reviews, audits and inspections. Non-conformance management (section 8.11) will be entered into an incident management system (HSE Toolbox) and assigned corrective actions, time frames and responsible persons.
- i. Ongoing consultation arrangements are in place as described in sections 4.5, 4.6 and 4.7 of the EP. This includes a process for identifying new relevant persons, sending them appropriate information and notifications as necessary, including in the unlikely event of an oil pollution incident. Quarterly consultation updates are also provided for. This ongoing consultation, as required by regulation 14(9) is considered appropriate.

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)

44. NOPSEMA is reasonably satisfied, based on the description of the location of the activity in the EP, that it does not involve the activity or part of the activity being undertaken within any part of a declared World Heritage Property

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)

- 45. NOPSEMA is reasonably satisfied that the EP demonstrates that the titleholder has carried out the consultations required by Division 2.2A and the measures adopted because of the consultations are appropriate because:
 - a. Consultation has taken place with relevant persons as required by regulation 11A.
 - i. Relevant persons were identified and consulted during the course of preparing the plan as required by regulation 11A and set out at Table 4-1 of the EP. The EP includes a method for identification of, and consultation with, relevant persons that is consistent with the definition of relevant person provided by regulation 11A and provides for consideration of correspondence received from organisations or individuals requesting to be consulted as a relevant person (see section 4.2 of the EP). Relevant persons identified included, but was not limited to:
 - A. Government agencies and departments, such as Australian Maritime Safety Authority, Department of Agriculture, Water and the Environment, Director of National Parks;
 - B. Industry bodies, such as Commonwealth Fisheries Association, Northern Territory Seafood Council;
 - C. Commercial fisheries, such as Northern Prawn Fishery, Austral Fisheries; and
 - D. Community based representative bodies such as the Tiwi Land Council, the Northern Land Council, the Environment Centre Northern Territory and the Australian Marine Sciences Association.

ii. The titleholder has provided relevant persons with sufficient information to allow the relevant person to make an informed assessment of the possible consequences of the activity on their functions, interests or activities. Activity specific information was initially provided to relevant persons in the form of the Barossa Development Drilling and Completions Stakeholder Consultation package. The consultation package included an activity summary, location map, coordinates, water depth, distance to key regional features, exclusion zone details and estimated timing and duration. It also outlined relevant impacts and risks together with a summary of selected management control measures and encouraged feedback on the proposed activity. Commercial fishers were provided additional supplementary information specific to the fishery within which they operate.

The consultation package provided sufficient information to allow relevant persons to determine if their functions, interests or activities will be affected by the activity, or alternatively to identify that they required further information to make this determination. The titleholder responded to requests made by relevant persons, either through provision of additional information in relation to impacts and risks of the activity, including excerpts of the draft EP while in development, and advice that the EP was publicly available following submission to NOPSEMA, 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 project and subsequent phases of development, the titleholder has committed to providing further information with respect to future activities of the project during the consultation processes for relevant EPs for those activities (Section 4 of the EP).

- iii. The titleholder has allowed relevant persons a reasonable period for the consultation. Consultation commenced in May 2021 and has continued throughout the course of the assessment process providing sufficient time for relevant persons to consider the information provided and make an informed response (see Section 4.1 and Table 4-2 of the EP). The titleholder has addressed all responses from relevant persons in a timely manner and has allowed each relevant person reasonable time to consider and respond to information provided.
- iv. Relevant persons were informed by the titleholder through the Barossa Development Drilling and Completions Stakeholder Consultation package that they may request that particular information provided in the consultation not be published and information subject to such a request was not published (Appendix E).
- b. The EP includes a report on all consultations under regulation 11A of any relevant person by the titleholder in accordance with regulation 16(b).
 - i. The report contains a summary of each response made by a relevant person (see Table 4-2). The summaries of the responses from relevant persons adequately reflect the responses made by relevant persons such that relevant claims and objections are adequately identified.
 - ii. The report contains an appropriate assessment of the merits of any objection or claim raised during relevant persons consultation (see Table 4-2). The titleholder has clearly 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. This assessment of merit has



informed the titleholders response or proposed response to the relevant persons objection of claim.

- iii. The report contains an appropriate statement of the titleholder's response, or proposed response, if any, to each objection or claim (see Table 4-2). Where there has been a claim or objection identified, the titleholder has provided an adequate response or proposed response to each objection or claim that has been raised.
- iv. The full text of the responses by relevant persons has been included in the sensitive information section of the EP where those responses are in written form. The full text is provided in the Sensitive Stakeholder Information Report - Barossa Drilling and Completions Environment Plan (document # bad-200 0013).
- c. 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 Tables 4-2, 8-2 and 8-4). The consultation has progressed to resolve objections and claims made by relevant persons as far as reasonably practicable.
- d. An ongoing consultation process is described in the EP requiring the titleholder to continue to consult with relevant persons as appropriate (See section 4.5). The titleholder has committed to continue to update relevant persons via the Barossa Development Quarterly Consultation update. This update will provide activity-specific updates and be used to introduce any future EPs, including production operations EPs. It will also be used to provide relevant persons an opportunity to request further information and engagement. Additionally, the titleholder has committed to notifying relevant persons prior to commencement and upon completion of the activity. The process described provides that if new relevant persons are identified, they can be added to the titleholder's database and included in future correspondence.

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

- 46. NOPSEMA is reasonably satisfied that the EP complies with the requirements of the OPGGS Act and regulations because:
 - a. the EP is consistent with the 'Objects' of the Environment Regulations including the principles of ESD.
 - b. There is sufficient information to address each of the content requirements of regulations 13-16 of the Environment Regulations with enough clarity, consistency and detail commensurate to the nature and scale of the activity.
 - c. In addition to those addressed elsewhere in this document, these requirements include: an EP summary statement has been included in the EP as required by Regulation 11(2B).
- 47. The EP does not allow for any equipment to be left on the seabed at the completion of the activity and commits to installing and maintaining equipment to enable future removal of property (section 2.3.1), consistent with the requirements of section 572 of the OPGGS Act.



Other considerations

48. NOPSEMA considered correspondence received directly from third parties during the course of the assessment relating to the activity and environment plan assessment.

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

- 49. 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.
- 50. 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. Some examples of how NOPSEMA has applied the program requirements to this EP include ensuring that the decision to accept this EP:
 - a. is not inconsistent with relevant recovery plans, threat abatement plans and wildlife conservation plans, and that these documents have been taken into account when determining the acceptability of the EP where impacts to listed threatened species and ecological communities may arise.
 - b. ensures that impacts to the Commonwealth marine area will be of an acceptable level having regard to regard to relevant policy documents, gazettal instruments, bioregional plans, wildlife conservation plans, plans of management and EPBC Act guidance documents on the DAWE website.
 - c. ensures that the decision 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 DAWE website.
- 51. In assessing the EP, NOPSEMA had regard to the EPBC Act Policy Statement 'Indirect consequences of an action: Section 527E of the EPBC Act' (SEWPaC 2013), in particular in relation to GHG emissions associated with natural gas consumption/combustion. The Barossa Development drilling EP does not involve the recovery of hydrocarbons for production and accordingly, there are no GHG emissions associated with natural gas consumption/combustion which would be considered impacts of the activity in accordance with the EPBC indirect consequences policy. Further infrastructure and approvals are required prior to production of gas. Indirect consequences are considered in the context and scope of the petroleum activity. It was noted that the titleholder will consider indirect consequences in its future production operations EP.

Conclusion

52. Through review of the titleholder's financial assurance declaration and confirmation forms, NOPSEMA is reasonably satisfied, in accordance with regulation 5G of the Environment Regulations, and at the time of making the decision to accept the EP, the titleholder is compliant with subsection 571(2) of the OPGGS Act in relation to the petroleum activity, and the compliance is in a form that is acceptable to NOPSEMA.



- 53. In accordance with regulation 10 and based on the available facts and evidence, NOPSEMA was reasonably satisfied that the EP met the following criteria set out in sub-regulation 10A of the Environment Regulations:
 - 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.
- 75. As NOPSEMA is reasonably satisfied that the EP meets the criteria set out in sub-regulation 10A of the Environment Regulations, NOPSEMA accepted the EP and gave notice to the titleholder in writing (attachment 1).

Signed



Environment Manager - Drilling & Spill Risk

06 May 2022



Our ref: ID: 6773 A833191
Your ref: BAD-200-0003

Santos NA Barossa Pty Ltd

RE: ENVIRONMENT PLAN ACCEPTANCE – BAROSSA DEVELOPMENT DRILLING AND COMPLETIONS

Please be advised that the Barossa Development Drilling and Completions environment plan (EP), comprising:

- Barossa Development Drilling and Completions Environment Plan (Document No. BAD-200-0003, Revision 3, dated 11/02/2022)
- Barossa Development Oil Pollution Emergency Plan (Document No. BAA-200 0314, Revision 1, dated 24/12/2021)
- Sensitive Stakeholder Information Report Barossa Drilling and Completions Environment Plan (Document No. BAD-200 0013, submitted 30/12/2021)

has been accepted in accordance with regulation 10 of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations).

An assessment of the EP was conducted in accordance with the Environment Regulations and NOPSEMA's assessment policies. This included a general assessment of the whole EP and three detailed topic assessments of the EP content, as follows:

- a. Matters protected under Part 3 of the EPBC Act.
- b. Consultation with a focus on adequacy of consultation with relevant persons.
- c. Unplanned emissions and discharges with a focus on the adequacy of arrangements and capability for timely and effective source control response to a loss of well control event.

This acceptance is based on the document submissions provided in accordance with the Environment Regulations. Please note that the responsibility for the ongoing environmental performance of the Barossa Development Drilling and Completions activity remains, at all times, with Santos NA Barossa Pty Ltd.

NOPSEMA will communicate this acceptance decision on its website and will publish the final environment plan, excluding the sensitive information part, in accordance with regulation 9(2A).





You are reminded that in accordance with regulation 29, Santos NA Barossa Pty Ltd must notify NOPSEMA at least ten days before commencement and within ten days after completion of any activity described in the EP.

Should you have any queries regarding the above, please contact

Yours sincerely

Environment Manager, Drilling & Spill Risk wA573172 14 March 2022