

Eos 3D Marine Seismic Survey Environment Plan

Activity overview

Santos is seeking to acquire subsurface data via a 3D Marine Seismic Survey (MSS) in Commonwealth waters of the southern Bonaparte Basin, commencing at the earliest from mid 2024 until end of 2026.

The Operational Area for the Eos 3D MSS is approximately 107 km from the nearest coastline, and approximately 119 km from Wadeye in the Northern Territory (NT see **Figure 1**).

The purpose of the survey is to identify, and image detailed subsea geological formations for the potential injection and storage of carbon dioxide (CO₂).

Activity duration is approximately 50 days, subject to weather standby and technical downtime.

Consultation and feedback

All petroleum activities in Commonwealth waters must have an Environment Plan (EP) accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) before any activities can take place.

Under Commonwealth Environmental Regulations, Santos is required to consult with relevant persons about proposed activities when preparing an EP. A relevant person includes authorities, persons or organisations whose functions, interests or activities may be affected by the proposed activity.

Santos meets this requirement by undertaking consultation in two phases:

- **Preliminary consultation** to understand values and sensitivities and confirm consultation expectations of authorities, persons and organisations whose functions, interests or activities who may be affected by proposed activities (relevant persons).
- **Consultation** of relevant persons on specific activities.

Activity specific consultation is planned to commence on **27 October 2023**, with the consultation period closing on **27 November 2023**. More details on consultation and providing feedback can be found on the back page of this fact sheet.

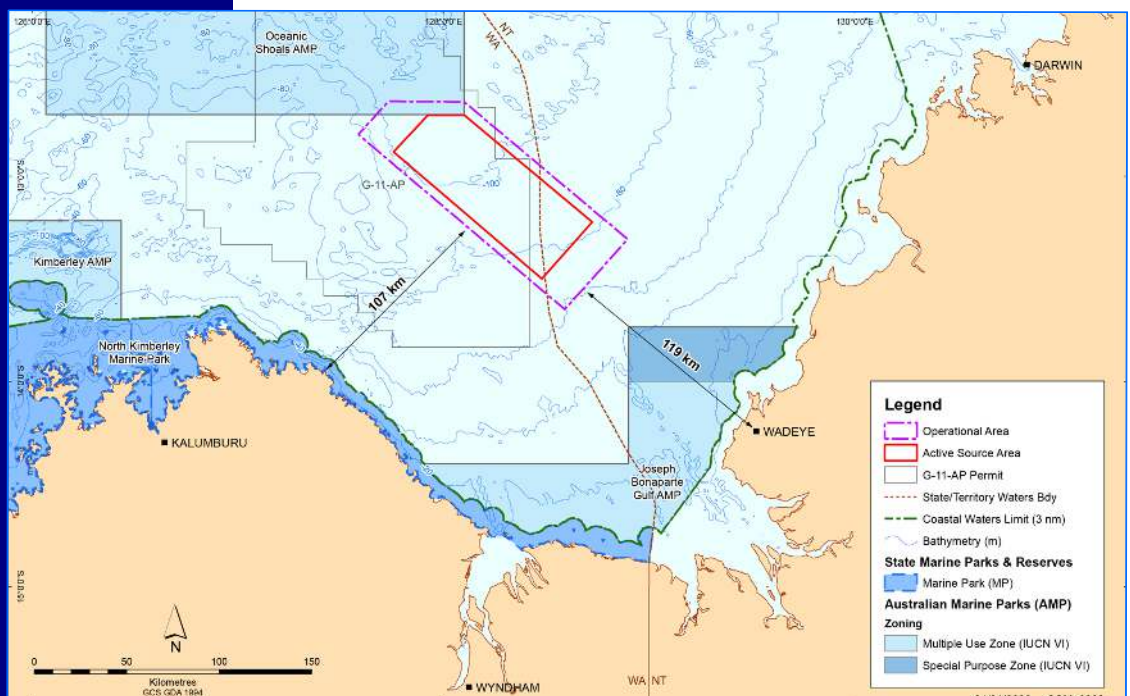


Figure 1. Eos 3D MSS activity location

Activity description

Activity details		
Timing	Earliest commencement of the activity is Q3 2024, however, activity may occur anytime from EP acceptance by NOPSEMA to the end of December 2026.	
Duration	<ul style="list-style-type: none"> • Approximately 50 days to complete the activity. • The expected duration is a forecast and is subject to change based on adverse weather conditions or technical/equipment issues that may arise during the activity. 	
Water depth	Operational Area 60 m to 115 m.	Active Source Area 67 m to 111 m.
Vessels	<ul style="list-style-type: none"> • Seismic survey vessel. • Up to two dedicated support vessels (one being a chase vessel) will accompany the seismic survey vessel to provide logistical, safety and equipment management duties. • Vessel details are unknown at this time. 	
Aircraft	<ul style="list-style-type: none"> • Aircraft maybe used for crew changes, critical equipment supply, surveillance and emergency response uses. Aircraft includes helicopters and drones. 	
Volume of seismic source	<ul style="list-style-type: none"> • Max. 3,050 cubic inches (in³). 	
Operating pressure	<ul style="list-style-type: none"> • 2,000 psi. 	
Description of the natural environment	<ul style="list-style-type: none"> • The Operational Area is predominately characterised by a relatively flat and largely featureless seabed, predominantly sand with a proportion of silt and clay which gradually slopes from south to north. 	
Exclusion zone	<ul style="list-style-type: none"> • 3 nm (5.6 km) exclusion (safety) zone around the seismic vessel and trailing streamers. 	
Greenhouse gas assessment permit	<ul style="list-style-type: none"> • G-11-AP. 	
Activity coordinates		
Operational Area	Latitude	Longitude
	12° 47' 45.870" S	127° 35' 9.014" E
	12° 38' 5.216" S	127° 44' 2.253" E
	12° 38' 16.443" S	128° 6' 3.199" E
	13° 18' 22.214" S	128° 53' 45.423" E
13° 38' 52.656" S	128° 35' 23.154" E	
Active source area	Latitude	Longitude
	12° 52' 52.261" S	127° 45' 28.575" E
	12° 42' 9.215" S	127° 55' 28.219" E
	12° 42' 8.964" S	128° 6' 5.702" E
	13° 13' 21.492" S	128° 43' 23.459" E
13° 29' 56.111" S	128° 28' 44.239" E	

Activity purpose and approvals

The Eos 3D MSS is required to meet Santos' work program obligations for GHG assessment permit G-11-AP.

GHG assessment permits allow titleholders to explore in the permit area for potential GHG storage formations and potential GHG injection sites in Commonwealth offshore areas. The primary purpose of the 3D MSS is to facilitate future CO₂ injection activities by providing detailed structural and amplitude imaging of the reservoir/seal interface for each identified storage target to confirm suitability for injection and storage of CO₂.

An EP is being prepared for the survey, which must demonstrate that the impacts and risks of the activity will be managed to a level as low as reasonably practicable and acceptable over the life of the activity. The EP will be submitted to NOPSEMA for acceptance in accordance with the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth)*.

About marine seismic surveys

The process of collecting seismic data is known as 'acquisition'. A marine seismic survey takes place along a series of pre-defined acquisition lines (normally several hundred metres apart) within an overall acquisition area.

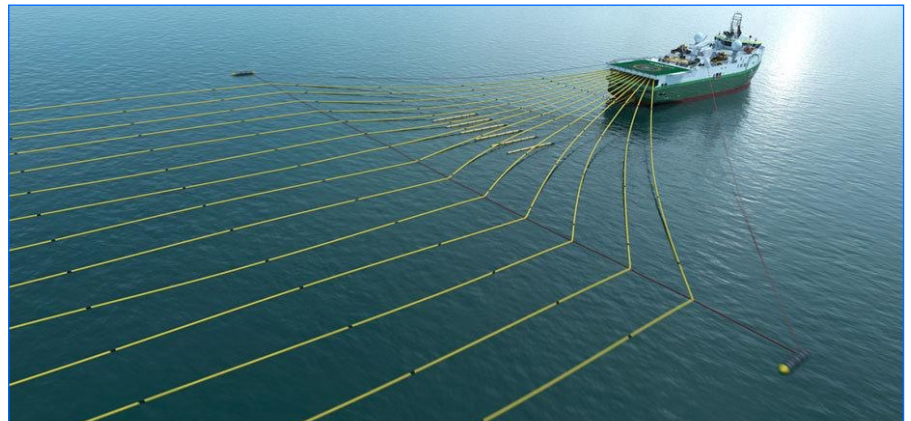


Figure 2. Example of a seismic array and marine seismic vessel for 3D or 4D surveys.

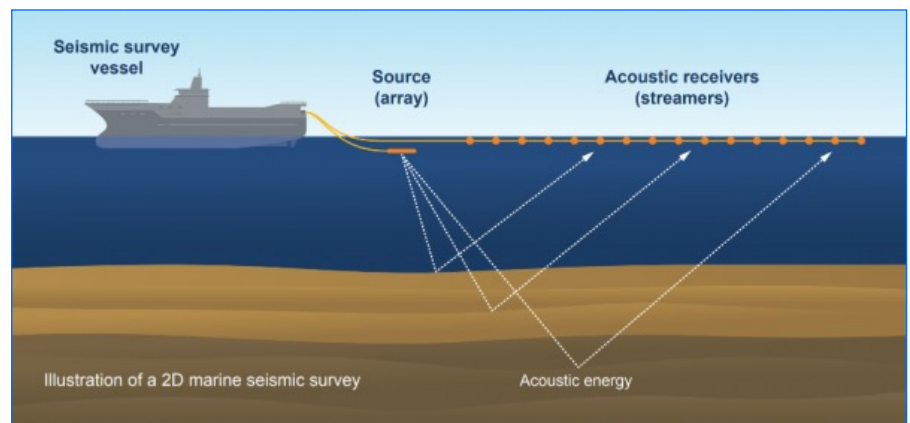


Figure 3. Illustration of a marine seismic survey (Source: NOPSEMA).

Marine seismic surveys are carried out by specialised vessels that tow an array of acoustic sources (airguns) and receivers (hydrophones) across a defined acquisition area. Airguns work by rapidly releasing compressed air to form a bubble, which creates a pulse of sound. This sound energy is directed at the seafloor and penetrates into the various rock layers beneath.

The reflected soundwaves are then captured by hydrophone receivers, which are towed behind the vessel on a series of cables known as 'streamers'.

Marine seismic surveys can be two, three, or four dimensional (2D, 3D, or 4D). 2D surveys tend to have a smaller sound source and a single streamer (see **Figure 3**) while 3D and 4D surveys use a larger sound source and multiple streamers (see **Figure 2**).

More information about marine seismic surveys can be found [here](#).

Source: NOPSEMA

Defining the environment area for proposed activities

Santos has undertaken an assessment to define the environmental, social, economic and cultural aspects that may be affected by proposed activities.

To do this we have considered the totality of the area where activity impacts and risks may occur.

These areas are summarised in Table 1. The widest extent of these area is called the Environment that May Be Affected (EMBA), which for this activity is the outer boundary of worst-case marine diesel oil spill resulting from a vessel collision (see **Figure 4**).

Oil spill EMBA's are defined by overlaying a great number (usually hundreds) of individual, computer simulated, hypothetical oil spill events into a single map. Each simulation starts from the same location (release point), but each will be subject to a different set of wind and weather conditions derived from historical data. The use of advanced and sophisticated models enables us to present all the areas that could be affected.

While the EMBA represents the largest possible spatial extent that could be contacted by the worst-case spill events modelled, an actual spill event is more accurately represented by a

single simulation run, resulting in a smaller spatial extent. Often one or more simulation runs are selected to be representative of the 'worst-case' based on the nature and scale of the Activity and the local environment.

However, both the EMBA (based on numerous possible spills) and the single representative worst-case oil spill are used for the environmental risk assessment and oil spill preparedness and response planning.

Please see the [NOPSEMA Spill Modelling Video](#) for more information on oil spill modelling and why it is required for the preparation of Environment Plans.

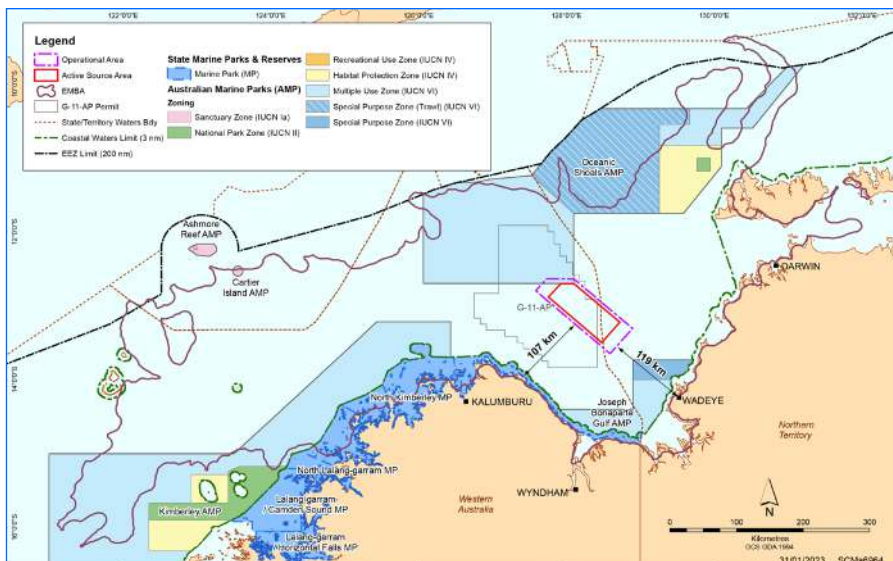


Figure 4. Eos 3D MSS activity location & EMBA.

Table 1. Environment area for proposed activities

Operational Area
The area in which the seismic vessel will operate, accounting for line turns with streamers deployed.
Active source area
The area in which the seismic vessel will operate to acquire the seismic data and achieve the geophysical objectives of the survey.
Environment that May Be Affected (EMBA)
The spatial extent of activity impacts (e.g. vessel presence, light, noise) and risk (e.g., hydrocarbon spill).

Santos has undertaken a review of publicly available information to identify environmental, social, economic and cultural features and/or values that may be affected by activity impacts and risks. The outcomes of this review are summarised in **Table 2**.

Table 2. Environmental, social, economic and cultural features

Feature	Description	Within Operational Area	Within EMBA	Public information review
Aboriginal heritage	Registered Aboriginal heritage sites protected under the: <ul style="list-style-type: none"> • <i>Aboriginal Torres Strait Islander Heritage Protection Act 1984 (Cwth)</i>. • <i>Aboriginal Sacred Sites Act 1989</i>. • <i>Heritage Act 2011(NT)</i>. • <i>Aboriginal Land Act 1978 (NT)</i>. • <i>Aboriginal Cultural Heritage Act 2021 (WA)</i>. • <i>Aboriginal Heritage Act 1972 (WA)</i>. 	No	Yes	Aboriginal Heritage sites are present along the southern eastern boundaries of the EMBA. Sea country interests may exist in the EMBA.
Biologically important areas	Biologically important areas (BIAs) are spatially defined areas where aggregations of individuals of a species are known to display biologically important behaviour such as breeding, foraging, resting or migration.	Yes	Yes	The Operational Area includes BIAs for turtles.
Cultural heritage	Registered cultural sites under the: <ul style="list-style-type: none"> • <i>Underwater Cultural Heritage Act 2018</i>. 	No	Yes	No known sites of shipwrecks, sunken aircraft or Aboriginal and Torres Strait Islander Underwater Cultural Heritage have been identified within the Operational Area. The nearest shipwreck, the SEDCO Helen, is approximately 10 km northeast of the Operational Area.

Table 2. Environmental, social, economic and cultural features ... continued

Feature	Description	Within Operational Area	Within EMBA	Public information review
Defence	Designated defence activity areas.	Yes	Yes	Defence activities may take place within the Operational Area.
Fishing	Commercial fishing.	Yes	Yes	A number of Commonwealth, State and Territory fisheries overlap the EMBA, some of which are active in the Operational Area.
	Indigenous, subsistence or customary fishing.	No	Yes	Traditional Australian Indigenous fishing activities are generally concentrated within 3 nm of the Northern Territory / Western Australian coastline.
	Recreational fishing.	Yes	Yes	Fishing charter vessels may transit through the Operational Area and EMBA but fishing activities are considered unlikely in the Operational Area due to remoteness.
Key ecological features	Key ecological features (KEFs) are elements of the Commonwealth marine environment that are considered to be of regional importance for either a region's biodiversity or its ecosystem function and integrity.	Yes	Yes	The Operational Area overlaps one KEF for the carbonate bank and terrace system of the Sahul Shelf. KEFs are present in the EMBA.
Oil and gas operations	Petroleum operations.	Yes	Yes	Petroleum exploration and production activities have been undertaken within the EMBA and the Bonaparte Basin is an established hydrocarbon province with a number of commercial operations. Several exploration permits overlap the Operational Area with the closest production licence being the Eni Australia B.V. located 21 km south-east of the Operational Area.

Table 2. Environmental, social, economic and cultural features ... continued

Feature	Description	Within Operational Area	Within EMBA	Public information review
Protected areas (nearest Commonwealth and Territory)	Australian Marine Park (AMP).	Yes	Yes	The Operational Area overlaps the Oceanic Shoals AMP and five AMPs overlap the EMBA.
	Northern Territory Reserves.	No	Yes	The EMBA overlaps the Garig Gunak Barlu Marine Park (Cobourg Peninsula), located approximately 318 km north-east of the Operational Area, and several other Northern Territory Reserves. <ul style="list-style-type: none"> • Casuarina Coastal Reserve. • Channel Point Coastal Reserve. • Shoal Bay Coastal Reserve. • Tree Point Conservation Area. • Buffalo Creek Management Area. • Djukbinj National Park. • Keep River National Park.
	Western Australia Reserves.	No	Yes	The EMBA overlaps the North Kimberley Marine Park (NKMP), located approximately 105 km west of the Operational Area, and several other Western Australia Reserves including the Ord River Nature Reserve (Ramsar Site), located approximately 133 km south of the Operational Area. <ul style="list-style-type: none"> • Niiwalarra Islands National Park. • Browse Island Nature Reserve. • Lesueur Island Nature Reserve. • Low Rocks Nature Reserve. • Pelican Island Nature Reserve.

Table 2. Environmental, social, economic and cultural features ... continued

Feature	Description	Within Operational Area	Within EMBA	Public information review
Shipping	Shipping routes.	Yes	Yes	The Operational Area does not overlap any shipping fairways, however there is vessel traffic that passes through the northern end of the Operational Area.
Telecommunications	Subsea telecommunications cables.	No	Yes	The North West Cable System (NWCS) connects offshore oil and gas facilities in the Browse, Bonaparte and Carnarvon Basins to onshore locations and is approximately 125 km north-north-east of the Operational Area.
Tourism	Marine and coastal tourism.	No	Yes	Remoteness of the Operational Area and water depth limits opportunities for tourism. Tourism is likely within the EMBA.
Towns / communities	Darwin.	No	Yes	Darwin is the nearest capital city and is approximately 230 km northeast from the Operational Area.
	Wadeye.	No	Yes	Wadeye is the nearest community and is approximately 119 km southeast from the Operational Area.

Activity impacts and risk management

We have summarised in Table 3 the potential environmental impacts and risks and associated management measures for the proposed activity. These aspects will be risk-assessed with the Environment Plan on a case-by-case basis.

Table 3. Activity impacts and risk management

Potential impacts – planned activities	
Acoustic disturbance to fauna	
<p>Description of potential impacts</p> <p>Potential impacts from noise emissions may occur in the operational area from the following sources:</p> <ul style="list-style-type: none"> • Seismic source array. • Vessel operations (e.g. vessel engines, thrusters, propeller cavitation and operation of machinery and equipment). • Helicopter activities relating to crew change requirements. 	<p>Compliance with the following key management measures</p> <p>Marine fauna observations undertaken to minimise the disturbance to fauna caused by the Activity.</p> <ul style="list-style-type: none"> • Implementation of EPBC Act Policy Statement 2.1 (Part A): <ul style="list-style-type: none"> • Pre start-up visual observation. • Soft start procedures. • Start-up delay procedure. • Operations procedure. • Shut-down procedure. • Night-time and low visibility procedures. • Adoption of EPBC Regulations (Part 8) for interacting with cetaceans. • Implementation of selected control options of EPBC Act Policy Statement 2.1 (Part B). <ul style="list-style-type: none"> • Use of 2 Marine Fauna Observers (or 1 x MFO and 1 x SEA) on board the seismic survey vessel (Part B.1). • Adaptive management measures for Omura’s whales (Part B.6). • No operation of seismic source within the Carbonate Bank and Terrace Systems of the Sahul Shelf or the Pinnacles of the Bonaparte Basin KEFs. • No operation of the seismic source within the Active Source Area where impacts to the Australian snubfin dolphin foraging/resting/calving/ breeding BIAs may occur.

Table 3. Activity impacts and risk management ... continued

	<ul style="list-style-type: none"> • Shutdown procedures for turtles in accordance with EPBC Act Policy Statements 2.1 (Part A). • No operation of the seismic source within the interesting BIA for flatback turtles during nesting season. • Night-time and low-visibility procedures for turtles consistent with EPBC Act Policy Statement 2.1 - Procedure A.3.6. • Seismic source validation. • Increased duration of pre-start visual observations conducted by MFO (Omura's whale is primary observation target however, all fauna to be observed).
<p>Atmospheric emissions</p>	
<p>Description of potential impacts</p> <p>Potential impacts from atmospheric emissions may occur in the operational area from the following sources:</p> <ul style="list-style-type: none"> • Vessel operations (e.g. vessel & aircraft engines, generators, mobile and fixed plant and equipment). • Vessel waste incinerator. • Vessel ozone-depleting substances (ODS) used in closed-system rechargeable refrigeration systems. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • International Convention for the Prevention of Pollution from Ships (MARPOL) -compliant Marine diesel oil (MDO) will be used during activity. • Waste incineration managed in accordance MARPOL and Marine Orders as appropriate. • All vessel engines to be maintained in accordance with manufacturers specifications. • Air pollution prevention certification. • Ozone-depleting substance handling procedures.

Table 3. Activity impacts and risk management ... continued

Light emissions	
<p>Description of potential impacts</p> <p>Potential impacts from light emissions may occur in the operational area from the following sources:</p> <ul style="list-style-type: none"> • Vessel operations (e.g. external navigation and safe operations lighting). • Vessel-based spot lighting (e.g. streamer deployment and retrieval procedures). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Lighting will be used as required for safe work conditions and navigational purpose.
Planned operational discharges	
<p>Description of potential impacts</p> <p>Planned discharges from the vessel in the operational area may include:</p> <ul style="list-style-type: none"> • Sewage/greywater. • Food waste. • Brine. • Cooling water. • Deck drainage. • Oily water. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Sewage treatment system. • Oily water treatment system. • General chemical management procedures. • Hazardous chemical management procedures. • Waste (garbage) management procedure. • Deck cleaning product selection procedure. • Clean up of oil/ lubricant spills to deck in accordance with vessel Shipboard Oil Pollution Emergency Plan (SOPEP).

Table 3. Activity impacts and risk management ... continued

Interaction with commercial fisheries	
<p>Description of potential impacts</p> <p>Interaction with commercial fisheries may occur as a result of:</p> <ul style="list-style-type: none"> • Vessel operations including the presence of any towed equipment (e.g. streamers). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Recreational fishing restrictions. • Navigation equipment and procedures. • Vessels fitted with AIS systems and radars, including AIS (virtual or installed) to mark the location of streamer tail buoys. • Exclusion (safety) zone established to reduce potential for collision or interference with other marine user activities. • Maritime Notices - Notices to Mariners (NTM) and AUSCOAST warnings. • Santos activity notifications (where requested). • Support vessel present and operational during the Activity. • Decision making and communications protocol implemented in the event that the seismic vessel and towed equipment are required to leave the Operational Area during the survey. • Concurrent operations planning with relevant commercial fishers. • Application of Santos Commercial Fishers Payment Claim Protocol. • Constant bridge watch. • Protocols for handling entangled fishing gear to be provided to seismic contractor.

Table 3. Activity impacts and risk management ... continued

Interaction with other marine users	
<p>Description of potential impacts</p> <p>Interaction with commercial fisheries may occur as a result of:</p> <ul style="list-style-type: none"> • Vessel operations including the presence of any towed equipment (e.g. streamers). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Navigation equipment and procedures. • Vessels fitted with AIS systems and radars, including AIS (virtual or installed) to mark the location of streamer tail buoys. • Exclusion (safety) zone established to reduce potential for collision or interference with other marine user activities. • Maritime Notices - Notices to Mariners (NTM) and AUSCOAST warnings. • Notices to Department of Defence (DoD). • Stakeholder consultation. • Support vessel present and operational during the Activity. • Constant bridge watch. • Santos decision making and communications protocol implemented in the event that the seismic vessel and towed equipment are required to leave the Operational Area during the survey. • Recreational fishing restrictions.
Cumulative and additive noise emissions impacts	
<p>Description of potential impacts</p> <p>Potential impacts from successive seismic surveys can be classified as the following:</p> <ul style="list-style-type: none"> • Cumulative impacts - Considered when the spatial footprint of impacts from previous seismic surveys (or other significant underwater sound producing activities) have occurred over the same area of activity. • Additive impacts - Result from other concurrent seismic surveys (or other significant underwater sound producing activities), where the effects may or may not overlap spatially, but when taken together have an additive or incremental effect on the same receptors. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Seismic source separation distance during concurrent surveys: minimum 40 km while operating. • Management of concurrent seismic surveys within commercial fisheries. • Identification and risk assessment of other concurrent petroleum activities within 20 km of the operating seismic source.

Table 3. Activity impacts and risk management ... continued

Potential risks - unplanned activities	
Marine diesel oil (MDO) release from vessel collision (surface)	
<p>Description of potential risks</p> <p>Potential release of MDO may occur in the operational area from the following sources:</p> <ul style="list-style-type: none"> • Vessel collision and fuel tank rupture. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • MARPOL-compliant fuel oil (MDO) will be used during the activity. • Vessels fitted with AIS systems and radars (virtual or installed) to mark the location of seismic streamer tail buoys. • Exclusion (safety) zone established to reduce potential for collision or interference with other marine user activities. • Maritime Notices - Notices to Mariners (NTM) and AUSCOAST warnings. • Navigation equipment and procedures. • Support vessel in place during Activity to reduce potential for collision or interference with other marine users. • Constant bridge watch. • Restrictions on how small volumes of unused IFO and HFO must be stored on a vessel, including restricting volumes and limiting storage to tanks that do not have direct exposure to the marine environment. • Implementation of Oil Pollution Emergency Plan (OPEP). • Implementation of Vessel spill response plans (SOPEP/SMPEP). • Maximum volume of fuel stored in a single tank of vessels used for the Activity will not exceed 1,065 m³.

Table 3. Activity impacts and risk management ... continued

Minor hydrocarbon release	
<p>Description of potential risks</p> <p>Sources of risk from an accidental minor release of hydrocarbons may occur as a result of:</p> <ul style="list-style-type: none"> • Vessel refuelling (e.g. fuel hose breaks, coupling failure, tank overfilling). • Vessel equipment and machinery failure (e.g. tank pipework failure or rupture, hydraulic hose failure, inadequate bunding and/or storage, insufficient fastening or inadequate handling, vessel thruster/propeller stern tube seal leak and/or mechanical damage). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • MARPOL-compliant fuel oil (MDO) will be used during the activity. • Deck drainage control measures (such as scupper plugs) in areas where chemicals and hydrocarbons are stored and frequently handled. • General chemical management procedures. • Hazardous chemical management procedures. • Maritime dangerous goods code. • Bulk refuelling transfer procedures. • Implementation of Oil Pollution Emergency Plan (OPEP). • Implementation of Vessel spill response plans (SOPEP/SMPEP). • Bunkering / bunkering drill undertaken prior to the Activity.
Spill response operations	
<p>Description of potential risks</p> <p>In the event of a hydrocarbon spill, response strategies will be implemented where possible to reduce environmental impacts to ALARP but may include:</p> <ul style="list-style-type: none"> • Light, noise and atmospheric emissions. • Operational discharges and waste. • Physical presence and disturbance. • Disruption to other users of marine and coastal areas and townships. • Shoreline clean-up operations. • Oiled wildlife response operations. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • In the event of a hydrocarbon spill, the Oil Pollution Emergency Plan (OPEP) requirements are implemented to mitigate environmental impacts.

Table 3. Activity impacts and risk management ... continued

Unplanned hazardous and non-hazardous discharges - liquid	
<p>Description of potential impacts</p> <p>Sources of risk from an accidental release of hazardous and non-hazardous (non-hydrocarbon) liquids may occur as a result of:</p> <ul style="list-style-type: none"> • Vessel equipment and machinery failure (e.g. tank pipework failure or rupture, hydraulic hose failure, inadequate bunding and/or storage, insufficient fastening or inadequate handling, vessel thruster/propeller stern tube seal leak and/or mechanical damage). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Equipment maintenance in accordance with preventative maintenance system (PMS). • Oily water treatment system. • General chemical management procedures. • Hazardous chemical management procedures. • Maritime dangerous goods code. • Dropped object prevention procedure. • Implementation of Vessel spill response plans (SOPEP/SMPEP).
Unplanned hazardous and non-hazardous discharges - solid	
<p>Description of potential risks</p> <p>Sources of risk from an accidental release of hazardous and non-hazardous (non-hydrocarbon) solids may occur as a result of:</p> <ul style="list-style-type: none"> • Overfull/uncovered bins on deck. • Incorrectly disposed items. • Spills during transfers of waste. • Loss of vessel and survey equipment (e.g. streamers, fenders). • Supply transfer from support vessel to survey vessel. <p>Solid objects, such as those below, can be accidentally released to the marine environment, and potentially impact sensitive receptors:</p> <ul style="list-style-type: none"> • Non-hazardous solid wastes, such as paper, plastics and packaging. • Hazardous solid wastes, such as batteries, fluorescent tubes, medical wastes, and aerosol cans. 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Equipment maintenance in accordance with Preventative Maintenance System (PMS). • Streamers are fitted with streamer recovery devices (SRD). • Waste (garbage) management procedure. • Dropped object prevention procedure. • Streamer deployment / retrieval procedure. • Streamers have locating devices fitted. • Streamer tow depth constrained.

Table 3. Activity impacts and risk management ... continued

Marine fauna collisions	
<p>Description of potential risks</p> <p>Marine fauna interactions may occur as a result of:</p> <ul style="list-style-type: none"> • Vessel collision. • Equipment collision (e.g. streamers, seismic source). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Streamer deployment / retrieval procedure. • Use of a 'turtle friendly' tail buoy. • Implementation of <i>Environmental Protection and Biodiversity Regulations 2000</i> (Part 8) for interacting with cetaceans. • Implementation of control measures consistent with EPBC Act Policy Statement 2.1 (Part B): <ul style="list-style-type: none"> • Use of two Marine Fauna Observers (MFOs) (or 1 x MFO and 1 x SEA) on board the seismic survey vessel. At least one MFO will have previous experience on a seismic survey vessel as an MFO. • Constant bridge watch. • Marine fauna observations undertaken to minimise the disturbance to fauna caused by the Activity. • Whale shark interaction guideline for support vessel.
Introduction of invasive marine species (IMS)	
<p>Description of potential risks</p> <p>Introduction of invasive marine species (IMS) may occur due to:</p> <ul style="list-style-type: none"> • Biofouling on vessels and marine equipment (e.g. streamers, ballast water exchange). • External / internal niches (e.g. sea chests, seawater systems). 	<p>Compliance with the following key management measures</p> <ul style="list-style-type: none"> • Anti-foulant system. • Aquatic Biosecurity Solution vessel check tool (applied to vessels), and immersible equipment clean. • Biosecurity risk management Plan. • Ballast water management plan.

Consultation

Consultation provides Santos with an opportunity to receive feedback from authorities, persons and organisations whose functions, interests or activities may be affected by proposed petroleum activities.

This feedback helps us to refine or change the management measures we are planning to address potential activity impacts and risks. Santos' objective for proposed activities is to reduce environmental impacts and risks to a level that is As Low As Reasonably Practicable (ALARP) and acceptable over the life of the activity.

Consultation also helps us to identify values and sensitivities where information is not publicly available, such as spiritual and cultural connection to land and sea country, as well as first-hand feedback on commercial and recreational fishing, tourism and local community activities and interests.

Providing feedback

You might be a relevant person if, for example, you have spiritual or cultural connections to land and sea country in accordance with Indigenous tradition that might be affected by our activity, if you otherwise carry out recreational or commercial fishing, tourism or other activities that might be affected by our proposed activity, or if you are part of a local community that might be affected by our proposed activity.

If you consider you may be a relevant person, please contact us by **26 October 2023** to allow Santos time to initiate consultation with you, so you can tell us how you would like to be consulted throughout this process or if you need additional information.

The merits of relevant person feedback provided through the consultation process will be considered during EP development, with a summary of responses summarised and included in the EP submitted to NOPSEMA for assessment. Please let us know if you would like your personal/organisational details or any part of your feedback to remain private and we will ensure this remains confidential to NOPSEMA.

More information about how community members can participate in environmental approvals for activities proposed in Commonwealth waters has been published in a [brochure](#) by NOPSEMA.

Contact

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