

Environmental Approval

PURSUANT TO SECTION 69 OF THE *ENVIRONMENT PROTECTION ACT 2019*

Approval number	EP2022/022-001
Approval holder	Santos NA Barossa Pty Ltd
Australian business number (ABN)	44 109 974 932
Registered business address	60 Flinders Street, Adelaide SA 5000
Action	Darwin Pipeline Duplication

Action description

Construction, commissioning, operation and decommissioning of the Darwin Pipeline Duplication Project. The action is for a section of the Barossa gas pipeline that will transport gas from the Timor Sea to the existing Darwin liquefied natural gas facility. The approved action includes an approximately 100 km section of pipeline in NT waters, a **spoil disposal** area, and a shore crossing at Wickham Point in the Greater Darwin Area. Construction of the pipeline will include:

- pipe laying,
- placement of no more than 500,000 tonnes of rock during backfill and stabilisation of the pipeline, and
- anchoring of construction vessels within a 900 m corridor on either side of the pipeline.

Advisory notes

- i. Approval is granted under section 69 of the *Environment Protection Act 2019* for the action to be undertaken in the manner described, including with implementation of the environmental management measures, commitments and safeguards documented in the referral information (including the Referral Report and Appendices) and the supplementary environmental report (**SER**) (including the **SER** and Appendices). If there is an inconsistency between the referral information or the **SER** and this environmental approval, the requirements of this environmental approval prevail.
 - ii. Notification of environmental incidents must be in accordance with Part 9 Division 8 of the EP Act 2019 and Part 10 of the Environment Protection Regulations 2020. In an emergency, the NT EPA Pollution Response Hotline should be notified by telephoning 1800 064 567.
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- iii. Submission of all notices, reports, documents or other correspondence required as a condition of this approval, including notification to the **CEO** or **Minister**, must be provided in electronic form by emailing environmentalregulation@nt.gov.au
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Address of action 1860, 1870, 1871 Hundred of Ayres, Wickham, NT.
Darwin Harbour, NT.

NT EPA Assessment Report number 106

Person authorised to make decision Hon Kate Worden MLA,
Minister for Environment, Climate Change and
Water Security

Signature



Date of decision 22/12/23

Environmental approval conditions

1 Limitations and extent of action

- 1-1 All activities must be carried out in the **approved extent (Figure 1)**.
- 1-2 Activities must not exceed the limitations in **Table 1**.

Table 1 Limitations

Action element	Limitation
Dredging	No more than 500,000 m ³ of material to be dredged for subsea pipeline trenches in the approved extent .
Spoil disposal	Spoil disposal may only occur within the 625 ha spoil disposal area in the approved extent .

2 Management plans

- 2-1 The approval holder must implement and comply with the following plans:
 - (1) Onshore construction environmental management plan¹;
 - (2) Offshore construction environmental management plan²;
 - (3) Marine megafauna noise management plan³;
 - (4) Cultural heritage management plan (**CHMP**), as required by condition **4**; and
 - (5) Trenching management plan (**TMP**)⁴, updated as required by condition **6**.

Culture and heritage

3 Environmental outcomes

- 3-1 The approval holder must ensure the action achieves the following environmental outcomes:
 - (1) protect Aboriginal cultural values; and
 - (2) protect maritime heritage, including shipwrecks.

¹ SER Appendix 11. Onshore construction environmental management plan. Document number BAS-210 0025. 26 April 2023.

² SER Appendix 18. Offshore construction environmental management plan. Document number BAS-210 0024. 26 April 2023.

³ SER Appendix 7. Marine megafauna noise management plan. Document number BAS-210 0045, 26 April 2023.

⁴ SER Appendix 4. Trenching and spoil disposal management and monitoring plan. Document number BAS-210 0023, 26 April 2023.

4 Cultural heritage management plan

- 4-1 To support achieving the environmental outcomes required by condition **3-1** a **CHMP** must be prepared by a **suitably qualified and experienced person**.
- 4-2 The **CHMP** must be prepared in consultation with the Northern and Tiwi Land Councils.
- 4-3 The **CHMP** must be submitted to the **Minister** at least 10 days prior to commencement of **trenching activity**.
- 4-4 The **CHMP** must include measures to provide for:
- (1) cultural heritage induction procedures for site personnel;
 - (2) an internal heritage clearance process prior to trenching and pipe laying activities;
 - (3) further archaeological survey and assessment if warranted by alignment changes;
 - (4) procedures for anchoring and the establishment of anchor exclusion zones;
 - (5) procedures to mitigate risks to unexpected maritime heritage objects, including a stop work protocol, developed in consultation with, and to the satisfaction of, the Heritage Branch of **DTFHC**;
 - (6) measures for ongoing consultation and engagement on cultural heritage values with stakeholders;
 - (7) the requirement to update the **CHMP** if stakeholder engagement identifies additional information about cultural heritage values that warrants additional measures to be implemented to achieve the environmental outcomes required by condition **3-1**; and
 - (8) detail of how compliance would be monitored and reported and how the outcomes of investigative and/or adaptive management actions would be notified to the relevant government authorities.

Marine environmental quality, Marine ecosystems

5 Environmental outcomes

- 5-1 The approval holder must ensure the action achieves the following environmental outcomes:
- (1) no **material environmental harm** to the environmental values of water, or declared **beneficial uses** of Darwin Harbour beyond the **zone of influence**;
 - (2) no **material environmental harm** to **benthic habitats and communities** beyond the **zone of impact**; and
 - (3) risks of physical injury, mortality, behavioural changes and health impacts on marine megafauna are minimised.

6 Trenching management

- 6-1 To support achieving the environmental outcomes required by conditions **5-1(1)** and **5-1(2)** the **TMP** must be updated, and submitted to the **Minister** at least 10 days prior to commencement of **trenching activity**.
- 6-2 To support achieving the environmental outcomes required by conditions **3-1(1)** and **3-1(2)**, the **TMP** must be updated to reflect any additional management measures related to trenching that arise as a result of the stakeholder engagement under condition **4-4(7)**.
- 6-3 The **TMP** must include:
- (1) a detailed monitoring program that includes:
 - (a) parameters to be monitored to detect impacts of **trenching activity** and **spoil disposal**, including turbidity (**NTU**);
 - (b) location, method and frequency of monitoring, including establishing baseline values of water quality;
 - (c) quantitative **trigger values** to indicate when management actions are required;
 - (d) monitoring and management actions to be implemented if **trigger values** are exceeded;
 - (e) reporting action to be undertaken in the event that **trigger values** are exceeded.
- 6-4 A written review and endorsement from an **independent qualified person**, stating that the **TMP** appropriately identifies and appropriately mitigates any environmental risk and complies with the conditions of the approval, must be provided to the **Minister** with the **TMP**.

7 Hydrotest fluid

- 7-1 The approval holder must ensure that there is no **planned discharge** of **hydrotest fluid** within NT waters.
- 7-2 The approval holder must ensure that any contingency discharge of **hydrotest fluid** is undertaken in a manner and at a rate such that marine water quality, within a 40 m radius of the discharge location, returns to ambient levels within 12 hours of cessation of discharge.

8 Maintenance and decommissioning

- 8-1 Any part of the pipeline or associated infrastructure that will not, or will no longer, be required for use must be **decommissioned** by the approval holder as soon as practicable.
- 8-2 The pipeline and associated infrastructure that is not in operation must be maintained in a condition appropriate for use or **decommissioning**.

- 8-3 The approval holder must ensure that **decommissioning** of the pipeline and associated infrastructure achieves the environmental outcomes identified in condition **5-1**.

General conditions

9 Revision of plans

- 9-1 The approval holder may review and revise any management plan required by Condition **2** and must provide the following to the **Minister** within 10 business days prior to any amendment(s) being implemented;

- (1) the revised plan(s)
- (2) a tabulated summary of the amendment(s) with document references;
- (3) reasons for the amendment(s);
- (4) an assessment of environmental risks and potential impacts associated with the amendment(s); and
- (5) if the **TMP** is updated, a written review and endorsement from an **independent qualified person** that the **TMP addresses** conditions **3-1** and **5**.

- 9-2 The approval holder must implement the action to comply with the latest revision of management plans required by condition **2**.

10 Commencement of action

- 10-1 This approval expires five years after the date on which it is granted, unless **trenching activity** has commenced on or before that date.
- 10-2 The approval holder must provide notification in writing to the **Minister**, at least 5 business days prior to the commencement of **trenching activity**.

11 Change of contact details

- 11-1 The approval holder must notify the **Minister** in writing of any change of its name, physical address or postal address for the serving of notices or other correspondence within 10 business days of such change.

12 Environmental performance reporting

- 12-1 The approval holder must:
- (1) within six months of the completion of commissioning carried out under this approval, obtain from an **independent qualified person**, a report on the environmental performance of the action and compliance with the conditions of this environmental approval; and
 - (2) submit the report to the **Minister** within 30 days of its completion.

12-2 The report required by condition **12-1(1)** must:

- (1) provide all monitoring data and reportable incidents required by the conditions of this approval;
- (2) provide an analysis and interpretation of monitoring data to demonstrate whether compliance with the requirements of conditions has been achieved;
- (3) include an assessment of the effectiveness of monitoring, management and contingency measures implemented to comply with the requirements of condition **5-1(1)** and **5-1(2)**;
- (4) include a comparison of the predicted impacts of the action, including **trenching activity** and **spoil disposal**, and the actual impacts of the action as verified by environmental monitoring data compared with baseline survey data;
- (5) be endorsed by the approval holder or a person delegated to sign on the approval holder's behalf;
- (6) include a statement as to whether the approval holder has complied with the conditions of this approval; and
- (7) identify all non-compliances and describe corrective and preventative actions taken.

13 Provision of environmental data

13-1 All environmental monitoring data required to be collected or obtained under this environmental approval must be retained by the approval holder for a period of not less than 10 years commencing from the date that the data is collected or obtained.

13-2 The approval holder must, as and when directed by the **Minister**, provide any environmental data (including sampling design, sampling methodologies, empirical data and derived information products such as maps) relevant to the assessment of the action and implementation of this environmental approval, to the **Minister** in the form and manner and at the intervals specified in the direction.

Definitions

The terms used in this approval have the same meaning as the terms defined in the *Environment Protection Act 2019* and *Environment Protection Regulations 2020*.

Term	Definition
approved extent	The extent identified in Figure 1 of this approval.
beneficial uses	Has the same meaning as in section 4 of the <i>Water Act 1992</i> .
benthic habitats and communities	The areas of seafloor that support functional ecological communities (e.g. high relief reef, platform reef, sand, silt and the depth they occur). The communities may include light dependent taxa (e.g. algae, seagrass, corals, some sponges, mangroves) or animals that obtain their energy by consuming live or dead organisms (e.g. ascidians, sponges, soft corals)
CEO	Has the same meaning as in section 4 of the EP Act .
CHMP	Cultural heritage management plan
contingency discharge	Discharge of hydrotest fluid in response to an unplanned event.
decommissioning	Decommissioning must comprise removal of all property. An alternative approach that delivers equal or better environmental outcomes may be used, if approved by the Minister .
DEWPS	Department of Environment, Parks and Water Security
DTFHC	Department of Territory Families, Housing and Communities
EP Act	<i>Environment Protection Act 2019</i>
hydrotest fluid	Seawater treated with chemicals which may include biocides, oxygen scavengers, and dye.
independent qualified person	A qualified person as defined under section 4 of the EP Act ; and who also meets the following requirements: <ul style="list-style-type: none"> a) was not involved in the preparation of the approval holder's referral or SER; b) is independent of the personnel involved in the design and implementation of the action; c) does not have a pecuniary interest in the project, approval holder or related entities and must not have provided prior services to the project; and d) has obtained written approval from the CEO, on the advice of the Executive Director, of the NT DEPWS Flora and Fauna Division to be the qualified person to satisfy the

Term	Definition
	independent qualified person reporting requirements under this approval.
material environmental harm	Has the same meaning as in section 8 of the <i>Environment Protection Act 2019</i> .
Minister	The Minister responsible for administering the <i>Environment Protection Act 2019</i> .
NT EPA	Northern Territory Environment Protection Authority.
planned discharge	Discharge of hydrotest fluid carried out during commissioning.
referral	The approval holder's referral to the NT EPA under section 48 of the EP Act
SER	Darwin Pipeline Duplication Project Supplementary Environmental Report. May 2023, including Appendices.
spoil disposal	Disposal of material generated by subtidal dredging.
suitably qualified and experienced person	<p>A person(s) who:</p> <ul style="list-style-type: none"> • has professional qualifications, training, skills and experience related to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, and methods. • is engaged by the approval holder to prepare and implement plans, programs and/or reports required under this environmental approval • is able to nominate an expert support team of specialised professionals on whom they would rely for site issues beyond their areas of expertise; and • demonstrates a sound ability and experience in forming and managing a multidisciplinary team for complex site assessment which contains the appropriate balance of expertise.
trenching activity	Trenching works carried out under this approval including dredging.
TMP	Trenching management plan, which includes management and disposal of spoil.
trigger value(s)	The values of monitored environmental parameters that indicate when response actions are required to prevent impact.
zone of impact	Defines the areas within which benthic habitats and communities are impacted by a particular event or action. Nominally, this is an

Term	Definition
	area of 40 m on each side of the pipeline centre, and the spoil disposal ground with a 20 m buffer extending outward.

Location and extent of action

Spatial data depicting information provided in Figure 1 are held by the **DEPWS** as follows:

- NTEPA2021/0171-002~0001: Spatial files - Santos - Darwin Pipeline Duplication

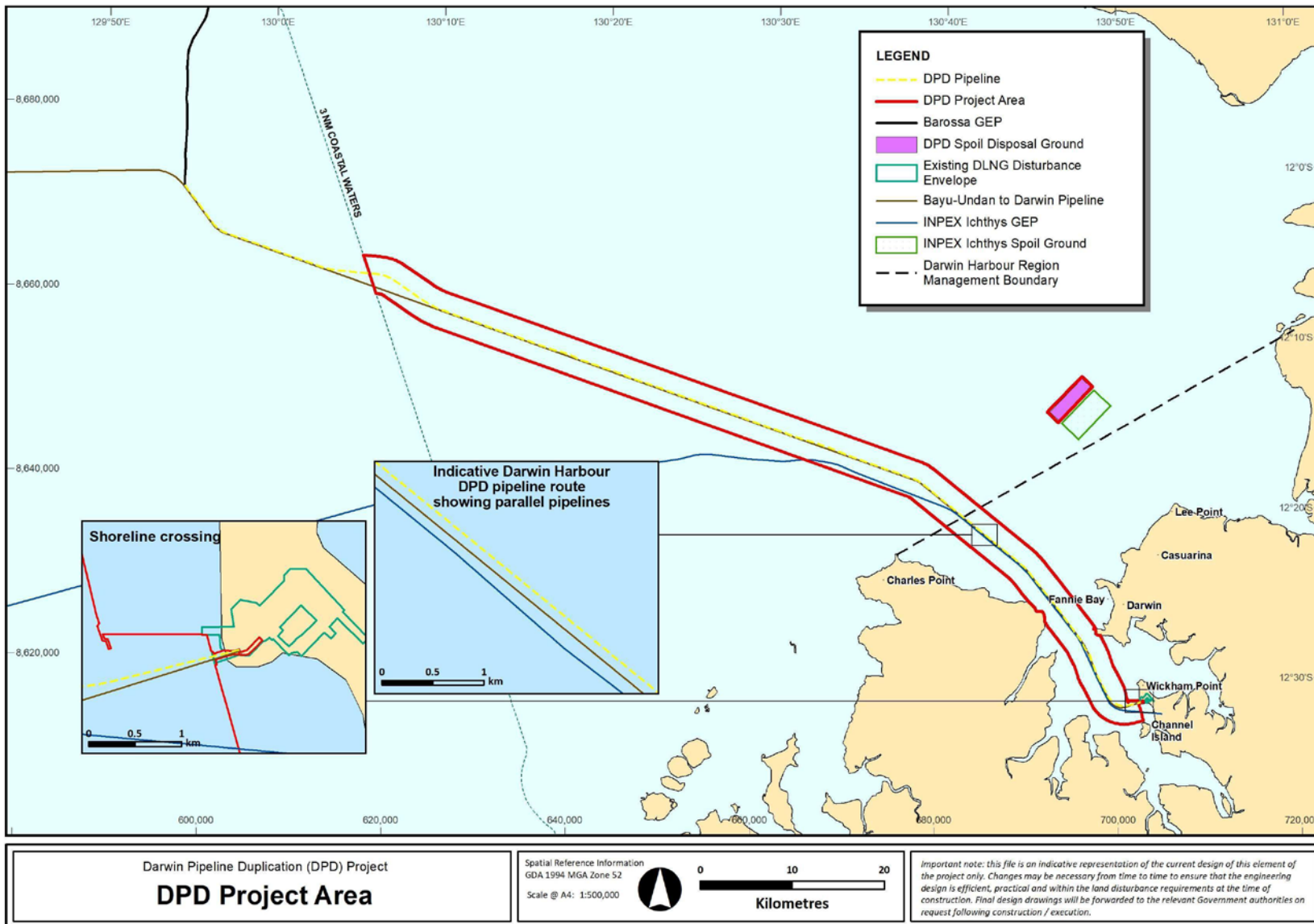


Figure 1 DPD approved extents (red) (Commonwealth/NT waters boundary labelled as '3NM coastal waters')