

Approval notice and statement of reasons

Petroleum (Environment) Regulations 2016 (NT) (Regulations)

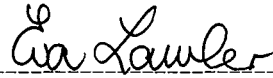
Interest holder	Santos QNT Pty Ltd (Santos) ABN 33 0830 771 96
Petroleum interest/s	EP161
Environment management plan (EMP) title	McArthur Basin Civil and Seismic Program
EMP document reference	Revision 3 prepared by Santos QNT Pty Ltd dated 21 May 2019
DENR EMP assessment document reference	NTEPA2019/0032-007~0005
Regulated activity	Land clearing, earthworks, establishing seismic lines and drill pads, conducting seismic surveys
Is the EMP a new plan submitted under reg 6 or a revision of a current plan submitted in accordance with reg 15?	New plan
Was the regulated activity referred ¹ for consideration whether an environmental impact statement or public environmental report was required?	Yes, in accordance with the <i>Environmental Assessment Act 1982</i>
Was an environmental impact statement or public environmental report required?	No NT EPA decision of 10 May 2019 NTEPA2019/0032-003~0007
Has an Authority Certificate under the <i>Northern Territory Aboriginal Sacred Sites Act 1984</i> (NT) (NTASSA) been issued for the regulated activity?	Yes NTEPA2019/0032-004~0005 Authority Certificates C2019/043 and C2018/105
Date an EMP compliant with reg 8 was first submitted under reg 6	8 April 2019
Dates within which the EMP was published for comment under reg 8A, if applicable	N/A
Date further information was required and submitted under reg 10, if applicable	N/A
Date of resubmission notice under reg 11(2)(b), if applicable	N/A
Date EMP was resubmitted under reg 11(3), if applicable	N/A
Date a notice setting out a proposed timetable for consideration of the EMP was issued under reg 11(2)(c) if applicable	N/A
Proposed timetable given in notice under reg 11(2)(c) if applicable	N/A
Where provided under s29B of the <i>Northern Territory Environment Protection Authority Act 2012</i> (NT) (NT EPA Act), the dates the Northern Territory Environment Protection Authority (NT EPA) was requested to, and provided, advice on EMP	Date of Minister's request for advice: 25 February 2019 Date of NT EPA Advice: 14 May 2019 NTEPA2019/0032-002~0001

¹ This means a referral under the *Environmental Assessment Act 1982* (NT) or the *Environment Protection and Biodiversity Conservation Act 1994* (Cth) (EPBC Act).

Date of decision

6 / 6 / 2019

Decision maker



Hon Eva Dina Lawler MLA, Minister for
Environment and Natural Resources

1 Approval notice

1. The EMP is approved. reg 11(2)(a)
2. The approval is subject to the following conditions: reg 12(2)
 - a. **Condition 1:** The interest holder must submit to Department of Environment and Natural Resources (DENR) a detailed timetable and breakdown of all civils works for the regulated activity prior to commencement of the activity and update the timetable each month.
 - b. **Condition 2:** The interest holder must develop, in consultation with DENR, a rehabilitation plan for each disturbed area appropriate to the nature and scale of the activity. At a minimum, the plan should include:
 - strategies for determination of final land use(s), rehabilitation goals and details of how rehabilitation objectives will be achieved;
 - commitments to stakeholder engagement where relevant;
 - implement progressive rehabilitation, with the borrow pits rehabilitated before the wet season, to avoid depressions, make them self-draining with topsoil and seeding for return of vegetation
 - continuation of rehabilitation and at least yearly monitoring for three years after completion of activities or until demonstration that rehabilitation objectives have been met;
 - monitoring and maintenance program for reinstated and rehabilitated areas;
 - timetable and schedule for implementation
 - c. **Condition 3:** The regulated activity must be undertaken in compliance with relevant requirements of Part A (Surface Activities) of the Code of Practice: Onshore Petroleum Activities in the Northern Territory. These include:
 - i. The planning, design, locating and construction of petroleum infrastructure must have regard to the considerations of the Land Clearing Guidelines as published on the DENR website and amended from time to time. Specific consideration must be given to the following:
 - a. suitability of site (e.g. flooding, sheet flow pathways, soil drainage and slope constraints, proximity to watercourses, dune crossings)
 - b. erosion and sediment controls
 - c. sensitive receptors
 - d. wildlife movement
 - e. biodiversity protection
 - f. water
 - g. weeds and

1 Approval notice

- h. cultural heritage
- ii. Road and pipeline corridor designs must:
 - a. minimise erosion of exposed road surfaces and drains
 - b. ensure that roads and pipeline surface water flow paths minimise erosion of all exposed surfaces and drains
 - c. comply with relevant guidelines such as the International Erosion Control Association Best Practice for Erosion and Sediment Control (2008), IECA Appendix P: Land Based Pipeline Construction December 2015 (Addendum to IECA 2008) and the Australian Pipeline Industry Association Code of Environmental Practice 2017
- iii. The requirements of the Land Clearing Guidelines as published on the DENR website and amended from time to time must be complied with in relation to the protection of natural waterways as a result of land disturbance and ensure the following:
 - a. appropriate buffers are implemented around natural waterways
 - b. disturbance in the wet season is minimised
 - c. the number of crossing points is minimised
 - d. crossings are constructed as close as practicable to right angles to the waterway
 - e. material changes in the shape of the waterway are avoided
 - f. material changes in the volume, speed or direction of flow or likely flow of water in the waterway are avoided
 - g. alteration to the stability of the bed or banks of the waterway (including by removal of vegetation) is avoided
 - h. erosion risk, sedimentation and pollution of waterways is minimised through the appropriate design and implementation of best practice erosion and sediment control measures
- iv. Land clearing for corridors, well pads and other operational areas must be kept to a minimum
- v. All infrastructure stream crossings must provide for appropriate fauna passage
- vi. Activities that involve wastewater or chemical storage must be carried out according to the wastewater management plan and spill management plan which are part of the EMP (which are further detailed in section C.7 of the Code)
 - i. The site layout should be designed to minimise the risk of spills. This may include segregating areas for chemical storage and handling
- vii. Progressive rehabilitation of significantly disturbed land which is not required for the ongoing conduct of petroleum activity (ies) or future activities, must commence as soon as practicable, but **not** longer than 12 months following cessation of activities on the land.

2 Material considered

1. The following material has been taken into account in making this decision:
 - a. Santos McArthur Basin Civil and Seismic Program EP161 Revision 3 dated 21 May 2019.
 - b. The principles of ecologically sustainable development set out in reg 4 and the approval criteria.
 - c. The NT EPA decision and Statement of Reasons under the *Environmental Assessment Act 1982* relating to the regulated activity not requiring assessment
 - d. The NT EPA advice provided at my request under s29B of the NT EPA Act.
 - e. The Authority Certificate issued under the NTASSA and associated response provided by the Aboriginal Areas Protection Authority.

3 The Code of Practice: Onshore Petroleum Activities in the Northern Territory (Code).

4 Statement of reasons

1. The EMP meets the approval criterion in reg 9(1)(a), because it contains all the information required by Schedule 1 of the Regulations. reg 9(1)(a)
2. The EMP meets the approval criterion in reg 9(1)(b) for the following reasons: reg 9(1)(b)
 - a. The nature of the regulated activity is as follows:
 - i. A series of civil construction activities and seismic surveys located over two well locations on EP161, required to enable Santos' 2019 drilling program and involving: the installation of, or upgrading of, access tracks, camp pads and lease pads; clearing of seismic lines; use of approved gravel pits to provide material for the proposed works.
 - ii. The regulated activity does not include drilling, stimulation (hydraulic fracturing) or testing of a petroleum exploration well.
 - iii. All activities are proposed for the 2019 dry season.
 - b. The scale of the regulated activity is as follows:
 - i. The civil construction and seismic program covers two well locations, Inacumba-1/1H and Tanumbirini-1/2H wells, and comprises total land clearing of 59.2 hectares (ha) in addition to the 40.2 ha of existing cleared land in the project area. The regulated activity involves the installation of 10 km of cleared seismic lines and undertaking a 2D seismic program at Tanumbirini-1/2H and the installation of a 1 km new access track and upgrading 20 km of existing access tracks, as well as construction of camp pads and lease pads at both well locations.
 - ii. This regulated activity will use an estimated total of 46 megalitres (ML) of groundwater sourced from existing bores.
 - iii. The interest holder has estimated approximately 11,715 tonnes of carbon dioxide equivalent (CO₂) emissions from the regulated activity.
 - iv. Construction and seismic works are proposed for the 2019 dry season.

- c. The EMP contains an appropriate level of detail for the nature and scale of the activities proposed. The description of the regulated activity is clearly described. The description of the existing environment is informed by adequate baseline studies conducted in 2018 and 2019 and is adequately understood. The identification of environmental impacts and risks is comprehensive and contains a sufficient level of detail to inform an assessment of the environmental impacts and risks. The EMP provides detail on environmental outcomes and performance standards, implementation strategy, personnel, emergency contingency plan, stakeholder engagement, legislative requirements, recording, monitoring, reporting and notifications to an appropriate level of quality and applicability.
 - d. Having regard to the above, the information in the EMP is appropriate for the nature and scale of the regulated activity to which it relates.
3. The EMP meets the approval criterion in reg 9(1)(c) for the following reasons: reg 9(2)(a)
- a. I have considered reg 4(d) (which requires that I give fundamental consideration to the conservation of biological diversity and ecological integrity as follows:
 - i. I believe the information I have regarding the existing biodiversity and ecosystems that are to be affected by the regulated activity; the effects that are likely; and the mitigation measures reasonably available, is sufficient.
 - ii. The regulated activity poses a low risk to the ecosystem within the Sturt Plateau and Gulf Fall and Uplands bioregions. Given the relatively small area of clearing that is proposed and the very large area of similar habitat within the region, the regulated activity does not pose a significant risk to any regional populations of threatened species. Four threatened species have been identified as having a 'medium' likelihood of occurrence within the regulated activity area. Due to the timing of works, management strategies outlined in the EMP and the relatively small area of impact, it is unlikely that the regulated activity will pose a risk to the identified threatened species. Impacts and risks to flora, fauna, and ecosystems have been mitigated to an acceptable level.
 - iii. The conservation of biological diversity and ecological integrity is vital to the achievement of ecologically sustainable development. Given the fundamental nature of this consideration, I have given central importance to the conservation of biodiversity and ecological integrity in weighing whether I am satisfied the approval criterion in reg 9(1)(c) has been met.
 - iv. If carried out in accordance with the EMP, the regulated activity is not considered to have an impact on the conservation of biological diversity. The EMP outlines measures to minimise impacts on affected environmental values, including the management of threatening processes such as weeds and fire. Where relevant, management measures are consistent with the requirements of the Code and the NT Land Clearing Guidelines.
 - v. If carried out in accordance with the EMP, the regulated activity is not considered to have an impact on the conservation of ecological integrity.
 - b. I have considered reg 4(a) (which concerns the integration of long-term and short-term economic, environmental, social and equitable considerations) as follows:
 - i. The expression *environment* as defined in the Regulations relevantly includes the well-being of humans, structures made or modified by humans, amenity values of an area and economic, social and cultural conditions. The requirements under the Regulations include stakeholder engagement and a broad consideration of the environmental impacts and environmental risks of

the regulated activity in question. In making that broad consideration, the long-term and short-term environmental impacts and environmental risks were identified and assessed in the EMP.

- ii. The regulated activity is low impact and of short duration. It forms one component of a broader gas exploration program in the region. The EMP adequately assesses the environmental impacts and risks associated with the regulated activity and outlines appropriate avoidance and mitigation measures. This includes the assessment and management of social impacts and risks, including the appropriate management of cultural heritage. The interest holder has undertaken stakeholder engagement with landholders and land managers, traditional owners, the Northern Land Council (NLC) and NT Government agencies.
 - iii. The EMP in this case is considered to have adequately assessed and integrated economic, social and environmental considerations.
 - iv. I observe that in carrying out the regulated activity there is no particular contest between economic, social and environmental considerations that requires further mention.
 - v. Accordingly, I am satisfied that the concept of integration has been taken into account.
- c. I have considered reg 4(b) (which concerns the 'precautionary principle') as follows:
- i. The regulated activity does not pose a threat of serious or irreversible environmental damage which warrants the application of the precautionary principle.
- d. I have considered reg 4(c) (which concerns the principle of intergenerational equity) as follows:
- i. The environmental burdens of the regulated activity will not disproportionately affect particular stakeholders. The estimated greenhouse gas emissions from the regulated activity are minimal in context of Northern Territory and Australian emissions. Cultural values will be protected through the application of Authority Certificates issued to the interest holder under the *Northern Territory Aboriginal Sacred Sites Act 1984* and measures for reporting on discovery of archaeological sites. Accordingly I do not believe that the carrying out of the regulated activity in accordance with the EMP would have an effect contrary to the principle of intergenerational equity.
- e. I have considered reg 4(e) (which concerns the promotion of improved valuation, pricing and incentive mechanisms) as follows:
- i. In accordance with the 'polluter pays principle':
 - (1) The interest holder will cover the cost of remediation of the impacts of the regulated activity, as is set out in Section 7.4 of the EMP.
 - (2) If the interest holder fails to remediate the impacts, an environmental rehabilitation bond has been provided by the interest holder which is considered adequate to cover the resulting costs.
- f. No environmental report or statement has been required to be prepared in relation to the regulated activity. This indicates that the NT EPA was not of the opinion that the regulated activity is reasonably considered to be capable of having a significant effect on the environment. reg 9(2)(b)

- g. The NT EPA has provided the following in relation to the regulated activity and the EMP:
- i. In accordance with my request under s29B of the NT EPA Act, the NT EPA reviewed the EMP for the regulated activity against the approval criteria in regulations 9(1)(b), 9(1)(c) and 9(2)(a) of the Regulations and other matters the NT EPA considered relevant, and has provided advice about the EMP.
Relevantly:
 - (1) The NT EPA recommended that should the EMP be approved, it be subject to four conditions. Three of these conditions are outlined in Section 1(2) of this Approval Notice. I have not accepted the condition recommended by the NT EPA requiring an Erosion and Sediment Control Plan (ESCP), as a site-specific ESCP was submitted to me in a revised EMP after the NT EPA provided its advice.
 - (2) The NT EPA concluded that the EMP for the regulated activity, subject to the recommended approval conditions, is appropriate for the nature and scale of the regulated activity and demonstrates that the regulated activity can be carried out in a manner that environmental impacts and environmental risks of the activity will be reduced to a level that is as low as reasonably practical and acceptable.
 - ii. The content of the NT EPA's advice and recommendations have been incorporated into the comments in this statement of reasons and the conditions in the Approval Notice.
- h. The existing environment along with its particular values and sensitivities is appropriately identified in Section 4 of the EMP. reg 9(1)(c)
- i. The anticipated environmental risks are appropriately identified in Section 5 of the EMP.
- j. I agree with the risk assessment set out in Section 6 of the EMP, and to the extent I do not agree I have imposed a condition or conditions to address the relevant risk or risks.
- k. The anticipated environmental impacts are appropriately identified in Section 6 of the EMP. As the regulated activity forms the first component of an exploration program, no cumulative impacts have been identified and assessed. In EMPs for subsequent stages (if they proceed) the interest holder will need to address cumulative impacts.
- l. There are no environmental impacts or environmental risks relating to the proposed regulated activity which I consider to be unacceptable.
- m. Overall, having regard to the above, I am satisfied that the EMP demonstrates that the regulated activity is to be carried out in manner by which the environmental impacts and environmental risks are reduced to a level that is:
- i. as low as reasonably practicable; and
 - ii. acceptable.