

Approval notice and statement of reasons

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

Interest holder	Tamboran B2 Pty Ltd ACN 105 431 525 Falcon Oil and Gas Ltd ABN 53 132 857 008
Petroleum interest(s)	Exploration Permits 98 and 117 (EP98 and EP117)
Environment management plan (EMP) title	Beetaloo Basin Shenandoah South 3D Seismic Program
EMP document reference	TB2-HSE-MP-14, Rev 2, (TAM3-2) prepared by Tamboran B2 Pty Ltd dated 6 March 2025
Regulated activity	Preparation of 640 km, 3.5 m wide 3D Seismic lines (76.25 ha clearing, 221 ha total disturbance area) Seismic acquisition along 42 lines (AWD and seismic charges) Storage of hazardous material (Explosive magazine, fuels, lubricants and oils) Operation of existing camp Groundwater extraction (2 ML)
Is the EMP a new plan submitted under reg 6 or a revision of a current plan submitted in accordance with reg 18, or regs 15 and 17?	This is a new plan submitted under reg 6.
Was the regulated activity referred ¹ for consideration whether environmental impact assessment was required?	No
Was environmental impact assessment ² required?	N/A
Has an environmental approval ³ been issued for the regulated activity?	N/A
Has an Authority Certificate under the Northern Territory <i>Aboriginal Sacred Sites Act 1989</i> been issued for the regulated activity?	Yes Authority Certificate C2024/031
Date an EMP compliant with reg 8 was first submitted under reg 6	22 October 2024
Date 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	13 December 2024 (requested) 20 February 2025 (received)
Date of resubmission notice under reg 11(2)(b), if applicable	13 December 2024 (requested) 20 February 2025 (received)
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(2A), or reg 11(3)(c), if applicable	N/A

¹ This means a referral under the *Environment Protection Act 2019* (NT) (EP Act) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

² This means a requirement for an environmental impact assessment to be conducted under the EP Act and/or the EPBC Act.

³ This means an approval granted under the EP Act and/or the EPBC Act.

Proposed timetable given in notice under reg 11(2A), or reg 11(3)(c), if applicable N/A

Where provided under s29B of the Northern Territory Environment Protection Authority Act 2012 (NT) (NT EPA Act), the dates the Northern Territory Environment Protection Authority (NT EPA) was requested to, and provided, advice on EMP N/A

Date of decision 9 / 4 / 2025

Decision maker

Signature

Hon Joshua Burgoyne MLA,
Minister for Lands, Planning and
Environment

1 Approval notice

1. I approve the EMP under reg 11(3)(a)(i).
2. The approval is subject to the following conditions:

Condition 1: By 1 October of each year, the interest holder must submit to Onshoregas.DLPE@nt.gov.au a completed Annual Environmental Performance Report Template (AEPR) for the preceding 12-month period of 1 July to 30 June. The AEPR Template must be completed in accordance with the Onshore Petroleum Annual Environmental Performance Reporting Guideline (21 December 2023) as updated from time to time.

Condition 2: The interest holder must submit recordable incident reports to Onshoregas.DLPE@nt.gov.au no later 5 pm ACST 15 days after the end of each quarter, being 15 April, 15 July, 15 October and 15 January each year while the approved plan remains in force, and must be submitted regardless of whether an incident occurred during the reporting period or not.

Condition 3: Within 45 days of completing seismic activities, the interest holder must submit to Onshoregas.DLPE@nt.gov.au geospatial files (as shapefiles and inclusive of metadata).

Condition 4: By 31 October of each year, the interest holder must submit to Onshoregas.DLPE@nt.gov.au the emissions report required by clause D.6.2 of the Code, which must:

- i. calculate emissions in accordance with the National Greenhouse and Energy Reporting (Measurement) Determination 2008;
- i. document actual annual greenhouse gas emissions from conduct of the regulated activity estimated and reported under the *Commonwealth National Greenhouse and Energy Reporting Act 2007* (NGER Act) versus predicted emissions in the EMP (TAM3-2);
- ii. demonstrate the actual emissions have been verified by an auditor registered under the Register of Greenhouse and Energy Auditors established under section 75A of the NGER Act;

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- iii. include a summary of all regulated activities conducted which have contributed to greenhouse gas emissions during the reporting period; and
- iv. account for differences between actual and predicted emissions with reference to all parts of the regulated activity with potential to create greenhouse gas emissions.

Condition 5: The interest holder must record all accidental releases of liquid contaminant or hazardous chemicals in a site spill register, which records:

- i. the liquid contaminant or hazardous chemical spilled or leaked;
- ii. the GPS co-ordinates of the location of the spill or leak;
- iii. the source and volume of the spill or leak;
- iv. the volume of impacted soil removed for disposal and the depth of any associated excavation; and
- v. the corrective actions taken or proposed to be taken to prevent recurrence of an incident of a similar nature.

2 Material considered

1. The following material has been taken into account in making this decision:
 - a. Beetaloo Basin Shenandoah South 3D Seismic Program, dated 06 March 2025.
 - b. The principles of ecologically sustainable development referenced in reg 5A and the approval criteria set out in reg 9(1).
 - c. The Authority Certificate issued under the *Northern Territory Aboriginal Sacred Sites Act 1989*.
 - d. The Code of Practice: Onshore Petroleum Activities in the Northern Territory (Code).
 - e. The Greenhouse Gas Abatement Plan prepared by Tamboran B2 Pty Ltd, version 5 dated 15 October 2024.

3 Statement of reasons

3. 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)
4. I have taken into account the approval criterion in reg 9(1)(b) by noting the nature and scale of the regulated activity and bearing it in mind during my consideration of the impacts and risks. In particular, I note that: reg 9(1)(b)
 - a. The nature of the regulated activity is as follows:
 - i. Preparation of 640 km, 3.5 m wide 3D Seismic lines.
 - ii. Seismic acquisition along 42 lines.
 - iii. Storage of hazardous material (Explosive magazine, fuels, lubricants and oils).
 - iv. Operation of existing camp.
 - v. Groundwater extraction.
 - b. The scale of the regulated activity is as follows:
 - i. A total surface disturbance of 221 ha.
 - ii. An estimated groundwater usage of 2 ML.
 - iii. A peak traffic movement of 8 vehicles per day.
 - iv. A workforce of up to 68 personnel.
 - v. Anticipated emissions of 4,875 tCO₂^e (total).
5. The approval criteria in reg 9(1)(c) requires that I be satisfied that the activity will be carried out in a manner by which the environmental impacts and environmental risks of the activity will be reduced to a level that is both: (i) as low as reasonably practicable; and (ii) acceptable. In assessing whether the EMP meets the approval criteria, I note that my decision is a prescribed decision (under reg 5A) for s 6A of the Act, and as such requires me to consider and apply the principles of ecologically sustainable development. In accordance with reg 12(3), I provide the following information about how the EMP meets the approval criteria, and the way I have taken into account the principles of ecologically sustainable development when considering whether or not the plan meets the approval criteria. reg 9(1)(c)
6. The principles of ecologically sustainable development are defined at section 18-24 of the *Environment Protection Act 2019*, and I address each in turn:

- a. The decision-making principle (s 18 *Environment Protection Act 2019*) requires effective integration of long-term and short-term environmental and equitable considerations, and for processes to provide for community involvement in relation to decisions and actions that affect the community. Related to this, I note the following:
 - i. The regulated activity is low impact and of short duration, 20 weeks plus rehabilitation, and forms one component of a broader onshore petroleum exploration program in the region. The regulated activity will inform decision-making about longer-term petroleum activities.
 - ii. Public consultation on the EMP was not required under the Petroleum (Environment) Regulations 2016, as the EMP does not propose drilling and hydraulic fracturing activities. The public was made aware that the EMP was under assessment via the Department of Lands, Planning and Environment's (Department) website.
 - iii. Next, I have considered short-term and long-term environmental impacts of carrying out the regulated activity. Environmental impacts include direct and indirect effects on the physical, biological, economic, cultural and social aspects of the environment, and may include cumulative impacts or occur over time.
 - iv. The information before me suggests short-term environmental impacts are negligible if the regulated activity is undertaken in the manner detailed in the EMP and the conditions of approval.
 - v. The information before me suggests long-term environmental impacts are negligible if the regulated activity is undertaken in the manner detailed in the EMP and the conditions of approval.
 - vi. There is no particular contest between economic, social and environmental considerations that requires further mention.
 - vii. Taking an integrated view of long-term and short-term environmental and equitable considerations, I am satisfied that the considerations on balance and taken together support approval of the EMP.
- b. The precautionary principle (s 19 *Environment Protection Act 2019*) applies when there are threats of serious or irreversible environmental damage and requires that lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. I am satisfied that the regulated activity does not pose a threat of serious or irreversible environmental damage.
- c. The principle of evidence-based decision-making (s 20 *Environment Protection Act 2019*) requires decisions to be made on the best available evidence in the circumstances that is relevant and reliable. I am of the view that the evidence before me satisfies this requirement for the following reasons: I am satisfied that the best available evidence has been obtained because:
 - i. The EMP was developed by persons who have professional qualifications, training, skills and experience on the subject matter of environment, safety, risk management, and petroleum development and operations, as well as consultants with experience working in the Beetaloo Sub-basin.
 - ii. The interest holder employed a comprehensive process to obtain relevant information including baseline assessments, archaeological assessments, stakeholder engagement and consultation with relevant NT government agencies.

- iii. The EMP has undergone review and assessment by a multi-disciplinary team in the Department and NT government agencies, which has informed my decision on the EMP.
- iv. The interest holder has modified the EMP to address areas of uncertainty or clarification. These included environmental performance standards and measurement criteria, environmental impacts and risk, consideration of heritage places and objects, rehabilitation success criteria and protection of habitat.
- v. No concerns regarding the sufficiency of information to support the EMP are apparent. On the contrary, they indicate, and I am satisfied that, the information before me is comprehensive.
- vi. I believe the information regarding the proposed regulated activity adequately provides the best available evidence in the circumstances that is relevant and reliable to the evidence-based decision-making process.
- d. The principle of intergenerational and intragenerational equity (s 21 *Environment Protection Act 2019*) requires that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of present and future generations. I have given consideration to the impact on present and future generations as follows:
 - i. This criterion requires me to turn my mind to whether the benefits of the proposal disproportionately burden present or future generations, or particular groups or communities of present or future generations.
 - ii. I have considered the benefit for future generations from increased economic activity in the region and am satisfied that exploration is a necessary precursor for future economic gains that may be achieved through a viable onshore petroleum industry.
 - iii. I have considered the use of groundwater and am satisfied that the proposed use will not result in either short-term or long-term impacts to other groundwater users.
 - iv. I have considered whether the health, diversity and productivity of the environment is maintained or enhanced for the benefit of each of these relevant groups.
 - v. The environmental burdens of the regulated activity will not disproportionately affect particular stakeholders.
 - vi. I consider that cumulative emissions are not significant when considered in context of 2022 NT and Australian emissions, which were approximately 16.73 million tonnes and 432.6 million tonnes respectively.
 - vii. Cultural values relating to sacred sites will be protected through the application of Authority Certificates issued to the interest holder under the *Northern Territory Aboriginal Sacred Sites Act 1989* and measures for reporting on discovery of archaeological sites during civil maintenance activities.
 - viii. 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 inter or intra-generational equity.
- e. The principle of sustainable use (s 22 *Environment Protection Act 2019*) requires that natural resources should be used in a manner that is sustainable, prudent, rational, wise and appropriate. In applying this principle, I have considered the following:

- i. I note that the EMP has assessed the cumulative impacts of groundwater extraction from the gum ridge formation and a groundwater extraction licence has been granted (GRF10285).
 - ii. The total anticipated water demand for this regulated activity is 2 ML which is approximately 0.4% of Tamboran's annual maximum water entitlement of 450 ML. Existing licensed groundwater bores will be used to meet the water requirements.
 - iii. No additional groundwater extraction licences are currently required for the regulated activity.
 - iv. Accordingly, I am satisfied that the concept of sustainable use of natural resources has been taken into account.
- f. The principle of biological diversity and ecological integrity (s 23 *Environment Protection Act 2019*) requires that biological diversity and ecological integrity should be conserved and maintained. I have applied this principle 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 does not pose a significant risk to any regional populations of threatened species. No core habitat for threatened fauna was identified in the project area, but 14 threatened species potentially occur in the wider landscape.
 - iii. The Department's Flora and Fauna Division is satisfied that the regulated activity does not pose a significant risk to the threatened species, important habitats or significant vegetation types. The mitigation controls identified in the EMP are adequate to reduce risks associated with potential impacts on biodiversity to be as low as reasonably practicable.
 - iv. 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 for the threatening processes are consistent with the requirements of the Code, NT Land Clearing Guidelines and Weed Management Planning Guideline: Onshore Petroleum Projects. Specific examples of mitigation controls include the use of spotters and fire trailers during the seismic program, biannual weed inspections and the requirement to have weed hygiene declarations prior to accessing the site. 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.
 - v. It is often the case that the conservation of biological diversity and ecological integrity is vital to the achievement of ecologically sustainable development. By their nature, ecosystems are complex and interdependent systems and relationships; this needs to be considered in relation to what preserves their integrity. Biological diversity also represents a wealth of potential natural resources that may provide options for present and future generations. I have borne this in mind when considering the weight to be given to the evidence before me regarding the potential impacts of the regulated activity on biodiversity and ecological integrity.

- vi. The measures to conserve and maintain biological diversity and ecological integrity in the EMP are appropriate, given the nature and scale of the regulated activity.
- vii. If carried out in accordance with the EMP, the risks of the regulated activity to the conservation of biological diversity and ecological integrity are considered to be mitigated to an acceptable level.
- g. The principle of improved valuation, pricing and incentive mechanisms (s 24 *Environment Protection Act 2019*) requires that environmental factors should be included in the valuation of assets and services, through application of the 'polluter pays' principles, consideration of full life cycle costs of providing goods and services and pursuing environmental goals in the most cost-effective way. I have applied the principle as follows:
 - i. The pollution and waste that will be generated by the regulated activity in the general course of its operation includes: emissions (e.g. fuel), liquid waste (e.g. sewage, greywater), solid waste and hazardous waste (e.g. spill contaminated material, tyres, used chemical and fuel drums and oil-contaminated material).
 - ii. I am satisfied that this pollution and waste will be disposed of by the interest holder at its own cost as set out in Table 25 and section 3.8.5 of the EMP.
 - iii. In relation to the risks of a pollution event that may occur unintentionally during the operations of the regulated activity, I consider that measures are in place to ensure the interest holder bears the costs of containment, avoidance, and abatement. Specifically, impacts and risks associated with contamination of soil, surface water and groundwater, are managed through requirements for the containment of contaminants and mandatory requirements for management plans for spills as defined in the Code.
 - iv. In relation to full life cycle costs, it is expected that the regulated activity will have a life cycle of 18 to 20 weeks, and at the end of this cycle the interest holder will take action to remove any residual pollution and waste as detailed by the EMP.
 - v. The interest holder is required to provide an environmental security calculated in accordance with the approved approach or methodology.
 - vi. With these measures in place, I am satisfied that the EMP ensures that environmental costs are not left as externalities to be paid for by Territory taxpayers or the local community. They will be fairly paid for by those who stand to benefit from the regulated activity, such as the interest holder, and consumers who choose to purchase the interest holder's products. To the extent there are some costs to the Territory, I am satisfied that this is appropriate given the broader economic benefits.
 - vii. In relation to options to pursue environmental goals in relation to the regulated activity, I have taken into account that these goals should be pursued in the most cost-effective way.
 - viii. I believe approval of the EMP is consistent with the principle of improved valuation, pricing and incentive mechanisms.
- h. The EMP was not referred under the *Environment Protection Act 2019*, as the regulated activity does not have the potential to cause a significant impact on the environment. reg 9(3)
- i. The existing environment along with its particular values and sensitivities is appropriately identified in section 4 of the EMP, and to the extent I do not agree reg 9(1)(c)

or there is some uncertainty, I have imposed conditions to address the relevant risk or risks.

- j. I agree with the risk assessment set out in Appendix I 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 interest holder's risk assessment is applicable to activities in all seasons and the outcomes are reflected in the EMP that includes, for example; a weed management plan; bushfire management plan; rehabilitation management plan; emergency response plan; stakeholder engagement management plan; and spill management plan. The EMP also includes the required elements for the ongoing management of erosion and sediments. This is consistent with the requirements of the Code that allows for the regulated activity to occur in the wet season months when contingency planning is provided.
- l. The anticipated environmental impacts are appropriately identified in Appendix I of the EMP. The regulated activities are a continuation of current activities and cumulative effects have been identified and assessed. In EMPs for subsequent stages (if they proceed) the interest holder will need to continue to address cumulative effects.
- m. The EMP demonstrates how the interest holder will comply with relevant requirements of the Code in undertaking these regulated activities. This includes reference to applicable Australian and international standards that have been adopted for regulated activity, as applicable. The EMP cross references relevant sections of the Code that apply to the mitigation and management measures to enable the reviewer to identify and confirm that the proposed activities comply with the Code, as applicable.
- n. I am satisfied that the interest holder has conducted ongoing stakeholder engagement in accordance with the Regulations. The EMP provides details of stakeholder engagement that meets Regulation 7 and Schedule 1, Clause 9 of the Regulations (Section 5 and Appendix J). Stakeholder engagement records (Appendix J) demonstrate that stakeholders did not raise objections about environmental impacts of the proposed activity that required specific changes from the interest holder. The EMP provides details of written feedback and input from stakeholders as part of the stakeholder engagement records. The risk assessment in the EMP details the potential environmental impacts of the activity and proposed environmental outcomes to manage impacts on social and cultural surroundings.
- o. There are no environmental impacts or environmental risks relating to the proposed regulated activity that I consider to be unacceptable.
- p. Overall, having regard to the above, I am satisfied that the EMP is appropriate for the nature and scale of the activity, and 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.