

Approval notice and statement of reasons

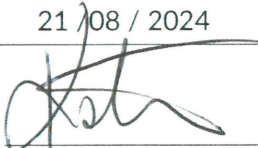
Petroleum (Environment) Regulations 2016 (NT) (Regulations)

Interest holder	Santos QNT Pty Ltd ABN 33 083 077 196 Peak Helium (Amadeus Basin) Pty Ltd ABN 65 654 263 804 Ordiv Petroleum Pty Ltd ABN 29 111 102 697
Petroleum interest(s)	Exploration Permit 125 (EP125)
Environment management plan (EMP) title	Amadeus Basin: Jacko Bore 1DW1 Drill and Test Program
EMP document reference	STO5-5, Rev 5, prepared by inGauge Energy Australia dated 28 June 2024
Regulated activity	<ul style="list-style-type: none"> • The re-establishment of the previously cleared well pad and campsite. • Civil construction associated with the expansion of the existing well site and associated infrastructure (laydown yard, overburden spoil stockpile, tank pads, fire breaks, effluent irrigation area, access tracks and water bores). • Drilling, completion, monitoring and maintenance, and suspension and decommissioning of a horizontal helium appraisal well. • Extended production testing of a horizontal helium appraisal well for a period of up to 365 days. • Rehabilitation of area utilised for the Activity and previously disturbed areas associated with the Interest Holder's exploration and appraisal activities. • The use and maintenance of public roads, existing access tracks and pre-existing gravel pits along the access track to the well pad.
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

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.

Has an Authority Certificate under the Northern Territory <i>Aboriginal Sacred Sites Act 1989</i> been issued for the regulated activity?	Yes C2023/054 (variation of C2023/018)
Date an EMP compliant with reg 8 was first submitted under reg 6	20 February 2023
Date within which the EMP was published for comment under reg 8A, if applicable	27 February 2023 to 27 March 2024
Date further information was required and submitted under reg 10, if applicable	13 April 2023 (requested) 19 June 2023 (received) 7 July 2023 (requested) 19 December 2023 (received)
Date of resubmission notice under reg 11(2)(b), if applicable	20 April 2023 (requested) 19 June 2023 (received)
Date EMP was resubmitted under reg 11(3), if applicable	18 July 2023 (requested) 19 December 2023 (received) 26 February 2024 (requested) 3 May 2024 (received) 31 May 2024 (requested) 01 July 2024 (received)
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	Notice issued 10 January 2024
Proposed timetable given in notice under reg 11(2A), or reg 11(3)(c), if applicable	Decision date advised as on or before 29 February 2024
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: 23 July 2024 NTEPA2023/0024-006~0004
Date of decision	21 /08 / 2024
Decision maker	 Signature
	Hon Kate Worden MLA, Minister for Environment, Climate Change and Water Security

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

Notification Conditions

Condition 1: By 1 September of each year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a notification if civil works (being all ground disturbing activities, including earth moving, land clearing, installation of gravel pits, establishment of well pads, and establishment of access tracks) are proposed to be conducted during the upcoming Wet Season (as defined in the Code of Practice: Onshore Petroleum Activities in the Northern Territory (2019) (the Code)). The notification must include:

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- i. the nature of the proposed civil works activities; and
- ii. the proposed timeframe for conducting the civil works activities.

Condition 2: Within 24 hours of commencing or stopping civil works activities (being all ground disturbing activities, including earth moving, land clearing, installation of gravel pits, establishment of well pads, and establishment of access tracks), the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a notification that civil works activities have commenced or ceased, including the date the activities commenced or ceased and the type and location of the activities.

Condition 3: Within 24 hours of drilling activities commencing or stopping, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a notification that drilling activities have commenced or stopped, including the location of the relevant drilling activity.

Condition 4: Within 30 days of each occasion a groundwater bore is installed, or within 30 days of determining an existing groundwater bore is proposed to be used, the interest holder must send to Onshoregas.DEPWS@nt.gov.au:

- i. the registered number of the groundwater bore;
- ii. the aquifer the groundwater bore is targeting;
- iii. the purpose of the groundwater bore;
- iv. whether the bore is proposed to be included on an extraction licence and the proposed volume to be extracted per annum, or if already included on an extraction licence, the extraction licence number and date issued and the volume allowed for extraction per annum; and
- v. the GPS coordinates of the groundwater bore.

Reporting Conditions

Condition 5: By 1 October of each year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a completed Annual Environmental Performance Report (AEPR) for the preceding 12 month period of 1 July to 30 June using the AEPR template. The AEPR Template must be completed in accordance with the Onshore Petroleum Annual Environmental Performance Reporting Guideline as updated from time to time.

Condition 6: Within three business days of 31 March, 30 June, 30 September and 31 December of each year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a report with the following information:

- i. regulated activities completed in the previous quarter;
- ii. regulated activities to be conducted in the next quarter, including estimated duration;
- iii. the date any conditions of this approval were completed in the previous quarter;
- iv. the date any conditions of this approval are due for completion in the next quarter; and
- v. monitoring and compliance activities to be conducted in the next quarter based on commitments in the approved EMP, relevant to the stage of a regulated activity.

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Condition 7: During the Wet Season (as defined in the Code), the interest holder must submit to Onshoregas.DEPWS@nt.gov.au weekly reports with the following information:

- i. whether unsealed access roads were used by any vehicle or machinery, other than a light vehicle;
- ii. daily inspection reports of erosion and sediment control measures and, where relevant, the type and date of corrective actions taken, or date proposed to be taken, in response to issues identified in the daily inspection reports;
- iii. daily inspection reports for secondary containment in use and, where relevant, the type and date of corrective actions taken, or date proposed to be taken, in response to issues identified in the daily inspection reports; and
- iv. all dates the regulated activity was stopped due to Wet Season events and the date and time that the regulated activity recommenced, or is proposed to recommence.

Condition 8: During drilling activities, the interest holder must record the date, time and position title of the officer who conducted the daily inspection, and must submit to Onshoregas.DEPWS@nt.gov.au a weekly report with the following information:

- i. the daily freeboard available in drill cutting pits (in cm) and the time of measurement; and
- ii. whether any non-compliances with legal requirements were identified in the daily inspections and, if relevant, corrective actions taken, or proposed to be taken, and the timeframe for implementation of corrective actions, in response to the non-compliances.

Condition 9: The interest holder must submit the weekly reports required by conditions 7 and 8 by 5pm ACST each Monday for the preceding week or part thereof.

Condition 10: The interest holder must submit recordable incident reports to Onshoregas.depws@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 11: Within 30 days of completing land clearing or other ground disturbing activities (being all ground disturbing activities, including earth moving, land clearing, installation of gravel pits, establishment of well pads, and establishment of access tracks), the interest holder must submit to Onshoregas.DEPWS@nt.gov.au geospatial files (as shapefiles and inclusive of metadata).

Greenhouse Gas Emissions Conditions

Condition 12: By 31 October of each year, the interest holder must submit to Onshoregas.DEPWS@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;
- ii. document actual annual greenhouse gas emissions from conduct of the regulated activity estimated and reported under the *Commonwealth National*

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Greenhouse and Energy Reporting Act 2007 (NGER Act) versus predicted emissions in the EMP (STO5-5);

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

Incident Management Conditions

Condition 13: 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.

Condition 14: The interest holder must undertake six-monthly testing of the quality of wastewater produced from this petroleum well, consistent with clause C.5.5(c) of the Code of Practice: Onshore Petroleum Activities in the Northern Territory (2019) (the Code).

Condition 15: The interest holder must provide a report consistent with the requirements of regulation 37B(2) to Onshoregas.depws@nt.gov.au within 90 days of the second testing event referred to in condition 14, inclusive of a full human health risk assessment, in accordance with regulations 37B(2A) and 4A.

Condition 16: The interest holder must review the results of testing undertaken in condition 14 to ensure:

- i. the wastewater and spill management practices in the EMP remain appropriate for the concentrations of analytes detected; and
- ii. the storage, treatment and transport of wastewater remain consistent with legislated requirements for NORMs and listed waste; and
- iii. the human health risk assessment undertaken in accordance with condition 15 remains applicable to the type and concentrations of analytes detected.

2 Material considered

1. The following material has been taken into account in making this decision:
 - a. Amadeus Basin: Jacko Bore 1DW1 Drill and Test Program EMP, dated 3 May 2024
 - b. The principles of ecologically sustainable development referenced in reg 5A and the approval criteria set out in reg 9(1).
 - c. The NT EPA advice provided at my request under s29B of the NT EPA Act.
 - d. The Authority Certificate issued under the *Northern Territory Aboriginal Sacred Sites Act 1989*.
 - e. The Code of Practice: Onshore Petroleum Activities in the Northern Territory (Code) as set out in reg 4A.
 - f. The Department of Industry, Tourism and Trade advice that the Well Operations Management Plan approved for the regulated activity meets the requirements of the *Code of Practice: Onshore Petroleum Activities in the Northern Territory*.

3 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. 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. The re-establishment of the previously cleared well pad and campsite.
 - ii. Civil construction associated with the expansion of the existing well site and associated infrastructure (laydown yard, overburden spoil stockpile, tank pads, fire breaks, effluent irrigation area, access tracks and water bores).
 - iii. Drilling, completion, monitoring and maintenance, and suspension and decommissioning of a horizontal helium appraisal well.
 - iv. Extended production testing of a horizontal helium appraisal well
 - v. Rehabilitation of area utilised for the Activity and previously disturbed areas associated with the Interest Holder's exploration and appraisal activities
 - vi. The use and maintenance of public roads, existing access tracks and pre-existing gravel pits along the access track to the well pad.
 - b. The scale of the regulated activity is as follows:
 - i. 8.8 ha of new disturbance
 - ii. Estimated groundwater usage of up to 73.2 ML
 - iii. One horizontal helium appraisal well
 - iv. Extended production testing for 365 days conducted over a period of 12 to 18 months.
 - v. Peak traffic movements for the regulated activity are 150 heavy and 113 light vehicles per week.
3. 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 reg 9(1)(c)

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 manner in which I have taken into account the principles of ecologically sustainable development when considering whether or not the plan meets the approval criteria. [

4. 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 (16 months 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 required under the Petroleum (Environment) Regulations 2016, as the EMP proposes drilling activities. The EMP was made available for public comment for 28 days from 27 February 2023 to 27 March 2023.
 - iii. The Department received no public submissions on the EMP. NTG agency and NT EPA Onshore Gas Committee comments were addressed by the interest holder via an updated EMP.
 - iv. I am satisfied that the community has had a reasonable opportunity to be involved in processes in relation to this decision.
 - v. Next, I have considered short-term and long-term environmental impacts of carrying out the regulated activity.
 - vi. The information before me suggests short-term environmental impacts are acceptable and ALARP with the proposed mitigations in place.
 - vii. The information before me suggests long-term environmental impacts are acceptable and ALARP if the regulated activities are undertaken in the manner detailed in the EMP and the conditions of approval.
 - viii. There is no particular contest between economic, social and environmental considerations that requires further mention.
 - ix. 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. While conduct of the regulated activity will likely result in minor and short-term impacts, I am satisfied the measures identified by the interest holder are effective to prevent a threat of serious or irreversible environmental damage.

- i. I have carefully evaluated the proposed precautionary measures against the risk-weighted consequences of impacts given the options available, and with a view to avoiding serious or irreversible damage to the environment wherever practicable. The EMP combined with the conditions I have imposed mitigates risks of serious or irreversible damage due to lack of full scientific certainty to a level that is both as low as reasonably practicable and acceptable.
- 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 environmental consultants with experience in the Northern Territory, including an ecologist and archaeologist.
 - ii. The interest holder employed a comprehensive process to obtain relevant information including baseline ecological assessments, archaeological assessments, stakeholder engagement and consultation with relevant NT Government agencies.
 - iii. The EMP was provided available for public comment to identify any deficiencies or additional evidence required from 27 February to 27 March 2023.
 - iv. The EMP has undergone review and assessment by a multi-disciplinary team in DEPWS and NT government agencies, which has informed my decision on the EMP.
 - v. The interest holder provided further information to clarify aspects of the EMP and amended the EMP to ensure it meets the requirements of the Regulations and the Code.
 - vi. No concerns regarding the sufficiency of information to support the EMP are apparent from the comments of stakeholders, interested persons, or the internal assessments. On the contrary, they indicate and I am satisfied that the information before me is comprehensive.
 - vii. 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 intra-generational 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 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.
 - iii. I have considered the protection of cultural heritage and am satisfied that conduct of the regulated activity will not impact on preservation of cultural heritage for the benefit of future generations.

- iv. I have considered the potential 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.
- v. 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 and conclude that on the balance, the health, diversity, and productivity of the environment is not reduced by the regulated activity for each identified group or community.
- vi. The environmental burdens of the regulated activity will not disproportionately affect particular stakeholders. Greenhouse gas emissions associated with this project are significantly below the threshold of becoming a large emitter and groundwater extraction will be in accordance with a water extraction licence.
- vii. 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 432.62 million tonnes respectively.
- viii. 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. No new ground disturbance is planned to occur.
- ix. 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 the findings of the Scientific Inquiry into Hydraulic Fracturing (HFI) in the NT that states: "... in the short to medium term, the Australian National Energy Market is likely to require higher levels of flexible, gas-fired generation, which can provide a reliable, low emissions substitute for ageing coal-fired generation, and essential security services to complement variable renewable electricity generation."⁴
 - ii. I note the NT Government's implementation of all the recommendations of the HFI, including establishment of the NT Government's Policy Statement on Management of Greenhouse Gas Emissions from the Onshore Gas Industry. This Policy Statement commits to amendment of the NT legislative framework to require a Greenhouse Gas Abatement Plan for all applications for onshore gas production and complements the Australian Government's reforms to the Safeguard Mechanism.
 - iii. A new water extraction licence will be required to cover the proposed exploration activities in this EMP. Sustainable use of the targeted aquifers will be considered as part of the water extraction licence application, under the *Water Act 1992*.

⁴ Refer section 9.7.4 of the *Scientific Inquiry into Hydraulic Fracturing in the Northern Territory*; p 233. Available at: <https://frackinginquiry.nt.gov.au/inquiry-reports?a=494286>

- 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 Karinga Creek Paleodrainage System, recorded as an international site of conservation significance, is located 10km north of the Jacko Bore 1DW1 Study Area. The location of the well pad extension, gravel pits and campsite will not intersect with the system; however, the existing access track (public road) does traverse the area in two areas spanning 12.3km in total. Specific controls will be put in place to reduce the potential impact of a spill on the access track.
 - 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 assessment of potential nesting habitat near the well pad, borrow pit and access tracks is adequate and considered low likelihood due to the lack of large trees. The Project Area is adequately identified as potential foraging habitat and the risk to the species from the activities is adequately identified as low. The mitigation controls identified in the EMP are adequate to reduce risks associated with potential impacts on biodiversity, such as noise, vehicle strike, dust erosions and spills to be as low as reasonably practicable.
 - iv. 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.
 - v. 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.
 - vi. 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 domestic waste, drilling waste, produced water and emissions.

- ii. I am satisfied that both hazardous and non-hazardous waste will be disposed of in accordance with the requirements of the *Waste Management and Pollution Control Act 1998* and the *Radiation Protection Act 2004* by the interest holder at its own cost, as outlined in the relevant sections of the Environment Management Plan and Wastewater Management Plan.
- iii. In relation to the risks of a pollution event that may occur unintentionally during the operations of the regulated activity, I consider that the following measures are in place to ensure the interest holder bears the costs of containment, avoidance, and abatement.
 - (1) impacts and risks associated with contamination of soil, surface water and groundwater, which are managed through meeting mandated requirements for well integrity and clean-up of spills and leaks and remediation of impacted soil; and
 - (2) impacts and risks associated with loss of containment of wastewater, which are managed through containment measures.
- iv. In relation to full life cycle costs, it is expected that the regulated activity will have a life cycle of five years, 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. The Spill Management Plan includes commitments to immediately remediate spills and leaks, so as to reduce the risk of long-term contamination of the environment and avoid environmental impact legacies.
- vii. 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.
- viii. 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.
- ix. I believe approval of the EMP with the conditions I have imposed is consistent with the principle of improved valuation, pricing and incentive mechanisms.
- h. The NT EPA did not require the EMP to be 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 NT EPA reviewed the EMP for the regulated activity against the approval criteria in regulations 9(3)(a) and 9(3)(c) of the Regulations and other matters the NT EPA considered relevant, and has provided advice about the EMP.
- i. The NT EPA has provided the following in relation to the regulated activity and the EMP:
 - i. In accordance with my request under s 29B of the NT EPA Act, the NT EPA reviewed the EMP against the approval criteria in regulation 9(1) 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. All conditions are outlined in section 1 of this Approval Notice.
 - (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. I have considered the NT EPA's advice and recommendations and these have been incorporated where relevant into this statement of reasons and the conditions in the Approval Notice.
- j. The existing environment along with its particular values and sensitivities is appropriately identified in section 5 of the EMP, and to the extent I do not agree or there is some uncertainty, I have imposed conditions to address the relevant risk or risks. reg 9(1)(c)
- k. I agree with the risk assessment set out in Appendix 04 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.
- l. 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; erosion and sediment control plan; bushfire management plan; wastewater management plan; rehabilitation management plan; emergency response plan; stakeholder engagement management plan; and spill management plan. 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 and minimum freeboard in wastewater infrastructure is maintained.
- m. The anticipated environmental impacts are appropriately identified in Appendix 04 of the EMP. The regulated activity is 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.
- n. The EMP demonstrates how the interest holder will comply with relevant requirements of the Code in undertaking these regulated activity. 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. The EMP provides water management commitments and management plans that meet the requirements of the Code.
- o. 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 8 and Appendix 11). The EMP describes the objection raised by the Imanpa community's Traditional Owners about the name of the proposed appraisal well; Mt Kitty 2. To better reflect the cultural connection to the location, it was recommended the well name would reference Jacko Bore. This recommendation has been adopted for both the existing and the proposed well. 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.

- p. I recognise the importance the community places on the protection of water, human health management of chemicals and waste, stakeholder engagement, social impacts and regulation and compliance. The EMP appropriately identifies the risks and potential impacts from the regulated activity and commits to mitigation and management measures to address these risks and potential impacts.
- q. There are no environmental impacts or environmental risks relating to the proposed regulated activity that I consider to be unacceptable.
- r. 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.