

Approval notice and statement of reasons


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

Interest holder	Peak Helium Pty Ltd (PKH) ABN 51 164 429 190
Petroleum interest(s)	Exploration Permit 134 (EP134)
Environment management plan (EMP) title	EP134 Work Program
EMP document reference	PKH2-3
Regulated activity	<ul style="list-style-type: none"> land clearing of 38.08 hectares for three well pads, widening of existing tracks and repurposing seismic lines as access tracks, and establishing new access tracks, campsites and gravel pits civil works, including the establishment of up to three well pads, four gravel pits and three groundwater bores construction of a bunded tank pad and tanks fitted with leak detection on each well pad and a campsite at each well pad drilling of four petroleum wells evaluation, logging, testing, coring, completion, workover, and maintenance of four petroleum wells extended production testing (EPT) of each of the four wells, for 365 days for each well site demobilisation site rehabilitation.
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 <i>Northern Territory Aboriginal Sacred Sites Act 1989</i> been issued for the regulated activity?	Yes Authority Certificate C2021/080
Date an EMP compliant with reg 8 was first submitted under reg 6	26 August 2022
Date within which the EMP was published for comment under reg 8A, if applicable	7 September to 5 October 2022
Date further information was required and submitted under reg 10, if applicable	28 October 2022 (requested) 23 January 2023 (submitted)

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.

	27 January 2023 (requested) 2 February 2023 (submitted)
Date of resubmission notice under reg 11(2)(b), if applicable	7 November 2022
Date EMP was resubmitted under reg 11(3), if applicable	23 January 2023
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	1 February 2023 (first timetable) 8 March 2023 (second timetable) 29 March 2023 (third timetable) 24 April 2023 (forth timetable)
Proposed timetable given in notice under reg 11(2A), or reg 11(3)(c), if applicable	8 March 2023 (first timetable) 29 March 2023 (second timetable) 27 April 2023 (third timetable) 27 May 2023 (fourth timetable)
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: 28 February 2023 NTEPA2022/0104-006~0001
Date of decision	26 / 05 / 2023
Decision maker	 Signature Hon Lauren Moss MLA, Minister for Environment, Climate Change and Water Security

1 Approval notice

1. I approve the EMP (PKH2-3) under regulation 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:

- a) the nature of the proposed civil works activities; and
- b) 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.

Reporting Conditions

Condition 4: By 1 October of each year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au a completed Annual Environment Performance Report Template for the preceding 12 month period of 1 July to 30 June. The Template must be completed in accordance with the *Onshore Petroleum Annual Environment Performance Reports Guideline* (28 October 2021).

Condition 5: 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:

- a) regulated activities completed in the previous quarter;
- b) regulated activities to be conducted in the next quarter, including estimated duration;
- c) the date any conditions of this approval were completed in the previous quarter;
- d) the date any conditions of this approval are due for completion in the next quarter; and
- e) 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.

Condition 6: 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:

- a) the daily freeboard available in drill cutting pits (in cm) and the time of measurement; and
- b) 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 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:

- a) whether unsealed access roads were used by any vehicle or machinery, other than a light vehicle;
- b) daily inspection reports of erosion and sediment control measures and, where relevant, corrective actions taken, or proposed to be taken, in response to issues identified in the daily inspection reports;
- c) daily inspection reports for secondary containment in use and, where relevant, corrective actions taken, or proposed to be taken, in response to issues identified in the daily inspection reports and the date corrective actions are completed;
- d) all dates and times that the regulated activity was stopped due to Wet

Season events and the date and time that the regulated activity recommenced;

- e) daily measurements of the freeboard available in each drill cutting pit (in centimetres); and
- f) daily measurements of the freeboard available in each wastewater tank (in centimetres).

Condition 8: The interest holder must submit the weekly reports required by conditions 6 and 7 by 5pm ACST each Monday for the preceding week or part thereof.

Greenhouse Gas Emissions Conditions

Condition 9: 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:

- a) calculate emissions in accordance with the National Greenhouse and Energy Reporting (Measurement) Determination 2008;
- b) 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 (PKH2-3);
- c) 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;
- d) include a summary of all regulated activities conducted which have contributed to greenhouse gas emissions during the reporting period; and
- e) account for differences between actual and predicted emissions with reference to all parts of the regulated activity with potential to create greenhouse gas emissions.

FOOTNOTE 1: Clause D.6.2(b) of the Code requires annual actual greenhouse gas emissions to be provided even where emissions are below the NGER Act threshold of 25 ktCO₂-e for scope 1 and scope 2 emissions reporting.

Condition 10: If the interest holder's emissions report, submitted in accordance with condition 9, documents that actual annual greenhouse gas emissions exceeded 100,000 tCO₂-e for the financial year of the report, within 30 days of the emissions report, the interest holder must prepare and submit to

Onshoregas.DEPWS@nt.gov.au a Greenhouse Gas Abatement Plan (GGAP), which:

- a) meets the Greenhouse Gas Abatement Plan content requirements specified in the *Greenhouse Gas Emissions Management for New and Expanding Large Emitters Policy*, version 1.1 dated 1 September 2021; and
- b) includes any emissions resulting from venting activities.

Condition 11: If the interest holder is required by condition 10 to prepare a GGAP, the interest holder must comply with the GGAP submitted.

Condition 12: If the interest holder is required by condition 10 to prepare a GGAP, by 31 October in each subsequent year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au an updated GGAP that demonstrates:

- a) the actual scope 1 and scope 2 greenhouse gas emissions produced, compared to the predicted scope 1 and scope 2 greenhouse gas emissions in the EMP (PKH2-3);
- b) the proposed method/s of offsetting residual cumulative scope 1 and scope 2 greenhouse gas emissions across all active EMPs for the preceding financial year;
- c) any changes to predicted future cumulative scope 1 and scope 2 greenhouse gas emissions across all active EMPs; and
- d) annual progress towards achieving net zero emissions by 2050

Condition 13: If the interest holder is required by condition 10 to prepare a GGAP, by 30 November in each subsequent year, the interest holder must submit to Onshoregas.DEPWS@nt.gov.au evidence of offsets obtained during the previous financial year.

Incident Management Conditions

Condition 14: The interest holder must record all accidental releases of liquid contaminant or hazardous chemicals in a site spill register, which records:

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

Condition 15: The interest holder must disregard Table 8.6 – 1 on page 118 of the EMP (PKH2-3).

2 Material considered

1. The following material has been taken into account in making this decision:
 - a. EP134 Work Program EMP (PKH2-3).
 - 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 *Northern Territory Environment Protection Act 2019*.
 - 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. civil works, including the establishment of up to three well pads, four gravel pits and three groundwater bores
 - ii. land clearing of up to 38.08 hectares for well pads, widening of existing tracks and repurposing seismic lines as access tracks, establishing new access tracks, campsites and gravel pits
 - iii. Drilling of four petroleum wells
 - iv. Evaluation, logging, testing, coring, completion, workover, and maintenance of four petroleum wells
 - v. Extended production testing (EPT) of each of the four wells, for 365 days for each well.
 - vi. Site demobilisation
 - vii. Site rehabilitation
 - b. The scale of the regulated activity is as follows:
 - i. The total area of surface disturbance is 38.08 ha.
 - ii. The estimated groundwater usage is 13.4 ML.
 - iii. Peak traffic movements for the regulated activity is 25 trucks and 45 light vehicles per week during drilling, and an average of 8 trucks and 13 light vehicles per week.
 - iv. Extended production testing for 365 days per well, with worst case greenhouse gas emissions totalling 221,089 tCO₂ equivalent over the life of the activity.

- v. Rehabilitation, to be completed within 12 months of completion of petroleum activities.
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 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 *Petroleum Act 1984*, 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. reg 9(1)(c)
4. The principles of ecologically sustainable development are defined at sections 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, as an onshore petroleum exploration program in the region. The regulated activity will inform decision-making about potential for 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 7 September 2022 to 5 October 2022.
 - iii. The Department received no public submissions on the EMP. Feedback resulting from assessment of the EMP was addressed by the interest holder via a modified 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. 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.
 - vi. The information before me suggests short-term environmental impacts are negligible.
 - vii. The information before me suggests long-term environmental impacts are negligible, noting I have set a condition in relation to greenhouse gas emissions abatement.
 - 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.

- 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 satisfied that the best available evidence has been obtained because:
 - i. The EMP was developed by environmental consultants with experience in the Finke bioregion, including an ecologist and archaeologist.
 - 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 was made available for public comment to identify any deficiencies or additional evidence required from 7 September 2002 to 5 October 2022.
 - iv. The EMP has undergone review and assessment by a multi-disciplinary team with experience in environmental science, engineering and risk management options for the regulated activity, which has informed my decision on the EMP.
 - v. The interest holder has modified the EMP to address areas of uncertainty or requiring clarification.
 - 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 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.

- 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 and conclude that on balance, the health, diversity and productivity of the environment is not reduced by the regulated activity for each identified group or community.
- v. The environmental burdens of the regulated activity will not disproportionately affect particular stakeholders.
- vi. I have considered greenhouse gas emissions and note that the contribution from this activity is negligible in a NT context. I consider that cumulative emissions are not significant when considered in context of 2020 NT emissions which were approximately 17.32 million tonnes; however, I have set a condition requiring the submission of a Greenhouse Gas Abatement Plan if actual emissions exceed a threshold of 100,000 tCO₂-e in a given financial year.
- 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*.
- 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 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 commitment to implementing all the recommendations of the HFI, including working with the Australian Government to seek to ensure that there is no net increase in lifecycle GHG emitted in Australia from any onshore petroleum produced in the NT.
 - iii. There are no cumulative impacts from groundwater extraction beyond seismic activities (0.1 ML), this EMP (13.4 ML) and current pastoral usage. The impact of groundwater extraction from the project and current pastoral uses is estimated to have a reduction in storage volume of the target aquifer of 0.6 % over 100 years of continuous pumping.
 - iv. No additional groundwater extraction licences are currently required for the regulated activity. Any future consideration of groundwater use will include an application for an extraction licence.
 - v. Accordingly, I am satisfied that the concept of sustainable use of natural resources has been taken into account.

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>

- 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, are sufficient.
 - ii. The EMP identifies 43 fauna species listed as threatened under the EPBC Act and/or the *Territory Parks and Wildlife Conservation Act 1976* (TPWC Act). No core habitat for these species was identified within the project area (well pads, camp pads and access tracks). An assessment of the likelihood of occurrence indicates 12 listed threatened species that may possibly occur in the wider landscape, based on habitat suitability and previous records. These include the Grey Falcon (*Falco hypoleucos*); Curlew Sandpiper (*Calidris ferruginea*); Thick-billed Grasswren (*Amytornis Modestus indulkana*); Plains Mouse (*Pseudomys australis*); Plains-wanderer (*Pedionomus torquatus*); Princess Parrot (*Polytelis alexandrae*); Night Parrot (*Pezoporus occidentalis*); Australian Painted Snipe (*Rostratula australis*); Sandhill Dunnart (*Sminthopsis psammophila*); Great Desert Skink/Mulyamiji (*Liopholis kintorei*); Slater's Skink (*Liopholis slateri*); and Latz's Wattle/Tjilpi Wattle (*Acacia latzii*).
 - iii. The mitigation controls identified in the EMP are adequate to reduce risks associated with potential impacts on biodiversity, such as noise, vehicle strike, dust, erosion and spills, 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 construction and maintenance of firebreaks, weed inspections conducted before and after any disturbance or clearing operation and the requirement to have weed hygiene declarations prior to accessing the site.
 - v. 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.
 - vi. 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 born 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.
 - vii. 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.

viii. 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, 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, and outlined in the Water and Wastewater Management Plan (Appendix 06).
 - 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. This includes:
 - (1) Impacts and risks associated with contamination of soil, surface water and groundwater, which are managed through meeting mandated requirements for well integrity, 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. In addition the interest holder is required to provide an environmental security sufficient to allow third party intervention for the rehabilitation and remediation should it be required, ensuring the interest holder bears the costs of pollution.
 - vi. The Spill Management Plan (Appendix 07) 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 are 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, it be subject to conditions for achieving six environmental outcomes. The NT EPA's recommendations have informed the conditions of this approval. All conditions are outlined in section 1(2) 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 and Appendix 01 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 section 6 and 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: an erosion and sediment control plan (Appendix 05); waste and wastewater management plan (Appendix 06); spill management plan (Appendix 07); fire management plan (Appendix 08); weed management plan (Appendix 09); methane emissions management plan (Appendix 10); stakeholder engagement log (Appendix 11); rehabilitation management plan (Appendix 12); and emergency response plan (Appendix 14). The EMP also includes the required elements for the ongoing management of erosion and sedimentation. 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 section 6 and 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 the regulated activity. This includes reference to applicable Australian and international standards that have been adopted for the 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 9 and Appendix 11). Stakeholder engagement records (Appendix 11) demonstrate that stakeholders did not raise objections about environmental impacts of the proposed activity that required specific changes in the EMP. 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.