Northern Territory Environment Protection Authority

# Onshore Petroleum Activity – NT EPA Advice

**CENTRAL PETROLEUM LTD (CTP6-3) – ENVIRONMENT MANAGEMENT PLAN (EMP) FOR THE MEREENIE OIL AND GAS FIELD (OL4 & OL5)**

## BACKGROUND

The Minister for Environment has formally requested under section 29B of the *Northern Territory Environment Protection Authority Act 2012* (NT EPA Act) that the Northern Territory Environment Protection Authority (NT EPA) provide advice on all Environment Management Plans (EMPs) received under the Petroleum (Environment) Regulations 2016 (the Regulations).

That advice must include a recommendation on whether the EMP should be approved or not, supported by a detailed justification that considers:

- whether the EMP is appropriate for the nature and scale of the regulated activity to which the EMP relates (regulation 9(1)(b))
- the principles of ecologically sustainable development (regulation 2(a)), as set out in sections 18 to 24 of the *Environment Protection Act 2019* (NT)
- whether the EMP demonstrates 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 as low as reasonably practicable and acceptable (regulation 9(1)(c))
- any relevant matters raised through the public submission process

In providing that advice, the NT EPA Act provides that the NT EPA may also have regard to any other matters it considers relevant.

## ACTIVITY

| Subject | Description |
|---|---|
| Interest holder | Central Petroleum Pty Ltd |
| Petroleum interest(s) | Onshore Production Leases OL4 & OL5 |
| Environment Management Plan (EMP) title | Mereenie Oil and Gas Field Environment Management Plan, prepared by Central Petroleum, dated 21 November 2023 (doc ref: 9900-630-PLN-0004) |
| EMP document reference | CTP6-4 |
| Regulated activity | The regulated activity includes:<br>• civil and project activities, including maintenance of firebreaks, well pads, roads and access tracks, repair of ESC devices, and installation of new equipment within existing disturbance footprint<br>• well operations and activities associated with producing the resource from below-ground reserves and processing product for transport and sale<br>• all activities at production facilities associated with gathering and processing of hydrocarbons for processing to sales point<br>• well workovers |

| | |
|---|---|
| | • installation of upgraded wellhead equipment, safety systems and infield flowlines<br>• progressive rehabilitation of previously disturbed areas and infrastructure<br>• support activities including accommodation, waste and wastewater handling, power generation, water supply and chemical storage and handling<br>• care and maintenance activities associated with the:<br>  ○ Mereenie Alice Springs pipeline<br>  ○ Brewer Estate Crude Oil Terminal Yard (non-operational site)<br><br>No drilling or hydraulic fracturing is proposed in the EMP. |
| Public consultation | Public consultation on the EMP was not required under regulation 8A(1)(b); as the EMP does not propose drilling or hydraulic fracturing. |

## NT EPA ADVICE

### 1. Is the EMP appropriate for the nature and scale of the regulated activity (regulation 9(1)(b))

Information relating to the nature and scale of the regulated activity is provided in the EMP in a clear format. Table 1 provides an overview of the key components of the regulated activity and worst-case scenario values. The proposed work program is scheduled to take place from 2024 – 2027.

Table 1: Key components of the proposed work program

| Component/aspect | Proposed |
|---|---|
| AAPA certificate | C2020/023, C2020/084 and C2022/086 |
| Total area of OL4 and OL5 | 123 $km^2$ and 158 $km^2$ |
| Total area of surface disturbance | No disturbance outside existing operation |
| Number of petroleum wells | 73 total:<br>• 37 active production wells<br>• 3 gas injection wells<br>• 17 wells that are shut-in<br>• 5 wells that are cased and suspended<br>• 11 wells that are decommissioned |
| Groundwater extraction licence | M10001 |
| Groundwater usage | 52.8 ML/annum |
| Groundwater extraction/monitoring bores | RN017898, RN017657,<br>RN004620, RN013861, and RN018955 |
| Borrow pits | 29 (12 active, 9 inactive, 12 under rehabilitation) |
| Camp | 85 person permanent camp |
| Traffic movements – Operations (avg./month) | ~ 40 light vehicles<br>~ 20 heavy vehicles |
| Traffic movements – Workovers (avg./day) | < 10 light vehicles<br>> 5 heavy vehicles during mobilisation/demobilisation<br>< 2 heavy vehicles during workovers |
| Volume of wastewater generated from workovers | 0.01 ML per well |

| Component/aspect | Proposed |
|---|---|
| Wastewater generated | < 10 ML/annum into Central Treatment Plant<br>< 1 ML/annum into Eastern Satellite Station |
| Formation water treatment and storage capacity | 15 ML (with freeboard volume excluded) |
| Estimated greenhouse gas emissions | 270,700 $tCO_2$-e (total) |

This Environment Management Plan (EMP) relates to activities at the Mereenie Oil and Gas Field, operated by Central Petroleum under Operating Licence 4 and Operating Licence 5 (OL4 and OL5). The field is located approximately 280 km west of Alice Springs and has been operated by Central Petroleum since 2015.

The EMP proposes the continuation of production activities, including ongoing workovers, upgrading above-ground infrastructure with new wellhead equipment, safety systems and the installation and replacement of gathering lines.

The EMP is a revision of previously approved production EMPs and as such includes existing facilities that were constructed over a period of time. These previous activities were approved under different legislation and NT EPA Advice does not consider historical potential impacts from the previously approved construction impacts. All works covered under this EMP are within existing disturbance footprints. No drilling, hydraulic fracturing/stimulation or clearing of native vegetation outside of the existing disturbance footprint is proposed.

The EMP shows an adequate consideration of potential impacts and risks of the regulated activity and proposes appropriate controls, in line with the Code. Areas of particular interest in this EMP are the storage of wastewater in lined pits.

### 1.2 General compliance with the Code

The EMP demonstrates how the interest holder will comply with the relevant requirements of the Code in undertaking the regulated activity. This includes selection of materials for well construction and related engineering controls contained in the Well Operations Management Plan (WOMP). The risk assessment provided in Appendix 1 of 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 regulated activity complies with the Code. The EMP also provides the following plans, which are compliant with the Code:

- Erosion and Sediment Control Plan
- Wastewater Management Plan
- Spill Management Plan
- Emergency Response Plan
- Weed Management Plan
- Fire Management Plan
- Methane Emissions Management Plan
- Rehabilitation Management Plan.

The level of detail and quality of information provided in the EMP is sufficient to inform the evaluation and assessment of potential environmental impacts and risks, and meets the EMP approval criteria under Regulation 9(1)(b).

## 2. Principles of ecologically sustainable development (regulation 2(a))

### 2.1 Decision-making principle

The EMP adequately assesses the environmental impacts and risks associated with the regulated activity and outlines appropriate avoidance and mitigation measures. Of the 40 risks identified, 35 are assessed as “low” if carried out in accordance with the mitigations and controls proposed in the EMP. Wet season contingencies and controls are proposed to mitigate potential erosion and

sediment impacts associated with runoff from disturbed areas, off-site wastewater release, or transport of chemicals and wastewater. These controls have been assessed as adequate.

The interest holder has demonstrated ongoing stakeholder engagement in the EMP as required by the Regulations with directly affected stakeholders identified.

## 2.2 Precautionary principle

The NT EPA considers there is a low threat of serious or irreversible damage from the regulated activity. The interest holder's investigations into the physical, biological and cultural environment provide a satisfactory scientific basis to assess potential environmental impacts and risks, and to identify measures to avoid or minimise those impacts and risks and address scientific uncertainty.

The risk assessment clearly demonstrates consideration of risk events in the context of the environment in which the regulated activity is conducted and its particular values and sensitivities, and the spatial extent and duration of the potential impact. Uncertainty in relation to the environmental features was assessed, with no areas of environmental uncertainty identified. The risks of conducting the activity over the wet season are well understood, and the EMP demonstrates adherence to the Code to the extent it is applicable.

The NT EPA is of the view that the precautionary principle has been considered in assessing the regulated activity and has not been triggered due to the low threat of serious or irreversible damage existing and the presence of a satisfactory scientific basis to assess potential impacts and risks. In addition, the existing environmental monitoring commitments contained in the EMP are compliant with the Code and provide measureable performance measures to ensure that the environmental outcomes are met.

The existing environmental monitoring commitments contained in the EMP are compliant with the Code and provide measurable performance measures to ensure that the environmental outcomes are met. The EMP commits to the preparation and submission of an annual environmental performance report, however the NT EPA recommends a Ministerial condition outlining the timing and form of the submission.

## 2.3 Principle of evidence-based decision-making

The environmental considerations of the project footprint were informed by a combination of desktop and baseline ecological, archaeological assessments and ongoing activities in the area over an extended period of time. The studies undertaken afford the interest holder with a reasonable knowledge of the potential environmental impacts and risks, and the most appropriate measures for mitigation of those impacts and risks.

The risk assessment demonstrates consideration of risk events in the context of the environment in which the regulated activity is to be conducted and its particular values and sensitivities, and the spatial extent and duration of the potential impact. The spill management plan outlines a satisfactory spill detection and response regime for spills and includes the reporting requirements. A key mitigation in relation to secondary containment of wastewater generated from workovers is the lining of all flare pits with impervious clay, prior to wastewater from a blooey line entering the pit. The risks of conducting the activity over the wet season are understood and appropriate to the environment in which the activity will be conducted. As a precautionary step, the NT EPA has recommended Ministerial conditions related to the recording of spills and hydro-testing of the clay liners for flare pits.

The EMP includes a detailed risk assessment related to the transport, storage and use of chemicals. The proposed management measures of chemical and hydrocarbons are satisfactory with secondary containment proposed to be used as well as satisfactory spill response procedures.

The EMP aligns with the requirements of the Code, including tracking of water use and wastewater generation and movement. The NT EPA has assessed the potential for spills from chemicals and hydrocarbons (e.g. diesel) stored in designated bunded areas at each location and concluded that

the proposed management measures are satisfactory. The mitigations described in the EMP include bunds around chemical storage areas, containment of hydrocarbons in double-lined diesel storage tanks, and spill prevention and response procedures. As a precautionary step the NT EPA has recommended and Ministerial condition for this activity relating to recording of spills.

The proposed environmental outcomes are likely to be achieved based on the best available information on the nature and scale of the activity, and the environment in which the regulated activity will be conducted. The studies undertaken by the interest holder to inform the EMP affords the interest holder with a detailed and reliable knowledge of the potential environmental impacts and risks and the most appropriate measures for mitigation of those impacts and risks.

The NT EPA is of the view that the evidence-based decision-making principle has been considered in assessing the regulated activity and that in the circumstances, decisions can be based on best available evidence that is relevant and reliable.

### 2.4 Principle of intergenerational and intra-generational equity

The potential environmental impacts and risks associated with the regulated activity can be adequately avoided or managed through the management measures and ongoing monitoring programs proposed in the EMP.

Protection of cultural interests is achieved through compliance with the requirements of Authority Certificates issued by the Aboriginal Areas Protection Authority under the *Northern Territory Aboriginal Sacred Sites Act 1989* (NT) and the previously completed archaeological assessment at the site to avoid archaeological heritage impacts. The regulated activity will be subject to requirements of an Authority Certificate that is currently under application. It is understood no approval of the EMP can occur without an Authority Certificate that relates to the activities in the EMP.

Total predicted worst-case greenhouse gas (GHG) emissions generated by the regulated activity are approximately 270,700 $tCO_2$-e. These emissions will result in an overall increase in NT GHG emissions (based on 17.32 million $tCO_2$-e in 2020) of 1.56%, based on conservative estimates of emissions from fuel consumption, flaring and fugitive emissions.

The NT EPA considers that environmental values will be protected in the short and long term from the activities outlined in the EMP and that the health, diversity and productivity of the environment will be maintained for the benefit of future generations, noting a condition has been recommended requiring a Greenhouse Gas Abatement Plan be prepared, submitted and complied with in the event actual emissions exceed the threshold in the NTG Greenhouse Gas Emissions Management for New and Expanding Large Emitters Policy.

### 2.5 Principle of sustainable use

The anticipated water demand for this regulated activity is up to 52.8 ML per annum. Cumulative impacts of groundwater extraction have been assessed. The interest holder has a groundwater extraction licence M100001 with a maximum water entitlement of 52.8 ML per annum from the Mereenie Sandstone formation. The anticipated water demand for this regulated activity represents a small proportion of the total water allocation for the Mereenie aquifer (11,400 ML per annum) from all extraction licences granted by the NT Government.

As described under section 2.4, the interest holder is not considered a large emitter and no greenhouse gas abatement plan was required.

As emissions in the EMP are estimates, a Ministerial condition is recommended that requires the interest holder to provide an annual emission report to the Department that summarises greenhouse gas emissions reported under the Australian Government's *National Greenhouse and Energy Reporting Act 2007* versus the predicted emissions in the EMP.

The NT EPA notes the requirement to assess all impacts and risks under the Regulations, which are to be managed to levels that are ALARP and acceptable. The NT EPA notes the NT capacity to

regulate greenhouse gas emissions is established in the Regulations and the *Environment Protection Act 2019*. The NT Government is working towards responding to the impacts and climate change through a suite of initiatives that are being implemented to achieve net zero greenhouse gas emissions by 2050.

To support the NT Government's commitment, the NT EPA has provided advice that the interest holder provide to DEPWS an annual report on the actual annual scope 1 and scope 2 GHG emissions, verified by a registered auditor and calculated in accordance with the National Greenhouse Energy Reporting Scheme (NGERS), versus predicted emissions in the EMP.

The NT EPA is of the view that the sustainable use principle has been considered in assessing the regulated activity.

### 2.6 Principle of conservation of biological diversity and ecological integrity

The proposed location for the regulated activity does not include groundwater dependent ecosystems; nor is it within proximity to a declared ecological community under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

The project footprint is located in the MacDonnell Ranges and Great Sandy Desert bioregions, which have an arid to semi-arid climate. The Great Sandy Desert bioregion is generally flat and arid with few watercourses, although there are several low ranges. The MacDonnell Ranges bioregion is comprised of high relief ranges and foothills, which enclose some broad plains and watercourses. The vegetation in these bioregions is dominated by spinifex and hummock grassland. These vegetation communities are regionally extensive across the southern region of the Northern Territory.

The regulated activity poses a low risk to the ecosystem within the MacDonnell Ranges and Great Sandy Desert bioregions. Given that no additional clearing or disturbance will take place, and the very large area of similar habitat within the region, the regulated activity does not pose a significant risk to any regional populations of threatened species. Due to the management strategies outlined in the EMP, it is unlikely that the regulated activity will pose a risk to the identified threatened species.

Avoidance and mitigation measures identified in the EMP are adequate to reduce risks from, for example, vehicle-strike, dust, erosion and/or spills to as low as reasonably practicable, in relation to potential impacts on biodiversity.

The EMP outlines measures to minimise impacts on affected environmental values, including the management of threatening processes such as erosion, weeds and fire. The proposed management plans are consistent with the requirements of the Code, the *NT Land Clearing Guidelines*, and the *Weed Management Planning Guideline: Onshore Petroleum Projects.* Specific precautions to ensure interaction with wildlife is avoided are included in the EMP. These include: inspections for fauna presence, fauna egress mats on ponds, speed limits on access roads, and daily checks of infrastructure.

The EMP identified 91 flora and fauna species listed under the Australian Government *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and/or the NT *Territory Parks and Wildlife Conservation Act 1976* (TPWC Act) that could potentially occur in the Mereenie Field or surrounding area. Of the 45 listed flora species, one is known to occur in the Mereenie Field (*Macrozamia macdonnellii*), with the remaining 44 species not known to occur. Of the 46 listed fauna species, one has been detected during fauna surveys (*Petrogale lateralis*), two other species are known to occur and 19 have been considered to possibly occur, or likely occur in the Mereenie Field. No conservation significant flora or fauna have been recorded on, or directly adjacent to (within 50 m) of the Mereenie well pads.

The NT EPA considers that implementation of, and compliance with, the EMP will ensure the conservation of biological diversity and ecological integrity is not impacted by the regulated activity.

### 2.7 Principle of improved valuation, pricing and incentive mechanisms

The interest holder is required to prevent, manage, mitigate and make good any contamination or pollution arising from the regulated activity, including contamination of soils, groundwater and surface waters through accidental spills.

All stages of the regulated activity, including disposal of waste, commercial purchase of groundwater, and progressive rehabilitation of all disturbed areas to an acceptable standard, are at the cost of the interest holder. The interest holder is required to provide an adequate environmental rehabilitation security bond to indemnify the NT Government. This is based on an assessment by the Department of the estimated rehabilitation cost submitted by the interest holder.

The NT EPA is of the view the principle of improved valuation, pricing and incentive mechanisms has been considered in assessing the regulated activity and is based on the interest holder bearing any environmental costs for the activity.

## 3. Environmental impacts and risks reduced to a level that is as low as reasonably practicable (ALARP) and acceptable (regulation 9(1)(c))

The interest holder commits to identified measures to avoid or minimise impacts on environmental values, informed by a baseline studies, surveys and data derived from previous operations in the area. The EMP systematically identifies and assesses environmental impacts and risks associated with the regulated activity. The key potential environmental impacts and risks considered in the EMP are: injury or death of conservation significant fauna from civil works, vehicle movements and earthworks; increased occurrence of weeds (including weeds of national significance); contamination of soil from release of hydrocarbons and formation water, including wastewater to ground; loss of places or items of cultural significance from fire as a result of activities under this EMP; and subsurface loss of contaminants during workovers contaminating surface water and/or groundwater and reducing groundwater pressure.

The EMP has considered the hierarchy of controls (elimination, substitution, engineering, administration) and provided demonstration of why the controls to be implemented are considered ALARP and acceptable. Of the 40 environmental risks, 35 risks have a residual risk rating of low and the interest holder has included mitigations that can/will be implemented such that the risks will be managed at levels that are ALARP and acceptable. The remaining five risks have a medium residual risk rating after controls have been applied specifically:

1. *Injury or death of conservation significant fauna from civil works, vehicle movements and earthworks*: limit vehicle speed on unsealed access roads; induction of personnel on speed limits and safe driving times; minimised vehicle movements through planning; and oversized loads accompanied by accredited pilot. The residual risk ranking is based on the likelihood being considered ‘unlikely’, but the consequence of the event occurring being considered to be ‘moderate’.
2. *Increased occurrence of weeds (including weeds of national significance)*: vehicles, equipment and machinery from known weed infested areas are inspected and cleaned prior to attending site; bulk materials imported to site to be declared weed seed free. The residual risk ranking is based on the likelihood being considered ‘unlikely’, but the consequence of the event occurring being considered to be ‘serious’.
3. *Contamination of soil from release of hydrocarbons and formation water, including wastewater to ground*: liquid waste stored in secure container in a bunded area; handle, store and otherwise manage all hazardous good in accordance with relevant Australian Standards and Codes of Practice; spills of workover fluid contained in bunded areas; containment of wastewater in flare pits or use of flare tanks; flowlines not located on access tracks; flowlines have asset protection along the route (fencing, bollards and traffic controls); flowlines constructed in accordance with Australian Standard 2885; flowline pressure tested prior to becoming operational; pond levels inspected quarterly and after a significant rainfall event. The residual risk ranking is based on the likelihood being considered ‘remote’, but the consequence of the event occurring being considered to be ‘serious’.
4. *Loss of places or items of cultural significance from fire as a result of activities*: implement emergency response plan if fire is detected; conduct Job Hazard Analysis for any new tasks or

new use of equipment to take account of variation in fire danger ratings; obtain fire information daily prior to attending site on current fire danger, presence of fire in the area and current weather conditions. The residual risk ranking is based on the likelihood being considered 'remote', but the consequence of the event occurring being considered to be 'serious'.

5. *Subsurface loss of contaminants during workovers contaminating surface water and/or groundwater and reducing groundwater pressure*: wells have multiple barriers in place; well managed in accordance with Well Operation Management Plan and Well Barrier Integrity Verification reports; ongoing groundwater quality monitoring program. The residual risk ranking is based on the likelihood being considered 'remote', but the consequence of the event occurring being considered to be 'serious'.

The EMP also considers cumulative impacts to groundwater, flora and fauna, greenhouse gases, traffic and social and concludes these have been managed to ALARP and acceptable levels.

The NT EPA considers that all reasonably practicable measures will be used to control the environmental impacts and risks, considering the level of consequence and the resources needed to mitigate them, and the nature, scale and location of the regulated activity. The NT EPA considers that the environmental impacts and risks will be reduced to a level that is ALARP and acceptable, considering the sensitivity of the local environment, relevant standards and compliance with the Code.

## 4. Summary of monitoring and inspections

Table 2 provides a summary of the monitoring and inspections committed to in the EMP. These programs are used by the interest holder to meet prescribed requirements and to confirm the effectiveness of the mitigations:

Table 2: Monitoring and inspections relevant to the scope of the regulated activity

| Aspect | Monitoring and inspections |
|---|---|
| Bushfire | • Fire break inspections (annual)<br>• Assessment of fuel loads (annual)<br>• Fire mapping (annual)<br>• Inspect fire equipment functionality (bi-annual) |
| Chemicals | • Inspection of chemical and waste storage areas/tanks or similar (daily) |
| Erosion and sediment control | • Visual monitoring of erosion and sediment controls (daily – monthly) |
| Flora and fauna | • Fauna interactions/fencing of evaporation ponds (daily) |
| Greenhouse gas emissions and fugitive emissions | • Clean Energy Regulator – National Greenhouse and Energy Reporting scheme (NGERs) (bi-annual)<br>• Reporting of NGERs outcomes to the Northern Territory Government (annual)<br>• Workover flaring (daily)<br>• Production facility flaring (continuous) |
| Groundwater | • Groundwater extraction volumes (quarterly)<br>• Groundwater monitoring program (bi-annual, annual reporting) |
| Rainfall | • Rainfall measurement (daily)<br>• Review of short and long-term weather forecast (daily) |
| Stormwater | • |
| Rehabilitation | • Rehabilitation success monitoring (annual) |
| Waste and wastewater | • Waste tracking (monthly)<br>• Freeboard monitoring of evaporation ponds (daily)<br>• Monitoring water volumes entering evaporation ponds from CTP/ESS processes (daily)<br>• Secondary containment (weekly in dry season, daily in wet season)<br>• Wastewater volumes treated for re-use (when treated or used)<br>• Wastewater volumes generated during workovers if wastewater is to be transported and disposed of offsite (when generated)<br>• Wastewater volume spilled (when spilled)<br>• Wastewater volumes transferred to tanks (Each time water is transferred) |

| Aspect | Monitoring and inspections |
|---|---|
| | • Visual inspections of tanks used in workovers (daily during workovers or when in use during the wet season, following a significant rainfall event, weekly when in use in the dry season, otherwise monthly)<br>• Produced water volume entering the evaporation ponds (daily) |
| Weeds | • Weed survey (annual) |

## 5. Other relevant matters

The provisions of the Code that relate to produced water associated with hydraulic fracturing activities do not apply to conventional wells. However, the risk to the surrounding environment should a loss of containment event occur is not well understood without monitoring of the quality of formation water produced from conventional wells. Therefore, the NT EPA recommends setting a condition for monitoring of the quality of formation fluid, consistent with clause C.5.5(c) of the Code.

## 6. Consideration under the *Environment Protection Act* 2019

In accordance with section 53(1) of the Environment Protection Act 2019 (NT) (EP Act), the NT EPA may provide a written notice (a call-in notice) to the proponent requesting the proponent refer the action, if it is believed on reasonable grounds that a proponent is taking an action that should be referred to the NT EPA for assessment. The NT EPA has considered the proposed regulated activity with regard to section 10 and 11 of the EP Act and has determined:

a) To the extent that major environmental stressors may arise from the proposed activity, they have been substantially reduced so those potential impacts are not significant

b) The location of the regulated activity has avoided impact to or influence on sensitive environmental values/receptors to the greatest extent possible and where unable to be avoided, potential impacts have been mitigated so those potential impacts, if they occur, would not be significant

c) At no stage of its lifecycle, could the regulated activity, on its own or cumulatively with other regulated activities at the location, have the potential to have a significant impact on the environment.

On this basis, the NT EPA has elected to not require the proponent refer the action.

## CONCLUSION

The NT EPA considers that, subject to the consideration of the recommended EMP approval conditions, the EMP:

- is appropriate for the nature and scale of the regulated activity
- demonstrates that the regulated activity can be carried out in a manner that potential environmental impacts and environmental risks of the activity will be reduced to a level that is as low as reasonably practicable and acceptable.

In providing this advice the NT EPA has considered the principles of ecologically sustainable development.

## RECOMMENDATIONS

The NT EPA recommends that should the EMP for Central Petroleum Ltd be approved, the Minister considers approval conditions to achieve the following outcomes:

1. Certainty as to the interest holder's compliance with the approved EMP through submission of an annual performance report and a rehabilitation progress report to DEPWS to demonstrate the interest holder has met environmental outcomes and complied with the requirements set out in the Regulations, the Code, the Ministerial conditions and the EMP.

2. Certainty as to the timing of the submission of annual performance reports and rehabilitation progress reports.
3. Certainty as the extent of greenhouse gas emissions through provisions of an annual emissions report to DEPWS that summarises greenhouse gas emissions reported under the Australian Government's *National Greenhouse and Energy Reporting Act 2007* versus the predicted emissions in the EMP, with actual emissions to be verified by an independent auditor registered by the Clean Energy Regulator.
4. Certainty that the land is free from contamination and can meet rehabilitation requirements through recording of all spills in an internal register that includes location, source and volume of the spill and corrective actions.
5. Certainty that flare pits can contain wastewater, through provision of evidence of lining with clay materials and hydrotesting outcomes prior to the introduction of any wastewater to a flare pit.
6. Certainty as to the ongoing integrity of the impervious base of flare pits through inspection and provision of inspection records.
7. Certainty that wastewater within flare tanks (if used) is secondarily contained.

PAUL VOGEL AM

CHAIRMAN

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

18 DECEMBER 2023