## Approval notice and statement of reasons

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

<table>
<thead>
<tr>
<th>Interest holder</th>
<th>Central Petroleum Ltd ABN 95 009 718 183</th>
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| Petroleum interest(s) | Operating Licence 3 (OL3, Palm Valley Field)  
Operating License 4 (OL4, West Mereenie Field)  
Production Licence 6 (PL6, Surprise Field)  
Production License 7 (PL7, Dingo Field)  
Exploration Permit 82 (EP82, Orange) |
| Environment management plan (EMP) title | 2020-21 Northern Territory Drilling Campaign November 2020 |
| EMP document reference | CTP3-4 |
| DEPWS EMP assessment document reference | NTEPA2020/0067-007-0006 |
| Regulated activity | Exploration and development drilling and associated land clearing, civil works, installation of flow lines and decommissioning and rehabilitation |
| Is the EMP a new plan submitted under reg 6 or a revision of a current plan submitted in accordance with reg 18? | This EMP is a new plan submitted under regulation 6 |
| Was the regulated activity referred\(^1\) for consideration of whether environmental impact assessment was required? | No |
| Was environmental impact assessment required and by which assessment method? | N/A |
| Has an environmental approval under the Environment Protection Act 2019 been issued for the regulated activity? | N/A |
| Has an Authority Certificate under the Northern Territory Aboriginal Sacred Sites Act 1989 been issued for the regulated activity? | Yes  
C2020/031 for Dingo Field  
C2020/033 for Orange  
C2020/084 for West Mereenie Field  
C2020/061 for Palm Valley Field  
C2020/058 for Surprise Field |
| Date an EMP compliant with reg 8 was first submitted under reg 6 | 31 August 2020 |
| Date within which the EMP was published for comment under reg 8A, if applicable | 4 September 2020 |
| Date further information was required and submitted under reg 10, if applicable | Letter 1 issued 30 September, submitted 26 October (CTP3-3)  
Letter 2 issued 6 November 2020, submitted 16 November 2020 (CTP3-4) |
| Date of resubmission notice under reg 11(2)(b), if applicable | N/A |
| Date EMP was resubmitted under reg 11(3), if applicable | N/A |

\(^1\) This means a referral under the Environment Protection Act 2019 (NT) or the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act).
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1. The EMP is approved. 

2. The approval is subject to the following conditions:

   Condition 1: The interest holder must submit to the Department of Environment, Parks and Water Security (DEPWS):

   i. a timetable (including time-bound commitments) for the regulated activity prior to the commencement of the activity and each quarter thereafter;

   ii. daily on-site reports indicating the status and progress of vegetation clearing and drilling, and the freeboard available in drilling sumps;

   iii. a five-day activity forecast for the duration of the activity during the wet season (1 October – 30 April each year);

   iv. written notification of any halt to the activity due to wet season conditions, within 24 hours of the halt; and

   v. immediate written notification of any fires potentially threatening the activity from external or internal sources.

   Condition 2: In the event of any accidental release of contaminants that exceeds 200 litres (for liquids), the interest holder must provide a written report to DEPWS within 24 hours of the incident being detected. The report must include:

   i. details of the incident specifying material facts, actions taken to avoid or mitigate environmental harm;

   ii. the corrective actions taken including the volume and depth of impacted soil removed for appropriate disposal if required; and

   iii. any corrective actions proposed to be taken to prevent recurrence of an incident of a similar nature.
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'Contaminant' is defined in section 117AAB(1) of the Petroleum Act 1984 (NT).

**Condition 3:** The interest holder must provide an annual report to DEPWS on its environmental performance, in accordance with item 11(1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016 (NT). The first report must cover the 12 month period from the date of the approval, and be provided within three calendar months of the end of the reporting period. The annual environmental performance report must align with the template prepared by DEPWS for this purpose.

**Condition 4:** In support of Schedule 1, item 11 of the Regulations and clause A.3.4 of the Code, the interest holder must provide to DEPWS geospatial files showing land disturbance footprints within 60 days of completion of each land clearing activity or within 6 months of approval of this EMP, whichever occurs first.
2 Material considered

1. The following material has been taken into account in making this decision:
   a. 2020-21 NT Drilling Campaign EMP, dated November 2020
   b. The principles of ecologically sustainable development (ESD) referenced in the Environment Protection Act 2019 (NT)
   c. The NT EPA advice provided at my request under s 29B of the NT EPA Act;
   d. The Authority Certificates issued under the Northern Territory Aboriginal Sacred Sites Act 1989 (NT) and associated response provided by the Aboriginal Areas Protection Authority
   e. The Code of Practice: Onshore Petroleum Activities in the Northern Territory (Code) as defined in regulation 4A
   f. All public comments submitted under reg 8B.

3 Statement of reasons

1. The EMP meets the approval criterion in regulation 9(1)(a), because it contains all the information required by Schedule 1 of the Regulations.

2. The EMP meets the approval criterion in regulation 9(1)(b) for the following reasons:
   a. The nature of the regulated activity is as follows:
      i. conventional drilling of seven exploration and/or development wells in five existing petroleum interests
      ii. ancillary activities to support the regulated activity, such as land clearing, access track construction, installation of flowlines for those wells shown to be suitable for development, decommissioning of wells unsuitable, and rehabilitation
      iii. non-routine flaring during well completion activities.
   b. The scale of the regulated activity is as follows:
      i. drill the seven wells in a staged approach, over the five year life of the EMP
      ii. clearing of vegetation with areas between 2.6 and 5.6 hectares at each well location (total area <26 hectares), inclusive of the well pads, access tracks and accommodation camp areas, as applicable to each location
      iii. installation and use of two temporary accommodation camps, and use of existing accommodation camps
      iv. use of an estimated 3.56 ML of groundwater per year, of which 1.41 ML is a new extraction licence, and 2.15 ML is included in an existing extraction licence, and an estimated 10.23 ML of groundwater that will be supplied under a commercial contract
      v. an increase of up to approximately 20 vehicles per day on regional roads in the Alice Springs area, during conduct of the regulated activity
      vi. contribution of approximately 18,265 tonnes carbon dioxide equivalent (tCO₂-e) greenhouse gas (GHG) emissions per year, representing a 0.11% increase in the total annual greenhouse gas emissions for the NT
   c. The EMP contains an appropriate level of detail for the nature and scale of the activities proposed. The regulated activity is clearly described. The description of the existing environment is informed by adequate field surveys and desktop
assessments. Uncertainty relating to environmental data is clearly stated. The identification of environmental impacts and risks is comprehensive and contains a sufficient level of detail to inform the assessment. The EMP provides detail on environmental outcomes and performance standards, implementation strategy, personnel, emergency response plan, stakeholder engagement, legislative requirements, recording, monitoring, reporting and notifications, to an appropriate level of quality and applicability.

d. Having regard to the above, the information in the EMP is appropriate for the nature and scale of the regulated activity to which it relates.

3. The EMP meets the approval criterion in regulation 9(1)(c) for the following reasons:  

a. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including the decision-making principle (s 18 Environment Protection Act 2019 (NT)) as follows:

i. Conduct of the regulated activity is spread over five years, is small scale and low impact at each location, and will inform decision-making about longer-term petroleum activities.

ii. The regulated activity includes conventional drilling and the EMP was made available for public comment for 28 days, in addition to ongoing stakeholder engagement conducted by the interest holder. Stakeholder feedback has informed the EMP development and public comment has been considered when making the approval decision.

iii. In carrying out the regulated activity, there is no particular contest between economic, social and environmental considerations that requires further mention. Competing environmental considerations resulted in a change to the location of two well pads, so as to avoid and minimise impacts.

iv. I believe the information regarding the proposed regulated activity adequately enables the integration of both long-term and short-term environmental and equitable interests, and has regard to community input.

b. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including the precautionary principle (s 19 Environment Protection Act 2019 (NT)) as follows:

i. The EMP outlines the interest holder’s investigations into the physical, biological and cultural environment and demonstrates a sound understanding of the environment at each location, providing a satisfactory scientific basis to assess potential environmental impacts and risks for the activity, and to identify measures to avoid or minimise those impacts and risks.

ii. The interest holder has adopted mitigations and controls to manage risks and the EMP demonstrates adherence to the Code that establishes best practice management measures for conduct of the regulated activity.

iii. The interest holder has proactively included a Wet Season Operations Management Plan (section 7.7), which includes measures such as halting activities and inspection of erosion and sediment control measures and access roads, if there is significant rainfall.

iv. I have imposed a condition requiring the interest holder to periodically provide to DEPWS an updated schedule of works and immediate written notification of any halt to the regulated activity due to the wet season.

v. The precautionary principle has been considered in assessing the regulated activity. The regulated activity does not pose a threat of serious or
irreversible environmental damage arising from the regulated activity and there is a satisfactory scientific basis to assess potential impacts and risks.

c. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including evidence-based decision-making principle (s 20 Environment Protection Act 2019 (NT)) as follows:

i. The EMP demonstrates an adequate understanding of the environment in which the regulated activity will be undertaken, and considers all relevant aspects of the environment that have potential to be affected. As the EMP proposes land clearing and drilling in both the wet and dry season, particular focus is placed on prevention of erosion and sedimentation, site design to avoid flooding impacts and protection of natural and cultural values at each location.

ii. The EMP has undergone review and assessment by NT Government agencies. Feedback from NT Government agencies was forwarded to the interest holder and has been adequately addressed, including amendments to the EMP. In addition, the interest holder has undertaken stakeholder engagement with landholders and land managers, traditional owners and the Central Land Council (CLC), in accordance with regulation 7.

iii. An Erosion and Sediment Control Plan (Appendix 5), which was informed by detailed flood modelling, includes protection of ephemeral drainage lines and is complemented by a Wet Season Operations Management Plan, which provides additional mitigations for avoiding mobilisation of soils during the wet season.

iv. A Bushfire Management Plan (BMP) has been included in the EMP (Appendix 7). The BMP incorporates mitigation controls already used by the interest holder in the Amadeus Basin and is considerate of regional fire management strategies.

v. The Wastewater Management Plan (section 7.4) includes the sources and estimated volume of wastewater to be generated in conduct of the regulated activity, and establishes use of drilling sumps that can cater for 110% of a 1 in 1000 year rainfall event.

vi. The Rehabilitation Management Plan (section 7.8) allows for early rehabilitation of wells to be decommissioned, and establishes a five year monitoring program to determine rehabilitation success.

vii. Potential impacts and risks from spills are adequately mitigated through the Spill Management Plan (section 7.5), which includes bunding, containment of hydrocarbons in double-lined diesel storage tanks and spill prevention and response procedures for hazardous spill prevention, monitoring, assessment, response and clean-up. The Emergency Response Plan (Appendix 8) considers procedures and processes for large spills and leaks, and all spills are to be remediated.

viii. I have imposed a condition requiring that the interest holder must report, in writing, any spill incidents that exceed 200 litres within 24 hours of the incident being detected.

ix. Traffic impacts including traffic flow and composition have been assessed to be negligible, with peak workforce periods requiring up to 20 additional transport movements per day on regional roads. The interest holder has also committed to liaison with Tourism NT and preparation of a Traffic Management Plan for assessment by the Department of Infrastructure, Planning and Logistics.
x. 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.

xi. I believe the information regarding the proposed regulated activity adequately provides the best available evidence in the circumstances that is reliable and relevant to the decision-making process.

d. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including the principle of intergenerational and intra-generational equity (s 21 Environment Protection Act 2019 (NT)) as follows:

i. The potential environmental impacts and risks associated with the regulated activity can be adequately avoided or managed through the management measures and monitoring programs proposed in the EMP, to ensure no long-term adverse impacts to the environment in which the activity is conducted, if carried out in accordance with the EMP.

ii. 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 a detailed archaeological assessment at each location the regulated activity is to be conducted has allowed archaeological heritage impacts to be avoided. Appropriate measures are proposed for the management of items of heritage value should they be discovered.

iii. The proactive measures included in the EMP regarding bushfire and weed management (such as fuel monitoring and weed surveys and control) will have an overall positive impact on the condition of the environment for future generations.

iv. The EMP commits the interest holder to progressive rehabilitation throughout the life of the activity which, combined with the Code requirements, is considered to reduce the risks to biodiversity and soil contamination to ALARP and acceptable levels.

v. The regulated activity will improve production potential in the Amadeus Basin, thereby also continuing to provide social and economic benefits to current and future generations of landholders.

vi. Interactions between the regulated activity and landholder operations have been assessed and the interest holder is committed to regular engagement on the progress of activities. Ongoing engagement and the level of satisfaction with the interest holder’s activities shows the interest holder is committed to not leaving a lasting negative legacy for future generations.

vii. The environmental burdens of the regulated activity will not disproportionately affect particular stakeholders. Cumulative GHG emissions generated by the regulated activity are not considered significant when considering the regulated activity will result in an overall increase in NT GHG emissions of approximately 0.11% per year, based on a likely over-estimation of actual flaring required.

viii. The environmental values will be protected in the short and long term from the activities outlined in the EMP and the health, diversity and productivity of
the environment will be maintained for the benefit of future generations. 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. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including sustainable use of natural resources (s 22 Environment Protection Act 2019 (NT)) as follows:

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."\(^2\)

ii. I also note the NT Government’s commitment to implementing all the recommendations of the HFI, including seeking to ensure that there is no net increase in life cycle GHG emitted in Australia from any onshore petroleum produced in the NT.

iii. Cumulative impacts of groundwater extraction have been assessed by the interest holder and are considered insignificant. Of the total estimated annual use of 13.79 L, only 1.41 ML is a new licence for the interest holder, and the remainder is included under existing licences held by the interest holder pursuant to the Water Act 1992 (NT) or is commercially supplied.

iv. Accordingly, I am satisfied that the concept of sustainable use of natural resources has been taken into account.

e. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including the conservation of biological diversity and ecological integrity (s 23 Environment Protection Act 2019 (NT)) 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. Site selection for conduct of the regulated activity was informed by a detailed ecological assessment at each location, which covered a much larger area than that required to be cleared of vegetation, thereby enabling the interest holder to move two well pads to avoid and minimise impacts.

iii. None of the proposed locations for the regulated activity include groundwater dependent ecosystems or are declared ecological communities under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act).

iv. The Palm Valley site is located in the Greater MacDonnell Ranges Site of Conservation Significance and the Palm Valley Site of Botanical Significance and the West Mereenie sites are located on the edge of the Lay Cock's Sandplain Site of Botanical Significance and the Mereenie Site of Botanical Significance. However, the areas to be cleared have been minimised at these locations, and the well pads at Palm Valley and West Mereenie-27 have been moved to minimise or avoid impacts. Further, the total extent of ground disturbance ranges from 0.0003 to 0.07% of the petroleum permit areas, and so the potential impacts and risks of the activity identified in the EMP are not

\(^2\) Refer section 9.7.4 of the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory; p 233.
considered to pose a significant risk to threatened species or their habitat at a population level. Specific and adequate measures for protection of wildlife are included in the EMP.

v. No threatened vegetation communities were listed or likely to occur within the proposed clearing areas. Two Near Threatened flora species as per the Territory Parks and Wildlife Conservation Act 1976 (NT) (TPWC Act) (Eucalyptus lucens and Stenanthemum centrale) were located at the Palm Valley location, which resulted in the interest holder moving the well pad location so as to minimise the number of individual plants cleared. Both are relatively common in the surrounding Krichauff and James Ranges.

vi. Potential habitat for the Slater's Skink (Liopholis slateri), the Southern Marsupial Mole (Notoryctes typhlops), and the Greater Bilby (Macrotis lagotis) and the Brush-tailed Mulgara (Dasycercus blythi) was identified in the Palm Valley Field, West Mareenie Field and Surprise Field, with each listed as 'Vulnerable' as per the TPWC Act. The interest holder has committed to avoid clearing these habitat areas and undertake additional surveys for the Slater's Skink should any existing road maintenance works be carried out in known habitat areas.

vii. The DEPWS Flora and Fauna Division is satisfied that that the regulated activity does not pose a significant risk to threatened species, important habitats or significant vegetation types. Further, that the mitigation controls identified in the EMP are adequate to reduce risks associated with vehicle strike, dust, erosion and/or spills to as low as reasonably practicable, in relation to potential impacts on biodiversity. Cumulative impacts to flora and fauna and their habitat from the regulated activity are not considered to be significant.

viii. In recognition of environmental sensitivities present at some locations, I have imposed a condition requiring the interest holder to provide geospatial files showing the extent of land disturbance at each location once clearing is completed at that location.

ix. The EMP outlines measures to minimise impacts on affected environmental values, including the management of threatening processes such as erosion, weeds and fire. Where relevant, management measures for the aforementioned threatening process are consistent with the requirements of the Code, the NT Land Clearing Guidelines, the Weed Management Planning Guideline: Onshore Petroleum Projects and Commonwealth threat abatement plans and advice.

x. 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 regulation 9(1)(c) has been met.

xi. If carried out in accordance with the EMP, the risks of the regulated activity to the conservation of ecological integrity and biological diversity are considered to be mitigated to an acceptable level.

g. In making my decision, I have considered regulation 5A, which requires that I give fundamental consideration to the principles of ESD, including the promotion of improved valuation, pricing and incentive mechanisms (s 24 Environment Protection Act 2019 (NT)) as follows:

i. In accordance with the 'polluter pays principle':

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(1) The interest holder has committed to the remediation of impacts of the regulated activity, as is set out in the EMP.

(2) If the interest holder fails to remediate the impacts, an environmental rehabilitation bond has been provided by the interest holder, which is considered to be adequate to cover the resulting costs.

(3) As with any business undertaken in the NT, the interest holder is required to pay full life cycle costs for goods and services used.

(4) The EMP considers progressive rehabilitation, commencing with those wells determined to be decommissioned.

ii. 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 improved valuation, pricing and incentive mechanisms.

h. The NT EPA did not require the EMP to be referred under the Environment Protection Act 2019 (NT), as the regulated activity does not have the potential to cause a significant impact to the environment.

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 for the regulated activity against the approval criteria in regulations 9(1)(b), 9(1)(c) and 9(2)(a) of the Regulations and other matters the NT EPA considered relevant, and has provided advice about the EMP. Relevantly:

(1) The NT EPA recommended that should the EMP be approved, it be subject to four conditions. 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 the comments in 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 2 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.

k. I agree with the risk assessment set out in Section 6 of the EMP, and to the extent I do not agree I have imposed a condition or conditions to address the relevant risk or risks. The cumulative effects of the regulated activity have been identified and assessed to the extent possible.

l. The interest holder's risk assessment is applicable to activities in all seasons and the outcomes are reflected in the EMP that includes a weed management plan; bushfire management plan; wastewater management plan; rehabilitation management plan; emergency response plan; stakeholder engagement management plan; spill management plan; erosion and sediment control plan, wet season management plan and a methane emissions 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.

m. Public consultation on the revision to the Revision to 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 4 September to 2 October 2020.

n. DEPWS received one public submission on the EMP from a non-government organisation in the Northern Territory.

o. I recognise the importance community places on regulation and compliance, assessment of cumulative impacts and ensuring decisions are based on the principles of ecologically sustainable development. I have taken into account the public submission in making my decision and the comment has been reviewed and addressed in the EMP that provides adequate consideration of the cumulative impacts and contribution to greenhouse gases from the conduct of the regulated activity. Regulation 8 (5) allows for more than one regulated activity to be included in an EMP.

p. 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 regulated activity complies with the Code, as applicable. The EMP provides management plans that meet the requirements of the Code.

q. 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 11 and Appendix 9). Stakeholder engagement records (Appendix 9) demonstrate that stakeholders did not raise objections about environmental impacts of the proposed activity that required specific changes from the interest holder. 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.

r. There are no environmental impacts or environmental risks relating to the proposed regulated activity that I consider to be unacceptable.

s. Overall, having regard to the above, I am satisfied that the EMP demonstrates that the regulated activity is to be carried out in manner by which the environmental impacts and environmental risks are reduced to a level that is:

i. as low as reasonably practicable; and

ii. acceptable.