NOTICE OF DECISION AND STATEMENT OF REASONS

Section 55 of the Environment Protection Act 2019 (EP Act) Regulations 57(2)(a) and 63 of the Environment Protection Regulations 2020 (EP Regulations)

Name of proposed action	Carpentaria Pilot Project
Proponent	Imperial Oil & Gas Pty Ltd
NT EPA reference	EP2024/033
Nature of proposed action	Oil and Gas
Description of proposed action	The proposed action is located on Aboriginal freehold land on EP 187 (NT Portion 5706) approximately 66 km west of Cape Crawford and includes:
	 the recovery of petroleum (unconventional gas) on an appraisal basis
	 land clearing of about 226 ha
	 drilling, stimulation, tie-in, appraisal testing and operation of up to 12 gas wells (ten new and two existing) at up to four new well pads and two existing well pads
	 construction of the Carpentaria Gas Plant and the Water Handling Station
	 installation of buried gas, water and wastewater flowlines between well pads, the Carpentaria Gas Plant and the McArthur River Gas Pipeline connection (~ 60 km)
	 groundwater extraction of up to 950 ML over five years
	 potential for 475,000 t CO₂-e Scope 1 greenhouse gas (GHG) emissions annually, of which >90% is proposed to be mitigated (i.e. net annual GHG emissions of 30,000 t CO₂-e) by the export of appraisal gas to the McArthur River Pipeline (subject to statutory approval)
	 proposed duration of up to five years, dependent on establishing the commercial viability of the resource.
Person authorised to make decision	Dr Paul Vogel AM, Chairperson
	Northern Territory Environment Protection Authority (NT EPA)
	Delegate of the NT EPA under section 36 of the Northern Territory Environment Protection Authority Act 2012 (Instrument of delegation dated 7 October 2020)
Decision	The proposed action does not have the potential to have a significant impact on the environment (section 55 of the EP Act).
	Environmental impact assessment is not required in accordance with regulation 57(2)(a) of the EP Regulations

Signature

Dr Paul Vogel AM

Date of decision	14 May 2024
	14 May 2024
Matters considered under EP Regulation 56	The NT EPA has considered the following:
	 the accepted referral (including the referral form, referral report and appendices)
	• submissions received in relation to the accepted referral.
Consultation	Submission period 27 March 2024 – 26 April 2024
	Submissions received:
	 government authority submissions: 6
	• public submissions: 91
	Submissions are available on the NT EPA website.

Statement of Reasons

Overview

Land

The NT EPA considers that the proposed action has the potential to impact on environmental values associated with six environmental factors¹. However, the NT EPA has decided that environmental impact assessment is not required. The reasons for this decision are outlined below.

The NT EPA has considered the referral information, the submissions received in relation to the referral information², and other statutory decision-making processes³ that apply to the proposed action, in deciding that the potential impacts of the proposed action are not significant.

Terrestrial ecosystems

The proponent conducted a desktop assessment and undertook surveys within the study area (proposed action footprint plus a 20 km buffer) to describe the terrestrial ecosystems. Vegetation within the study area largely comprises lancewood thickets and open eucalypt / acacia woodlands with smaller areas of riparian vegetation. Several 1st and 2nd order streams and one 3rd order stream occur within the proposed footprint. Flora and fauna values in the study area comprise threatened fauna and sensitive and significant vegetation.

The proposal includes clearing of approximately 226 ha of vegetation that is largely intact and may provide habitat for threatened fauna species. This has the potential to have a significant impact on flora and fauna values.

¹ NT EPA Environmental factors and objectives

² The referral information and submissions are available on the public register: Carpentaria Pilot Project

³ In accordance with section 55(4) of the EP Act

The potential impacts to flora and fauna values from the vegetation clearing have been minimised through project design. The referral states that the proposed project footprint has been sited to avoid disturbance to waterways, drainage lines, riparian vegetation and large trees with hollows suitable for fauna in accordance with the Land Clearing Guidelines⁴. The Flora and Fauna Division of the Department of Environment, Parks and Water Security (DEPWS) advised that the risk to all threatened species from the proposed action is low.

Considering the minimal clearing, the large amount of intact surrounding habitat, the avoidance of sensitive and significant vegetation, avoidance of potential breeding habitat for the Gouldian Finch, and the overall low risk of impact to threatened species, the potential impacts on terrestrial ecosystems are not significant.

In addition, an Environment Management Plan (EMP) for the proposed action is required to be approved under the Petroleum (Environment) Regulations 2016. The EMP is required by law to comply with the *Code of Practice: Onshore Petroleum Activities in the Northern Territory 2019 (NT)* (the code). The code includes requirements for minimising environmental risks and environmental impacts to flora and fauna to as low as reasonably practicable (ALARP). Refining the clearing footprint during finalisation of the EMP will further minimise environmental risks and impacts to flora and fauna to ALARP. If the EMP for the proposed action is approved under the Petroleum (Environment) Regulations 2016, its implementation would be monitored in line with the DEPWS Environmental Regulation Division's Compliance and Enforcement Policy⁵.

In accordance with section 55(4) of the EP Act, the NT EPA considers that the statutory decision-making process for an EMP under the Petroleum Regulations will further ensure the proposed action is appropriately designed and conditioned to mitigate potential significant environmental impacts of the proposed action on terrestrial ecosystems.

Hydrological processes

The proposed action is located in the southern Beetaloo Sub-basin and includes extraction of up to 950 ML of groundwater from the Gum Ridge Formation (GRF) aquifer in the Georgina Basin over five years, with a maximum of 750 ML in any one year. The potential for this to have a significant impact on water availability is considered below.

A new or altered groundwater extraction licence will be required under the *Water Act 1992*, and must comply with the requirements of the Georgina Wiso Water Allocation Plan 2023 -2031⁶. This plan outlines the estimated sustainable yield for the groundwater resources within different water management zones. The estimated sustainable yield is the amount of water that can be allocated from the water resource to support declared beneficial uses that is environmentally sustainable. This estimate is based on environmental aspects such as inflows, recharge, outflows, evapotranspiration, and existing storage. Additionally, the plan considers other water users, and sets a groundwater extraction limit of 8,000 ML per year for the Georgina Basin for petroleum activity.

The proposed extraction limit of 750 ML per year is about 9.4% of this allocation for petroleum activity. If approved, this would bring the cumulative allocation of petroleum water extraction licences from the GRF aquifer in the Georgina Basin to 1,500 ML/per year. This is about 18.8% of the Georgina Basin petroleum allocation.

The proposed water extraction is within the estimated sustainable yield for groundwater and therefore would not result in significant impacts. The proposed action will not directly,

Water

⁴ Land clearing guidelines (nt.gov.au)

⁵ Compliance and Enforcement Policy

⁶ Georgina Wiso Water Allocation Plan 2023-2031 (nt.gov.au)

indirectly or cumulatively cause a significant impact on the hydrological processes of the Georgina Basin water resource.

Inland water environmental quality

The topographic high for the proposed action is the crest of the Favenc Range, which is located on the northern side of the Carpentaria Highway. Flood modelling shows the project area drains to the north and south of the crest of the Favenc Range with the Favenc Range acting as a divide. Relief Creek, the highest stream order in which the project intersects, flows to the north of the Carpentaria 4 well pad.

The proposed action overlies the Cambrian Limestone Aquifer (CLA) system. The CLA extends up to approximately 700 km from Mataranka in the north to the Barkly Highway in the south and comprises two main layers, the Anthony Lagoon (upper layer) and Gum Ridge (lower layer). The depth to groundwater over the area of the proposed action is generally over 50 metres below ground level (mbgl).

The proposed action has the potential to have a significant impact on the quality of surface water and groundwater through the possible loss of drilling fluid chemicals, wastewater, or condensate. These potential impacts would be mitigated through the regulatory process (Petroleum Regulations) for addressing environmental impacts of onshore petroleum activities through an approved EMP that is compliant with the Code. This includes a requirement for control and impact monitoring bores to enable early detection of contaminants and the implementation of corrective action to prevent significant impacts.

In addition, the requirement for an approved Well Operations Management Plan (WOMP)⁷ would further mitigate potential impacts to groundwater quality. A WOMP must address the mandatory requirements set out in the Code and demonstrate how integrity of the well would be achieved, monitored and managed.

In accordance with section 55(4) of the EP Act, the NT EPA considers that the statutory decision-making process for an EMP will ensure the proposed action is appropriately designed and conditioned to mitigate any potential significant environmental impacts of the proposed action on groundwater and surface water quality. The proposed action will not directly, indirectly or cumulatively cause a significant impact on the water quality of the Georgina Basin water resource.

Atmospheric processes

Air

Flaring from the proposed action could potentially result in the release of approximately 475,000 tCO₂-e Scope 1 greenhouse gas emissions per year for the life of the project. This has the potential to have a significant impact and affect the NT EPA's objective to 'minimise greenhouse gas emissions so as to contribute to the NT Government's goal of achieving net zero greenhouse gas emissions by $2050'^8$.

The NT Government policy for addressing Scope 1 emissions exceeding 100,000 tCO₂e per year applies to the proposed action⁹. This policy sets the expectation for a Greenhouse Gas Abatement Plan (GGAP) that must be considered in the statutory decision-making process for approval of the EMP.

The Australian Government's Safeguard Mechanism established under the National Greenhouse and Energy Reporting Act 2007 (NGER Act) applies to facilities that exceed

 ⁷ in accordance with the Northern Territory Schedule of Petroleum Exploration and Production Requirements 2019.
 ⁸ NT EPA Environmental factors and objectives

⁹ Greenhouse Gas Emissions Management for New and Expanding Large Emitters

100,000 tCO₂-e per year. If Scope 1 emissions from the proposed action exceed the Safeguard Mechanism threshold in any given year, the proponent will be required to comply with obligations to reduce emissions against a baseline.

Combined, these other statutory decision-making processes would lead to the minimisation of greenhouse gas emissions from the proposed action. In addition, the referral states that the proponent will apply to the NT Minister for Mining and Industry for approval to recover petroleum on an appraisal basis under section 57AAA of the *Petroleum Act 1984* and if successful, export gas via the McArthur River Pipeline to the McArthur River Gas Plant. In this case, average estimated annual Scope 1 emissions from the proposed action would be approximately 30,000 tCO₂-e per year.

In accordance with section 55(4) of the EP Act, the NT EPA considers that other statutory decision-making processes, including for an EMP, will ensure the proposed action is appropriately designed and conditioned to mitigate the potential significant environmental impacts associated with greenhouse gas emissions resulting from the proposed action.

Community and economy

The proposed action is located in a sparsely populated and remote region¹⁰. The referral states the peak workforce for the proposed action would be up to about 280 personnel. An additional 280 people in the region has the potential for impacts on the existing community, while also presenting an opportunity for economic and social benefit. There is uncertainty about the source of the workforce, where they would be accommodated, and how economic opportunities may be realised. However, due to the scale and duration of this appraisal program, the NT EPA considers that the risks to community and economy values from the proposed action are low, and that there is negligible potential for significant impact.

People Culture and heritage

If cultural and heritage values occur in the area, these could be impacted by the proposed action. The proponent will provide further information on these values, and the potential for them to be impacted, through the EMP approval process. The EMP cannot be approved unless it is accompanied by an Authority Certificate issued in accordance with the *Northern Territory Aboriginal Sacred Sites Act 1989*, which would give confidence that impacts to any sacred sites would be avoided.

Therefore, in accordance with section 55(4) of the EP Act, the NT EPA considers that the statutory decision-making process for an EMP will ensure the proposed action is appropriately designed and conditioned to mitigate the potential significant environmental impacts of the proposed action on culture and heritage.

Other environmental factors

The NT EPA considered other environmental factors during its consideration of the referral; however, the potential impacts on those factors were not considered to be significant.

Conclusion

The NT EPA has determined that the Carpentaria Pilot Project proposed by Imperial Oil & Gas Pty Ltd does not have the potential for a significant impact on the environment.

Environmental impact assessment of the proposed action is not required.

¹⁰ <u>Territory Stories - Social, Cultural and Economic (SCE) studies of the Strategic Regional Environment and Baseline</u> <u>Assessment (SREBA) for the Beetaloo Sub-basin</u>

In making its decision under section 55 of the EP Act and regulation 57 of the EP Regulations, the NT EPA has considered:

- the accepted referral and submissions made under regulation 52 and 53 (regulation 56 of the EP Regulations)
- the objects of the Act (section 3 of the EP Act)
- the purpose of the environmental impact assessment process (section 42 of the EP Act)
- other statutory decision-making processes that may mitigate the potential environmental impacts of the proposed action on the environment (section 55(4) of the EP Act).

In addition to the statutory decision-making processes for an EMP under the *Petroleum* (*Environment*) *Regulations* 2016, the NT EPA will also provide advice to the Minister on whether the EMP should be approved and if any additional conditions should be imposed. This will be based on expert assessment and advice from the NT EPA's Onshore Gas Committee.