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Our ref: NTEPA2017/0038-001~0016

The Hon Justice Rachel Pepper
Hydraulic Fracturing Taskforce
GPO Box 4396
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Dear Hon Justice Rachel Pepper

RE: HYDRAULIC FRACTURING INQUIRY – INFORMATION REQUEST

Thank you for your letter of 25 July 2017 inviting comment on greenhouse gas emissions from potential future hydraulic fracturing of onshore shale gas in the Northern Territory (NT).

The Northern Territory Environment Protection Authority (NT EPA) is an independent statutory authority established under the *Northern Territory Environment Protection Authority Act* (NT EPA Act). The objectives of the NT EPA are to:

- promote ecologically sustainable development
- protect the environment, having regard to the need to enable ecologically sustainable development
- promote effective waste management and waste minimisation strategies
- enhance community and business confidence in the environmental protection regime of the NT.

The NT EPA's functions are to

- advise and report to the Minister for Environment and Natural Resources under Part 3 of the NT EPA Act
- undertake functions associated with environmental assessments and the management of waste and pollution as conferred on it under other legislation.

Currently the NT EPA is conferred powers under the *Environmental Assessment Act* (EA Act), *Waste Management and Pollution Control Act* and the *Environment Protection (Beverage Containers and Plastic Bags) Act* and supporting subordinate legislation.

Through its administration of the EA Act, the NT EPA is responsible for determining whether a proposal is capable of having a significant effect on the environment, and if so, assessing the environmental impacts of the proposal. The outcomes of the assessment are provided as advice to the Minister for the Environment and Natural Resources and the minister responsible for approving the proposal to inform decision-making.

Where the NT EPA is of the opinion that the emission of greenhouse gases from a proposal could be capable of having a significant impact on the environment, the NT EPA is required to consider such matters in assessing the environmental impacts of that proposal. In such circumstances the NT EPA's aim is to encourage best industry practice to minimise greenhouse gas emissions to a level that is as low as reasonably practicable.

To inform the NT EPA's assessment, proponents may be required to identify and provide estimates of the Scope 1 (direct) and Scope 2 (energy indirect) greenhouse gas emissions from the proposal, an analysis of the greenhouse gas intensity of the proposal, and demonstration that the proposal is being designed and will be operated in a manner which maximises energy efficiency and minimises greenhouse gas emissions to a level that is as low as reasonable practicable.

The most recent NT EPA assessment that considered greenhouse gas emissions was for the Northern Gas Pipeline (Assessment Report 79), published in January 2017. The NT EPA's Assessment Report 79 acknowledged that methane emissions were a potential impact that could be mitigated by monitoring, maintenance and management in accordance with industry codes of practice.

Over the past five years the NT EPA has been notified of approximately 30 proposals relating to early stage exploration for onshore petroleum development (of this, three proposals involved hydraulic fracturing). The overarching NT EPA experience with these proposals was that, although it was ultimately decided that no individual proposal was likely to have significant environmental impacts, there were substantial gaps in the environmental information provided. This required the NT EPA to work with proponents to obtain sufficient additional information to enable the NT EPA to make an assessment decision under the EA Act.

The NT EPA's decisions about the potential extent of environmental impacts were predominately based on modelling and other predictive tools. Verification of the level of impact(s) actually experienced relied on monitoring environmental parameters during and after operations. The NT EPA has not been advised of the results of environmental monitoring.

The NT EPA is aware that there are concerns around the adequacy of the existing NT regime for regulating the potential impacts of hydraulic fracturing of onshore shale gas. The NT EPA has highlighted to the Northern Territory Government the increasingly urgent need to reform the Territory's environmental management and regulatory framework, not just for the onshore gas industry. The Northern Territory Government is pursuing an environmental regulatory reform agenda, and the NT EPA's recommendations to government are outlined in the *Roadmap for a Modern Environmental Regulatory Framework for the Northern Territory*, available at: https://ntepa.nt.gov.au/data/assets/pdf_file/0006/396294/ntepa_roadmap_hawke.pdf

The *Roadmap* outlines the NT EPA's position that one of the most critical areas for reform is to adopt a framework for a single environmental approval to be issued following the environmental impact assessment process to address gaps and concerns with the existing sectoral approval process. As noted above, under existing

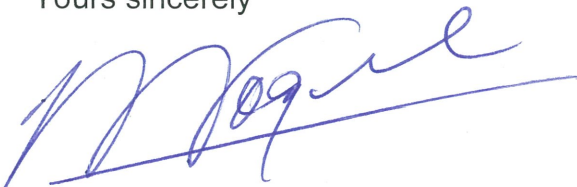
processes, the NT EPA makes recommendations to the Minister for Environment and Natural Resources and minister responsible for approving the proposal (sectoral approvals). Numerous concerns with this process have been raised including, for example, that sectoral legislation does not necessarily contain appropriate heads of power to enable all appropriate conditions to be imposed to address all environmental impacts. The single environmental approval model is designed to address these concerns.

Another recommendation of specific relevance to your inquiry is the NT EPA's proposal that updated environmental impact assessment legislation facilitates strategic environmental assessments in addition to individual project assessments. Such strategic assessments would allow an assessment of the cumulative impacts of a number of different activities by different proponents, such as with onshore gas, within a defined region. It could be applied at both exploratory and production stages. It could negate the need for individual project assessments while still ensuring appropriate environmental impact assessments and environmental controls are placed on activities.

Where possible, the NT EPA has taken administrative steps to improve environmental impact assessment processes and outcomes, such as its recent decision to publish statements for reasons for all assessment decisions, including where environmental impact assessment is not required. However, as identified in the *Roadmap*, considerable improvements to the NT's environmental impact assessment legislation is necessary in order to provide greater certainty for proponents and the community, improve the timeliness, appropriateness and adequacy of assessment processes and information used in decision making, ensure appropriate transparency and community participation in decision making, address and consider the cumulative impacts of development, and ensure health and social impacts are appropriately considered and managed within decision making processes.

Thank you for the opportunity to provide comment to the *Scientific Inquiry into Hydraulic Fracturing of Unconventional Reservoirs in the Northern Territory*.

Yours sincerely



DR PAUL VOGEL
Chairman

18 August 2017