SCIENTIFIC INQUIRY INTO HYDRAULIC FRACTURING IN THE NORTHERN TERRITORY



Origin Energy Submission #233

Mr David Close Chief Geologist and Unconventional Exploration Manager Origin Energy Level 4, North Tower 339 Coronation Drive MILTON QLD 4064

CC:

Dear Mr Close

RE: HYDRAULIC FRACTURING INQUIRY – INFORMATION REQUEST

As you are aware, the Hydraulic Fracturing Inquiry is being held under the Northern Territory *Inquiries* Act which provides, under section 9 of the act, for powers to send for witnesses and documents relative to the activities of the Inquiry.

Following the public release of the Issues paper, and an extensive community consultation process, members of the Hydraulic Fracturing Inquiry are now progressing towards the production of an Interim report, scheduled to be released to the public in mid-2017.

To further assist the Inquiry process, there are a number of sources of information we are seeking from your Company. These are as follows:

Petroleum Resource Information

- Up to date published estimates of potential shale and tight gas resources in the Northern Territory held by Origin.
- Professional advice from Santos as to estimates of which (if any) of the resources have the potential to be developed, the factors influencing this, and in what timeframe.
- Ranges of indicative gas volumes that could be developed and levels of confidence for these resources.
- All digital information relating to the boundaries of all potential shale and tight gas resources identified by Origin in the Northern Territory.

 All information relating to the geology and geochemistry of these prospective resources.

Petroleum Industrial Water Use Information

- Estimates of water requirements for the life cycle of the industry, broken down into development stages i.e. exploration, drilling, production etc. (assumptions on likely development scenarios to be included).
- Likely source of water for potential developments in the Northern Territory.
- Estimates of volumes of waste water to be produced by potential development for the life cycle of the industry, broken down into development stages i.e. exploration, drilling, production etc. (assumptions on likely development scenarios to be included).
- Likely economical recycle rates for wastewater reuse.
- Best estimates of likely discharges (controlled and uncontrolled) into the environment from a potential development detailing frequency, number quantity and quality.
- List of the likely chemicals in waste waters and their individual and combined toxicity.
- Details of storage, treatment and transport requirements by Origin for waste waters.

Land Access and Disturbance

 Describe the typical access infrastructure (roads, culverts, fencing, pipeline easements etc.) required throughout the operational phase of any potential development. Include in this description, typical site selection process, policy on the utilisation of existing infrastructure, construction standards, maintenance requirements, runoff management, security.

Geographic data sources should be provided in ESRI shapefiles to GDA94 Datum. All data sources should include metadata where possible. Metadata to meet the following Australian New Zealand Land Information Council (ANSLIC) standards http://www.anzlic.gov.au/resources/metadata. For clarification on data requirements, please contact Hydraulic Fracturing Taskforce on

The *Inquiries* Act provides protection for matters deemed confidential, however it is my intention wherever possible to have all information publically available. Can your Department please indicate which materials (if any) are not to be made publically available and provide the reasons for the determination for each.

Origin may already be planning to submit this information as part of a separate submission to the Inquiry by the deadline of 30 April 2017, and if so I look forward to receiving this information in due course, noting the requirements above. If your company is not intending to provide a submission to the Inquiry, or the material sought above doesn't form part of your submission, I ask that you meet our request as soon as possible.

Yours sincerely

THE HON JUSTICE RACHEL PEPPER

Chair

28 April 2017