

18 March 2018

Independent Scientific Inquiry Panel
Locked Bag 33
Cloisters Square
Perth, WA 6850

Dear Independent Scientific Inquiry Panel,

My experience background in petroleum geoscience with several explorations, production-development projects and had an interest in enhanced oil recovery in a safe way without harming our nature to apply in a petroleum industry. Unfortunately, since I have realised and did more research about Sidoarjo mud flow catastrophic occurred, other complex problems in mineral industry with logging problem, land clearing at primary rain Forrest and climate changes have been giving strong negative effects to our earth. It is simply because of we are using fossil fuels, enjoying other natural resources without appropriate dose and remediation plans in quite long time. Therefore, I preferred to apply my knowledge background to protect the place where we are living. Based on this reason, I have joined my diploma program in Environmental monitoring and technology at North Metropolitan TAFE. From there, I could make a real contribution to keep our nature from any harm.

I am highly concerned about the unconventional gas projects and hydraulic fracture projects in Western Australia operations and generally in all jurisdictions of Australia because:

Firstly, these hydraulic fracturing projects have a very high potential risk of groundwater (as one of an important drinking water resource from aquifers), sediments and soils contamination due to big total volume of water, chemical agents use and also waste water production on the surface and/or sub surface acreages where hydraulic fracturing has been applying for enhancing gas recovery. (Louisiana Ground Water Resources Commission, 2012), (Chief Scientist & Engineer NSW, 2014), (Department of Mines and Petroleum, 2015).

Secondly, high potential leaking from exploration, production and injection wells when pipes getting corrosion. Drilling muds, water, carbon dioxide and other chemical agents where applied in acreages of companies' projects. Even though several methods to protect of wells and pipes or slowing down of corrosion process were well identified since last decade. Furthermore, unfortunately, it is just a matter of time bomb when it would be explode after oil and gas services, operators after they left from their projects without any plans of monitoring for many years ahead (A. Haghshenas, 2017), (M. B. Dusseault, 2000), (D Brondel, 1994).

Moreover, reservoir engineers and geologists might do a modelling, projection, simulation from A to Z using any types of software they want. Unfortunately, our earth is really heterogeneous characteristic where suddenly activities may occur something worst without any plans. Even though everything is excellent prepared, engineered and simulated, but we are never know something unpredicted might happens, such as gas kick and blowout. For instance, Gulf of Mexico gas well blowouts in 2010, Sidoarjo mud flow accident in 2006 are examples that we do not really want happen in our lovely land Australia.

In conclusion, due to unacceptable risks that the unconventional gas hydraulic fracture operations poses to community's right to water, health and our nature, therefore I urge the inquiry to recommend make more strictly regulations on hydraulic fracture projects using unsafe chemicals composition that would be apply in unconventional gas activities. Creating strictly for monitoring regulation purposes after exploration and production wells that companies did everything process and not just abandon them

without any plans for controlling where corrosion may significantly occur in the future. If really strictly regulations will not exist for all these activities not only in Western Australia, but also across all states in Australia it should be better to completely ban.

Yours sincerely,

Felix Santo Pracoyo

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