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Hon. Justice R. Pepper  
Chair  
Hydraulic Fracturing Inquiry  
GPO Box 4396  
Darwin NT 0801

Dear Justice Pepper

KMSA was formed in 2012 when significant gas exploration activity was beginning to occur throughout the NT. Initially our members were concerned about the impacts of hydraulic fracturing, particularly given the negative campaigns that the local anti-fracking /Lock the Gate groups had been running in Katherine and elsewhere. In the beginning, we took a 'watch and learn' approach to the industry practice. Over the past 5 years we have taken the time to become well informed about 'fracking'. Katherine Mining Services Association now considers that hydraulic fracturing can be conducted in the Northern Territory in a safe and acceptable manner.

In terms of becoming better informed, collectively our members have attended a number of anti-fracking meetings; watched movies both for and against fracking; attended several Community information sessions included one delivered by CSIRO; attended approximately 10 Mining Industry conferences where hydraulic fracturing has been explained or discussed in detail; had guest speakers attend our meetings to educate us on fracking, including NT Dept of Mines and Energy and gas companies. Several of our members visited the Santos exploration well at Tanumbirini whilst drilling was occurring.

Having learnt quite a bit about fracking we also came to understand the extent of the significant misinformation being circulated in the community. To help counter this situation in 2016 KMSA, along with NT Chamber of Commerce and Sturt Plateau Best Practice Group, co-hosted 6 x Natural Gas Industry information sessions in Darwin and Katherine. These sessions were well attended by a good cross section of the public and after listening to participants' questions and the industry's responses, KMSA considers the gas industry's practice of fracking to have no insurmountable risks nor unacceptable risks.

The NT gas industry is highly regulated. The gas industry has very high standards of operation, often in excess of other industries operating in the NT. KMSA members have experienced these very high standards first hand. Before being accepted to work on a gas site, members have had to pass rigorous pre-qualifying assessments that reviewed their health, safety and environmental management systems and practices. Despite having undertaken work for other risk adverse industries most members have had to upgrade their management systems to a higher standard before being approved to work for gas companies.

It is the culture of very high work standards and strong adherence to health, safety and environmental management practices coupled with highly engineered wells that has led KMSA to consider that this industry can operate in the NT in a safe and acceptable manner.

In terms of risks of groundwater contamination, KMSA considers there to be minimal to no risk. The wells are so deep that fracking occurs below impermeable rock, particularly so in the Beetaloo basin. The multiple layers of well casing are very strong and so well engineered, it is difficult to foresee how they could be damaged to a point that groundwater contamination could occur. In addition, each well is continually monitored around the clock with multiple sensors and an operator can detect immediately any changes in well behaviour. They can immediately take action to prevent uncontrolled leaks or stop leaks in the unlikely event a leak occurs. Similarly, when being decommissioned the well casing is permanently blocked at several points to prevent uncontrolled leaks. Taking into account these and other measures KMSA considers there is no inherent risk to groundwater.

KMSA considers the use of chemicals in ‘frack fluid’ to be an acceptable risk. The frack fluid mixtures contains chemicals that are accepted for use in other industries within Australia. BTEX chemicals are already prevented from use in the Northern Territory. The dilution of the chemicals used in frack fluid are very high, with total frack fluid having less than 1% added chemicals. There are well defined standards in Australia for defining, manufacturing, transporting, storing, handling, using and disposing of dangerous chemicals. There are many industries who use dangerous chemical with well-established practices for doing so. Across Australia there is a considerable pool of workers and managers who are well skilled in dangerous chemical usage. The hydraulic fracturing operations in the NT are not likely to suffer from an inability to source workers and managers who know how to handle chemicals.

In terms of surface water contamination, KMSA considers there to be minimal to low risk of contamination. KMSA acknowledges that above ground spillages can occur which might impact the surface water in the immediate vicinity. However, these are the same risks that face all industries who handle chemicals including transportation accidents, equipment failure and human error.

KMSA considers that the industry’s technology, methods and work practices for handling chemicals onsite are such that the risks to surface water contamination are acceptable. For example, flowback fluid will be captured in lined and bunged ponds. It will be analysed and treated to neutralise it on site where possible. Fluid not treated onsite will be transported to specialised, regulated waste management facilities to be neutralize/cleaned. These facilities have very well established systems for cleaning water to an extent it can be reused in multiple ways including agricultural use.

In terms of volumes of water usage, KMSA understand the levels of water used in fracking is quite low when compared to other industry uses including horticulture and pastoral operations. A herd of 2,000 cows in one year will consume the same amount of water (29ML) as a fracked well over the life of that well (20-30ML). An orchid of 500 mangoes will consume within in a year (27ML), within than a fracked well over the life of that well.

KMSA considers hydraulic fracturing poses no additional risk to land contamination than any other industry that impacts on the land. The potential for chemical spills is the same all industries who handle chemicals including transportation accidents, equipment failure and human error. It could be viewed that the risks in the NT from hydraulic fracturing are lower due to the higher standards of work practices they maintain.

In terms of air pollution KMSA does not consider hydraulic fracturing to pose an unacceptable risk. In the unlikely event of an uncontrolled gas leak, the wells are continually monitored and any leak would be detected immediately with remedial action taken very quickly. In most instances the wells are in very isolated areas so the risk of harm to humans is very low.

In terms of economic impact KMSA considers hydraulic fracking to have similar impacts as other major industry developments and infrastructure developments, albeit the onshore natural gas industry is anticipated to have a long life in relative terms of mining and other major infrastructure projects.

Hydraulic fracturing will occur in remote areas of the NT. As such some impacts will be significantly lower than other developments closer to built-up areas, eg local property prices are not anticipated to be impacted any differently than any major development in a remote area, local contractors are at risk of not being approved for work due to real and perceived lack of capacity.

Hydraulic fracturing is highly skilled and technical aspect of the wider gas industry. KMSA is aware that there are risks that local businesses may not be considered capable of working in the industry. One of KMSA's role is to assist local businesses to upskill so they are capable and develop alliances with other larger businesses to improve their capacity. Another role is to actively promote the local capability to industry and facilitate local engagement. So far in the initial exploration phase, local businesses have been engaged at various levels. Indications are that this will increase as the industry and local capability grow sequentially.

In terms of the other themes of risk, KMSA considers these to be very manageable within the existing legal frameworks and practices and in many cases the impact of hydraulic fracturing will be the same, similar or less, but certainly not more than that of other industries operating in the NT.

KMSA finds it curious that the opponents to hydraulic fracturing are identifying unacceptable risks in fracking that are considered acceptable in other industries, eg water usage, management of risks to surface water; air quality, road management, land access.

In closing, KMSA is satisfied that the Northern Territory's laws and regulations are robust enough and the industry standards of work practices are high enough to enable hydraulic fracturing to occur in an acceptably safe manner and that there are no inherent unacceptable risks associated with hydraulic fracturing.

KMSA is willing to provide other information and comments to this inquiry and looks forward to future opportunities to do so.

Yours sincerely



Geoff Crowhurst  
Chair  
Katherine Mining Services Association