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31 January 2018

The Honourable Justice Rachel Pepper
Hydraulic Fracturing Task Force
GPO Box 4393
Darwin NT 0801

Dear Justice Pepper

Thank you for the opportunity to respond to the Draft Final Report of the Scientific Inquiry into Hydraulic Fracturing of Onshore Unconventional Reservoirs and Associated Activities in the Northern Territory.

Santos welcomes the Inquiry Panel's conclusion that, provided its recommendations are adopted and implemented, the risk of any environmental harm associated with development of an onshore shale gas industry in the Northern Territory can be minimised to an acceptable level, and in some instances, avoided altogether.

Santos has safely and sustainably operated petroleum exploration and production ventures in Australia, including in the Northern Territory, since the 1950s. We share the Panel's quest to ensure that, if the NT government decides to lift the moratorium on development of a shale gas industry, appropriate safeguards are put in place to minimise environmental harm and ensure cultural heritage is protected and social issues are properly addressed.

Santos is hopeful that the NT government will lift the moratorium and work with all stakeholders, including our industry, to adopt and implement the necessary safeguards in a way that allows the shale gas industry to develop safely, sustainably and economically for the benefit of all Territorians.

An NT shale gas industry has the potential to do for Australia what the shale gas revolution has done for America:

- Reinvigorating local industry investment and jobs;
- Developing new regions of northern Australia;
- Providing abundant, affordable energy supplies for Australian households and businesses;
- Revitalising local manufacturing; and
- Growing LNG exports to Asia in time to leverage the next forecast global supply gaps opening up in the early to mid-2020s.

Australian gas plays an important part in cleaning up air and reducing greenhouse gas emissions in Asia as well as contributing to Australia's own greenhouse emissions reduction effort.

The opening up of new gas supply sources for Australian consumers and industry is vitally important as existing gas fields mature and decline. Rising domestic gas prices in multiple Australian jurisdictions can only be offset in two ways:

- By facilitating new gas supply sources and injecting more competition into the market; and
- By ensuring that industry regulation achieves the critical objectives of safety, environmental and cultural heritage protection at the lowest practical cost.

Overall Santos considers the Panel's recommendations, when implemented, could potentially allow for the timely and economic development of a safe and sustainable NT shale gas industry if the NT government lifts its moratorium. Ongoing consultation by government and regulators with stakeholders, including our industry, and a focus on "risk-based" and "objectives-based" regulation will be essential to facilitate this outcome. In the meantime, we offer the following comments on the Panel's recommendations.

Regulatory reform in advance of production

We note that many of the Panel's recommendations relate to regulatory reform and baseline assessment of environmental values prior to any production occurring. Production can only occur if a production licence has been granted under the NT Petroleum Act.

The NT shale industry is in a state of infancy. If the moratorium is lifted and regulatory reform work for production activities proceeds, Santos is of the view that satisfactory protections are already in place to allow smaller-scale, low impact exploration and appraisal activities to resume in parallel. Such activities can only be carried out by the holders of an exploration permit granted under the Act. An exploration permit gives the permittee, subject to the Act and in accordance with the permit conditions and any Ministerial directions, the exclusive right to explore for petroleum, and to carry on such operations and execute such works as are necessary for that purpose, in the exploration permit area.

It is vitally important that the small scale exploration and appraisal (delineation) phases of activity be allowed to resume while regulatory reform for production activities is under way so data can be gathered to assess the true significance and potential of the NT shale gas resources.

Other elements of industry development also need to be assessed through the exploration and appraisal phases, including logistics and local business capability (e.g. support services, waste management, materials supply), infrastructure requirements and the capturing of both domestic gas and LNG market opportunities in a timely way. For the industry to be viable, all of these issues need to be progressed in parallel with the regulatory framework for production activities and the establishment of environmental baselines.

In its report, the Panel recognises the significant changes to onshore petroleum environmental regulation in the Northern Territory in recent years, following the Hunter and Hawke reviews. In Santos' view, these reforms, combined with the provisions of the NT Petroleum Act, exploration permit conditions and Ministerial directions, provide the protections and oversight for an immediate resumption of exploration and appraisal if the NT government decides to lift its moratorium. In addition, Santos already operates Australia-wide in accordance with the high standards of the Code of Practice for Constructing and Abandoning Petroleum and Associated Bores in Queensland.

Timing of regulatory reform in advance of production

The Panel notes it is unlikely there would be production in the Beetaloo sub-basin in less than three years. For investment in the industry to be viable, it is important that regulatory reform and environmental baselining is completed in a timely manner, certainly within this three year window, so that, if the moratorium is lifted this year, production licences can begin to be granted in the 2021-22 timeframe to capture market opportunities opening up in the early 2020s.

There will always be a desire to acquire more baseline data. However, in combination with an adaptive approach to environmental regulation, as has been taken by both the Australian and Queensland governments for development of the Queensland coal seam gas industry, three years should be sufficient for environmental baselining. Additional ongoing data collection, quality assurance, analysis and reporting requirements would be expected features of the regulatory regime and production licence conditions.

These baseline and ongoing monitoring data sets would allow the regulatory framework to adapt over time to respond to data-based risk assessment rather than taking an over-prescriptive approach to initial regulation.

Well integrity

Santos supports the implementation of a well integrity code of practice and would welcome the adoption of established codes like the Code of Practice for Constructing and Abandoning Petroleum and Associated Bores in Queensland or Guidance and Specifications provided by the American Petroleum Institute. As above, we consider that regulation should be risk and objectives-based, and avoid over-prescription (for example, over-design of well configuration that might not be appropriate in all circumstances or excessive bore monitoring requirements where groundwater contamination risks are low).

Water management

Santos supports the user-pays principle on the basis that extraction licensing and water charging applies to all water users so as to efficiently, effectively and equitably manage the Northern Territory's water resources.

The Panel recommends extending the EPBC water trigger to shale gas development, however, Santos considers that water management will be adequately addressed by user-charging, regulatory reform recommendations and the implementation of other Panel recommendations relating to water management. In addition, shale gas development is very different to large scale coal mining and coal seam gas development, for which the water trigger was initially introduced.

The Panel recommends a prohibition on the use of surface water by the shale gas industry even though it has identified the environmental risk of insufficient surface water as being low. We request the Panel consider a risk and objectives-based approach to regulation of surface water use rather than a blanket ban.

The Panel similarly recommends a prescribed approach to groundwater monitoring bores. We request the Panel again consider a risk and objectives-based approach to groundwater monitoring, particularly regarding the number and placement of monitoring bores which should include the ability to utilise the extensive existing network of water bores in the region.

Biodiversity, weed and fire management

Many of the Panel's recommendations relating to biodiversity, weed and fire management, reflect existing industry practice onshore Australia. As above, we consider that regulation should be risk and objectives based, and avoid over-prescription.

Chemicals use

The Panel noted that the majority of hydraulic fracturing chemicals have low toxicity and are used in concentrations unlikely to represent an acute health risk to human health. Santos supports the disclosure of chemical additives in accordance with existing government regulation and also the incorporation of geogenic and flow-back composition data as part of best practice Human Health Risk Assessment reports.

Further, the storage, handling and transport of chemicals is already regulated according to Australian Standards according to the classification of the material. These standards should apply consistently across all industry sectors, including the shale gas industry.

Cultural heritage

Santos is committed to protecting and preserving sacred sites. It is the Traditional Owners who determine where exploration can take place without impacting sacred sites, both above and below the ground.

The Panel report states "companies are electing not to get an Authority Certificate to undertake petroleum activities." We wish to advise that Santos has undertaken sacred site certifications for all project activities in the Northern Territory and works closely with the relevant Land Councils and the Aboriginal Areas Protection Authority to ensure sacred sites are identified and protected in accordance with the Sacred Sites Act.

Landscape amenity

Santos concurs with the Panel's approach, invoking the principles of ALARP with respect to the minimisation of the potential shale gas industry surface footprint.

Whilst in many cases, the proposed minimal well-pad spacing for gas field development is likely to be workable, we request a flexible approach to take into account site-specific factors (eg to move pads to avoid cultural heritage sites or to avoid watercourses, etc.). At this early stage of resource evaluation, there could also be sub-surface constraints that preclude prescribed minimal well-pad spacing in some areas.

Administrative arrangements recommendations

A number of the regulatory reform recommendations relate to administrative arrangements (e.g. cost recovery, standing, merits review, onus of proof, whistle-blower protections). We consider these administrative arrangements need to be developed as part of the overall administrative framework for the Northern Territory rather than being specifically developed to apply to one industry sector.

Conclusion

Thank you again for the opportunity to respond to your Draft Final Report. Santos appreciates the professionalism with which the Inquiry Panel has conducted its work and we look forward to its Final Report and the NT Government's consideration of it. We believe an NT shale gas industry, provided it is developed safely and sustainably, could bring enormous economic opportunities for Australia, at the same time protecting the unique environmental and cultural values and resources of the Northern Territory.

Please contact Tom Baddeley via email [REDACTED] or mobile [REDACTED] if you would like further information.

Yours Sincerely,

A handwritten signature in dark ink, appearing to be 'Bill Ovenden', with a long horizontal line extending to the right.

Bill Ovenden

Executive Vice President Exploration and New Ventures