

11 July 2011

Ian Hayllor
Chair
Basin Sustainability Alliance

via email: chairman@basinsustainabilityalliance.org

Dear Ian

BASIN SUSTAINABILITY ALLIANCE BLUEPRINT FOR SUSTAINABLE CSG OPERATIONS

I am writing to provide you with APPEA's response to the Basin Sustainability Alliance's *Blueprint for Sustainable CSG Operations*.

We very much appreciate the effort you and the BSA Committee have put into producing the Blueprint and we share the BSA's goal of sustainable industry development and the coexistence of CSG and food and fibre production.

We believe it is evident from our response there is in fact a high degree of alignment between the landholders, industry and government in terms of how the CSG industry should be regulated. A clear majority of the principles put forward by the BSA are reflected by existing government policy and supported by industry.

You will note our responses on the BSA's principles for land access and compensation. In this policy area we consider the new land access laws that came into effect on 29 October 2010 should be given time to be bedded down before being subject to major review. The new laws were the result of a process that took over two years and APPEA, the BSA, Agforce, and the Queensland Farmer's Federation all played a major role in their development. We would however welcome further discussion on how the existing system could be made to work better.

Thank you once again for your constructive approach to these issues and we look forward to an ongoing relationship with the BSA.

Yours sincerely



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Enc.



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APPEA Response to BSA Blueprint for Sustainable CSG Operations

BSA position	APPEA response
Principles	
<p>1. Environmental sustainability of water and land resources is to be of the highest priority. Scientific studies must precede any development.</p>	<p>Agreed, and the requirement for scientific studies already exists.</p> <p>Each LNG project EIS includes a range of comprehensive environmental impact technical and scientific studies covering all aspects of the proposed development. These studies have been used to ensure impacts have been addressed in the project development plans.</p> <p>Scientific assessment is also required for the granting of Environmental Authorities, and ongoing monitoring and assessment is a requirement of approval to ensure water and land resources are protected throughout the project.</p>
<p>2. More certainty and transparency is required by all parties.</p>	<p>Each LNG proponent has been and will continue to undertake extensive community and landholder consultation on their projects.</p> <p>The industry will succeed based on its record and there is full transparency of its activities with any transgressions, however minor, normally given widespread media coverage. The results of the industry's scientific studies are included in EISs, environmental conditions are publicly available, and the results of groundwater monitoring will be publicly available.</p> <p>Certainty in the investment environment is a key goal of the industry and the industry will continue to provide as much information as possible on its future activities to landholders and the community.</p>
<p>3. Fair compensation must be offered to any and all affected landholders. CSG companies must be able to pay full compensation and have the capacity to fund make-good arrangements.</p>	<p>Agreed, and has already been implemented.</p> <p>APPEA considers that fair compensation is being offered to any and all affected landholders consistent with legislative requirements that cover all compensatable effects caused by authorised activities.</p> <p>The industry is able to pay full compensation and has the capacity to fund make-good arrangements where these are needed.</p>
<p>4. Make-good arrangements must be enforceable, provide for future generations and for all affected parties. They must be transparent and fair for the benefit of the wider community as well as current individual landholders.</p>	<p>Agreed, and has already been implemented.</p> <p>The system established by the Queensland Government provides for enforceable make good arrangements covering all affected parties for the full extent of any impact.</p>
<p>5. A substantial bond (or some other form of environmental insurance) must be held by Government to ensure the</p>	<p>Agreed, and has already been implemented.</p> <p>Each and every CSG proponent is required to maintain financial assurances to the satisfaction of DERM to cover rehabilitation and restoration liabilities. These assurances are reviewed on a regular</p>

capacity to pay for serious environmental impacts that may occur at any time and for as long as the impacts may endure.	basis to ensure they match current actual disturbance and take into account progressive rehabilitation as well as ongoing development.
6. Landholders also want protection against unforeseen on-farm impacts. CSG Companies must carry insurance or have some other surety to be able to meet any such contingencies in future. We also demand public disclosure of bonds and insurance policies.	Agreed, and has already been implemented. Insurance cover is a government requirement and companies have coverage for third party liability. A summary of relevant policies and indemnities can be provided to a landowner during the negotiation process for a CCA or at other times that the landowner may request this information.
Water	
1. Make good obligations should apply to the water resources accessed by the wider community as well.	Agreed, and has already been implemented. The management of any impacts on underground water caused by CSG activities is comprehensively dealt with in the Water Act. This includes arrangements for the management of cumulative impacts, the preparation of underground water impact reports to establish obligations to manage any impacts, and requirements to assess and make good any impact on authorised water bores. The implementation of the make good provisions will be administered by the independent Queensland Water Commission (QWC).
2. Subject to appropriate scientific research, purified CSG water must be re-injected into associated aquifers or substituted for existing groundwater use wherever possible.	APPEA considers that government policy should maximise the benefit of produced CSG water. We believe that achieving this will require a flexible policy approach that does not determine ex ante what water management option is implemented. Where viable, reinjection or substitution of existing groundwater use is a preferred approach, but this should not preclude beneficial reuse in accordance with the CSG Water Management Policy. All possible water management options are being assessed by the industry.
3. Wherever possible, water must be beneficially used in the area of extraction and not piped kilometres away.	Wherever feasible or practicable, APPEA supports the beneficial use of water within the local region.
4. CSG Companies must continue to co-contribute to the science enabling the understanding of impacts of CSG activities on the water balance. The community must be kept fully informed of the outcomes of these water	Agreed, and is already occurring. All CSG-LNG proponents are funding and undertaking scientific assessments of a range of water issues, including the Queensland Water Commission's development of a regional groundwater model, and this information is being made public. Further, CSG companies have environmental conditions requiring ongoing monitoring and assessment which is adding to the scientific body of knowledge.

balance studies.	The work undertaken as a result of the CSG industry's activities will mean that the Surat Basin will be one of the most comprehensively studied basins in the world with respect to groundwater.
5. All CSG Companies must provide a Water Management Plan detailing the quantity and quality of water extracted and how it will be beneficially treated to prevent environmental harm. The industry should not progress until these plans are shown not to contain unacceptable risks.	<p>Agreed, and is already occurring.</p> <p>To obtain an EA for a development area, CSG proponents are required to prepare and submit for approval a comprehensive CSG Water Management Plan. A CSG Water Management Plan contains details of quantity, quality, treatment and impact and risk assessments. These plans are required under both State and Federal project approval conditions.</p> <p>As part of the Federal Government review process for each CSG to LNG project, Geoscience Australia provided independent technical advice which indicated that there were no unacceptable risks which would prevent the Projects from proceeding as long as they were appropriately conditioned.</p>
Land	
1. CSG operations must not result in any permanent land contamination and they must not have any serious impact on productivity.	<p>Agreed.</p> <p>With respect to high value cropping land, this outcome is specified in the Government's Strategic Cropping Land policy. In addition, all projects have procedures that aim to minimise the potential for land contamination.</p> <p>CSG producers also have strict rehabilitation requirements placed on them under the EP Act and the conditions of environmental authorities that apply to development activities.</p>
2. Any mining or CSG operation must not unreasonably interfere with normal farming and livestock operations.	<p>Agreed.</p> <p>During the construction phase of CSG infrastructure on a property, there may be disruption to farming and livestock operations which would be subject to appropriate compensation. During the longer term operations phase of a CSG Project, only limited impact on existing farming and livestock operations should occur.</p> <p>There are already in existence CSG developments on properties that demonstrate CSG operations and normal farming and livestock operations can coexist</p>
3. All CSG Companies must provide a Land Impact Statement which details the total area of land in the gas fields, the quality of this land and how much land will be temporarily disturbed and how much will be removed from productive agriculture for the life of the project. This information must be provided to all affected parties.	<p>APPEA considers this information is already available.</p> <p>CSG-LNG project EISs contain details of land impacted by the proposed gas field development which contains all this information on a total project basis. Each EA for a development area includes an Operational Plan which includes details of land impacts. The Operational Plan is updated on a regular basis.</p> <p>As part of the CCA negotiation process, each landowner will be provided with detailed development plans for each property which includes this information.</p>

<p>4. CSG infrastructure must not be located closer than 500metres from residences, schools, or intensive livestock operations without specific landholder agreement. Allowances should be made to enable landholders to negotiate greater separation distances where topography or particular circumstances warrant it.</p>	<p>Agreed, and we note that a more stringent standard is already in existence.</p> <p>The P&G Act makes particular arrangements for access, conduct and compensation matters in relation to development in proximity to sensitive receptors such as occupied residences, schools and intensive agricultural operations. The Land Access Code considers all activities carried out within 600m of a school or occupied residence as an ‘advanced activity’ requiring a CCA to be negotiated. The CCA will detail what has been agreed between the parties with respect to separation distances.</p>
<p>5. Well spacing and infrastructure must not be intensified without landholder agreement.</p>	<p>The Land Access Code requires that any change to a development plan covered by an approved CCA must be discussed by the parties and covered by a CCA amendment or a new CCA.</p>
<p>6. No CSG operations to be conducted on the Condamine Alluvium flood plain or any like susceptible area or aquifer until scientific studies and CSG technologies (directional drilling etc), can assure all stakeholders that there will be no adverse impacts on the aquifer or overland flow of the flood plains.</p>	<p>Agreed, and the main operator in the area, Arrow Energy, has publicly committed to no development in intensely farmed areas until concerns are properly addressed.</p>
<p>7. Developments must be planned area wide and all stakeholders fully informed and allowed to have input.</p>	<p>Agreed, and is already occurring.</p> <p>CSG-LNG EISs contain details of land impacted by the proposed gas field development on a total project basis. Each EA includes an Operational Plan which contains details of development by area. These Operational Plans will be updated at least every 5 years.</p>
<p>8. Landscape function must be understood in order to protect the land from erosion and to avoid adverse impacts on native flora and fauna.</p>	<p>Agreed, and is already occurring.</p> <p>CSG-LNG EISs contain comprehensive studies on terrestrial ecology and soils. These studies are further refined in the Environmental Management Plans associated with each EA for a development area which are required for all CSG tenements.</p>
<p>9. Subsidence risks must be clearly understood.</p>	<p>Agreed.</p> <p>We note that Geoscience Australia provided independent scientific advice to the Federal Minister in his assessment of CSG to LNG proponents EPBC referrals. Geoscience Australia’s assessment of EIS studies concluded that “...based on the estimated magnitude of the subsidence..., and with reference to subsidence assessments for CSG activities in similar geological environments elsewhere, we consider that the risk of impacts to surface water and shallow groundwater systems are very low.”</p>

	Proponents are however continuing to study this issue.
10. No land should be accessed while ever issues remain unresolved in the Land Court.	<p>The industry will continue to carry out its land access activities based on the requirements of the P&G Act and as detailed in the Land Access Code, which were developed in consultation with a range of stakeholders including the BSA, Agforce, and the QFF.</p> <p>The industry makes every effort to reach mutual agreement on a CCA with each landowner by consultation and negotiation as a first priority. In circumstances where agreement cannot be reached between the parties, once an application has been lodged with the Land Court and served, proponents can lawfully access the landowner's land to undertake the activities authorised under legislation, however we note that at present there are no cases before the Land Court that were initiated by CSG companies.</p>
11. After CSG operations cease, land must be fully rehabilitated to a pre-CSG development standard to ensure full productivity.	<p>Agreed, given agreement by the landholder who may wish that particular infrastructure (such as water management ponds) are retained post CSG development.</p> <p>CSG producers have strict rehabilitation requirements placed on them under the EP Act and the conditions of environmental authorities that apply to development activities.</p>
Salt	
1. Any salt derived from CSG activities must not have any detrimental impact on the environment.	<p>Agreed.</p> <p>We also note that there are strict environmental obligations placed on the industry under the relevant legislation. CSG proponents are required to comply with the <i>Environmental Protection Act 1994</i>, including the general environmental duty and the conditions of relevant environmental authorities (EAs) issued under that legislation. The EAs impose strict requirements in relation to environmental management, monitoring and reporting. The CSG Water Management Plan which must be prepared, reviewed and approved by DERM as part of obtaining an approved EA for a development area, details measures to minimise impacts associated with the storage and disposal of brine</p>
2. Brine should be removed from the surface environment and preferably used for industrial purposes.	<p>APPEA considers that salt should be safely contained and not allowed to impact the local environment.</p> <p>CSG proponents are actively assessing a range of options for brine management, including industrial use and reinjection into deep isolated geological formations.</p> <p>The CSG Water Management Plan which must be prepared, reviewed and approved by DERM as part of obtaining an approved EA for a development area, details measures to minimise impacts associated with the storage and disposal of brine.</p>
Drilling standards	

<p>1. Robust well construction standards must be developed, legislated and rigorously enforced. These standards need to clearly demonstrate the Government's determination that wells must not become a source of unintended interaquifer leakage or contamination. The development of these standards must have landholder input. The current standards for water bores can be used as a guide to developing the standards for drilling CSG bores.</p>	<p>Agreed, and is already occurring.</p> <p>APPEA fully supports best practice standards being applied to well construction. These must protect aquifers and also ensure safety. Though there are existing standards for the construction of petroleum wells, APPEA has developed a set of best practice standards which have been provided to the Government in a form consistent with the water bore standard.</p> <p>However, we note that it would be inappropriate to apply water bore standards themselves to CSG wells as this would result in the standard being set too low, and considerably increase safety and environmental risks as a result.</p>
<p>Social impacts</p>	
<p>1. CSG companies must commit to minimising adverse social impacts.</p> <p>Some of the issues of concern include the high costs of living in mining towns, competition for skilled labour, stretched government services (e.g. health and local councils) and increased demand on infrastructure (e.g. Warrego Highway).</p>	<p>Agreed, and is already occurring.</p> <p>CSG-LNG EIS commitments address cost of living, competition for skilled labour, impacts to government services and demand on infrastructure. Proponents are also required to develop a Social Impact Management Plan (SIMP) which details how these commitments will be realised. Final SIMP are required to be provided to the CG for approval within 30 days of FID.</p> <p>As noted, we agree that these impacts should be properly managed, but we also note that these are impacts associated with a growing economy and are preferable to the impacts of economic contraction.</p>
<p>2. Social impacts must be properly assessed (at both the personal and community level) and any adverse social impacts must be adequately addressed and/or compensated.</p>	<p>Agreed, this is already part of the existing legislative framework.</p> <p>As noted above, as part of the EIS processes CSG-LNG proponents have developed social impact assessments which identified and assessed potential social impacts. Proponents have also developed a social impact management plan which will seek to mitigate social impacts. These documents are publicly available and have been subject to public consultation.</p>
<p>3. Gas field development in rural residential areas such as Tara must be managed with care and consideration and the residents treated with respect</p>	<p>Agreed, and we would also expect that gas industry workers are treated with the same consideration and respect.</p>
<p>4. Some areas should be "off limits"</p>	<p>Agreed, and we note that CSG activity is prohibited from some areas at present. For example, CSG wells are not permitted to be drilling</p>

to CSG operations.	in national parks and dams are not permitted to be constructed in some areas specified in the Government’s Strategic Cropping Land policy.
Compensation	
<p>1. Compensation should be attractive to landholders. Landholders must be fully compensated for their time (including time taken to do the necessary research to be informed), for any loss in productivity, for any loss of amenity, for any reduction in land or business value and for any costs of legal representation.</p>	<p>As noted above, the CSG industry will meet all its obligations for compensation under the P&G Act. Compensation covers all ‘compensatable effects’ caused by authorised activities.</p> <p>‘Compensatable effects’ include:</p> <p>All or any:</p> <ul style="list-style-type: none"> - deprivation of possession of the surface of land - diminution of the land’s value - diminution of the use made or that may be made of the land or any improvement on it - severance of a part of the land from other parts of the land - cost, damage or loss arising from the carrying out of activities on the land <p>Accounting, legal or valuation costs necessarily and reasonably incurred to negotiate a CCA (other than facilitating an ADR).</p> <p>Consequential damages suffered by the landowner because of any of the above.</p>
<p>2. CSG companies must commit to adopting best management practices in all aspects of exploration and production activities as and when they become available or understood.</p>	<p>The CSG industry will integrate continuous improvement and lessons learnt into its ongoing field development planning and implementation to ensure the deliberate adoption of the most appropriate exploration and production practices, as new practices become understood.</p> <p>However, we note that there is no limit to what constitutes best practice, and one method can be argued from different angles by different parties.</p>
<p>3. Compensation should be for a term and be subject to review to allow for unforeseen impacts that may arise.</p>	<p>Agreed, this is already part of the existing legislative framework.</p> <p>The P&G Act also provides a mechanism for compensation to be revisited if there is a material change of circumstances.</p>
<p>4. Compensation must make allowance to reflect the compulsory nature of the imposition (i.e. allow a premium to reflect the compulsory nature of the acquisition and the social dislocation and upheaval it causes).</p>	<p>The CSG industry is committed to meet all its obligations for compensation under the P&G Act and as detailed in the Land Access Code. Compensation covers all ‘compensatable effects’ caused by authorised activities.</p>

<p>5. Compensation must account for interference.</p>	<p>Agreed, this is already part of the existing legislative framework. The P&G Act framework provides that any interference such as any loss of use of the land or quiet enjoyment can be reflected in the stated compensatable effects.</p>
<p>6. CSG companies must compensate for their infrastructure's impact on preventing landholders adopting innovation (new and more efficient agricultural practices).</p>	<p>Agreed, this is already part of the existing legislative framework. The P&G Act provides a mechanism for compensation to be revisited if there is a material change in the circumstances.</p>
<p>7. Where current compensation agreements are considered by the landholder to be unfair, the Government must appoint an independent commissioner to allow review of these agreements. The following circumstances warrant such review:</p> <ul style="list-style-type: none"> - Landholders didn't have independent legal advice - Age, language, lack of understanding etc. can be shown to have been a factor warranting review - Older agreements, regardless of whether legal advice was obtained - where older highly objectionable clauses were inserted (e.g. where these agreements have compromised all make-good obligations, all future rights, all material change rights etc) - Where misleading or deceptive conduct led a landowner to error or mistaken impression without which they would not have entered into the agreement - Where reasonably unforeseeable consequences/interference to the landowner have manifested after the agreement, or - Any other circumstances where justice reasonably requires. <p>This review process should be enacted in the legislation and the right for review guaranteed.</p>	<p>The CSG industry is committed to meet all its obligations for compensation under the P&G Act and as detailed in the Land Access Code. Compensation covers all 'compensatable effects' caused by authorised activities.</p>
<p>Well stimulation</p>	

<p>1. All chemicals used in CSG operations must be safe, must be registered and must be disclosed to landholders and State Government.</p>	<p>Agreed in principle.</p> <p>All chemicals used in the CSG industry are registered and disclosed in accordance with regulatory requirements.</p>
<p>2. CSG companies must provide detailed information on proposed well stimulation including the chemicals to be used, quantities injected, and the fate of these chemicals throughout the stimulation process. Landholders require this information to meet their Quality Assurance obligations.</p>	<p>The CSG industry is implementing the recently enacted government requirements around reporting well stimulation activities to the Department of Employment, Economic Development and Innovation and landholders, and we believe these requirements are appropriate.</p> <p>Under the new requirements, proponents are required to provide to a landholder a minimum of 10 working days ahead of a HFS (hydraulic fracture stimulation) treatment, which details the chemicals and chemical volumes and a “Notice of Intention to carry out hydraulic fracturing activities”. Then within 10 days following the HFS treatment, APLNG is required to confirm actual volumes pumped and provide a “Notice of completion of hydraulic fracture activities”.</p>
<p>3. Companies must inform landholders at least 10 days prior to any scheduled well stimulation activity and must provide a full report on completion.</p>	<p>Agreed, and as noted above this is now a government requirement.</p>
<p>4. The results of any ground water quality monitoring program must be promptly provided to landholders. Any water contamination must be immediately advised to landholders and emergency water supplies implemented immediately if necessary.</p>	<p>Agreed, and this is already provided for under existing government regulation.</p>
<p>5. Ten per cent of all CSG gas wells must be fully and independently audited each year, by suitably trained personnel, to ensure compliance with all obligations. Results of these audits must be publicly available.</p>	<p>Agreement with the principle that auditing should occur to ensure compliance with all obligations, however the specific requirements proposed may or may not align with government requirements and in some cases exceed the proposed requirements.</p> <p>In the case of emissions detection, the requirement is that 20 per cent of wells are audited each year.</p> <p>EIS requirements specified by the CG are that approval conditions, environmental authorities and development approvals must be audited by an appropriately qualified third party auditor within one year of the commencement of petroleum activities and three yearly thereafter. The Federal EPBC approvals for the project also have a requirement for independent third party auditing.</p>