

List of Recommendations

Recommendation 1

1.72 The committee recommends that federal and state governments conduct a thorough review of the appropriateness of 'adaptive management' in the context of regulating the industry, given the significant gaps in information regarding cumulative and long term impacts of the industry.

Recommendation 2

1.85 The committee recommends that the Commonwealth Government, through the Council of Australian Governments, or Standing Council on Energy and Resources (SCER), take the initiative in promoting a consistent national regulatory framework for all aspects of the coal seam gas industry.

Recommendation 3

2.58 The committee recommends that, given the degree of uncertainty about the long-term consequences of the CSG industry on the water resources of the Great Artesian Basin, that the Commonwealth not give any further approvals for production of CSG in that part of the Murray-Darling Basin overlying the Great Artesian Basin pending the completion of the Queensland Government's regional groundwater model and the CSIRO & Geoscience Australia basin scale investigation of water resources.

Recommendation 4

2.59 The committee recommends that the Commonwealth await the completion of the Namoi Catchment study before considering any applications under the Water Act or the *Environment Protection and Biodiversity Conservation Act 1999* for approvals to undertake coal seam gas production.

Recommendation 5

2.60 The committee recommends that all future CSG development approvals should be preceded by the development of "... a regional-scale, multi-state and multi-layer model of the cumulative effects of multiple developments" of ground and surface water as recommended by Geoscience Australia.

Recommendation 6

2.70 The committee recommends that the Commonwealth take the necessary steps to amend the *Water Act 2007* to include that part of the Great Artesian Basin that underlies the Murray-Darling Basin within the definition of Basin water resources.

Recommendation 7

2.75 The committee recommends that the Commonwealth take the necessary steps to amend the *Environmental Protection and Biodiversity Conservation Act 1999* to include the sustainable use of the Great Artesian Basin as a 'matter of national environmental significance'.

Recommendation 8

2.81 The committee recommends that all future approvals require independent comprehensive monitoring of regional earth surface movements to assess whether any measurable subsidence is occurring. Where subsidence occurs and has an adverse effect on land management or the natural environment, for example by altering drainage, the responsible gas companies would be liable for any necessary remediation. Further all gas exploration and/or production in an area subject to subsidence or impacts from subsidence not foreseen in the EIS should cease until action is taken to ensure that no further damage will occur. Where subsidence occurs in a gas producing region the onus lies with the gas companies to demonstrate that the subsidence is not a result of gas production activities.

Recommendation 9

2.85 The committee recommends that it be a requirement of all exploration or production approvals that the fluids extracted from wells after fracking are kept isolated in secure separate storages and prior to disposal are treated to the highest standards.

Recommendation 10

2.96 The committee recommends that the Commonwealth provide funds to NICNAS to enable that organisation to undertake a comprehensive review of the chemicals used in fracking, having particular regard to the quantities, combinations of chemicals and the way in which these chemicals are used and to confirm safe levels for their use. This study should be completed within the next two years. The Commonwealth and state governments should act promptly to ensure all fracking activities comply with any NICNAS recommendations.

Recommendation 11

3.64 The committee recommends that all CSG water should be included in the calculation of the total withdrawal from the ground and surface water systems. Seepage into depressurised coal seams, reinjection into regulated formations and virtual reinjection or surface disposal must be monitored and recorded if a complete picture of the state of artesian and sub-artesian water is to be maintained.

Recommendation 12

3.65 The committee recommends that where any aquifer used for the supply of stock or domestic water is depleted as a result of coal seam gas activities, the relevant company or companies should be required to pay for that water at the prevailing rate or make good the loss of water by virtual reinjection or reinjection where water to be reinjected is of an environmentally appropriate standard. The onus should rest with the gas companies to prove that, where an aquifer is depleted, it is not the result of coal seam gas extraction.

Recommendation 13

3.69 The committee recommends that as a general principle it should be established that where a gas company supplies treated CSG water for beneficial use to an existing water user in agriculture, industry or for domestic use that supply must be as a substitute for an existing allocation.

3.70 Where treated water is supplied to landholders (including on a company's own land) to develop a new crop or enhance existing production, that supply should be clearly understood to create no entitlement, above a pre-existing water licence, to water from any other source once the supply of CSG water ceases.

Recommendation 14

3.72 The committee recommends that comprehensive water management plans, *and the capacity to implement those plans*, particularly with regard to the disposal of salt and brine, be a requirement before any further production approval for coal seam gas be granted.

Recommendation 15

3.74 The committee recommends that all salt and brine residues that cannot be disposed of within the short term, either as part of an industrial process or by safe injection into a suitable aquifer, should be required to be removed from agricultural areas and water catchments. No controlled landfills for the disposal of salt should be permitted in the Murray-Darling Basin.

Recommendation 16

4.70 The committee recommends that the Commonwealth, in cooperation with the states, establish an independently managed trust funded by the gas companies to make financial provision for long-term rectification of problems such as leaks in sealed wells or subsidence and erosion caused by collapsing pipelines.

Recommendation 17

4.91 The committee supports the concept of strategic agricultural land and recommends that, when identified, exploration for, or production of, coal seam gas be banned from land identified under defined criteria.

Recommendation 18

4.99 The committee recommends that the Commonwealth, through the Council of Australian Governments, or other appropriate forum, request the States to insert in the relevant legislation a requirement that arbitration bodies charged with resolving disputes between landholders and the holders of exploration or production titles – the Land Court in Queensland; the Land and Environment Court in NSW – must give priority to the maintenance of agricultural production with minimal disruption in deciding any dispute.

4.100 Similarly, where a ministerial discretion such as that exercised under s.71 of the NSW Petroleum (Onshore) Act exists, the exercise of that discretion should be required to give priority to maintaining agricultural production with minimum disruption to the existing land-use.

Recommendation 19

4.107 The committee recommends that draft access agreements between landholders and gas companies include a requirement that company employees must have a landholder's approval whenever they wish to enter a property and that companies must maintain logs of staff entering private property.

Recommendation 20

4.108 The committee recommends that draft access agreements clarify the gas companies responsibility with regard to fire safety and require the gas company to advise landholders of all chemicals that are brought on to the land.

Recommendation 21

4.112 The committee recommends that legislation governing compensation to landholders include provisions that recognise as compensatable effects the involuntary nature of landholders' dealings with coal seam gas companies and the social impact of coal seam gas exploration and production.

Recommendation 22

4.117 The committee recommends that States' include in the relevant legislation as a compensatable effect the costs incurred by a landholder in seeking independent arbitration of a dispute over an access and compensation agreement, except where it can be demonstrated that the landholder had not negotiated reasonably and in good faith.

Recommendation 23

4.122 The committee recommends the Queensland and New South Wales governments establish mechanisms that provide where a landholder, having an access and compensation agreement with a coal seam gas exploration or production company, believes that that agreement was entered into without proper advice or understanding of its implications, then the landholder be entitled to seek a review of the agreement.

Recommendation 24

4.124 The committee recommends that the position of residents of small regional communities and on small blocks of land also be clarified and that enforceable conditions, including a buffer zone around houses, are included in exploration or production permits to ensure that, despite having no development on their land, they are not subject to excessive interference from coal seam gas developments.

