



PRIME MINISTER
PARLIAMENT HOUSE
CANBERRA ACT 2600

Tony Windsor MP
Parliament House
CANBERRA ACT 2600

Tony
Dear Mr Windsor

Thank you for signing an agreement on 7 September for a Government to be formed based on support for confidence and supply.

The agreement recognises your continued status as an independent Member of Parliament and your ability to determine your vote on all legislative matters, except confidence and supply.

Pursuant to the agreement that you have signed, which includes a much stronger governance framework for regional policymaking, I can confirm that in addition to the Australian Labor Party's 2010 election commitments and the matters outlined in agreements with the Australian Greens and other independent MPs, a minority Labor Government will pursue the following policy program during the term of the 43rd Parliament to advance the interests of regional Australia, including the interests of the constituents of New England.

1. A minority Labor Government agrees that the redevelopment of the Tamworth hospital is of vital importance to Tamworth and surrounding regions, and will:
 - a) Contribute up to \$20 million to enable the construction of a teaching and training facility as part of the Tamworth Hospital redevelopment - to ensure University of New England medical students can undertake part of their training at Tamworth Hospital.
 - b) Offset the cost of the project, consistent with Labor's fiscal rules.

2. A minority Labor Government will establish a well resourced Climate Change Committee, which encompasses experts and parliamentary representatives. The Committee will be resourced like a Cabinet Committee. I as Prime Minister will invite the Member for New England to serve as a member of the Committee. As important sources of information for the Climate Change Committee and the public the Government will request that:
 - a) Professor Garnaut update his Review in the light of developments since September 2008 and provide any advice he chooses to on pricing carbon.
 - b) An expert body calculates the carbon price equivalent of measures that China and other developed countries are taking and have committed to take to reduce energy use and greenhouse gas emissions.
 - c) Experts on climate change science and economics conduct a public forum in Parliament House on the economic and social impacts of both climate change and climate change mitigation.
3. A minority Labor Government will facilitate discussion of future tax reform as follows:
 - a) Convene a public forum of experts on taxation and its economic and social effects to discuss the Henry Review, with that meeting to be held before 30 June 2011.
 - b) Facilitate a debate on tax reform in the Australian Parliament following the forum.
4. A Labor Government will take the following specific steps to support biofuels:
 - a) Extending the commitment (outlined in the 2010-11 Budget) to provide additional transitional assistance to the domestic ethanol industry, such that the industry will receive around \$440 million of assistance over the next ten years. This includes:
 - i. Delivering on the Labor Government's previous commitment to a more gradual implementation of the policy to equalise tax on Australian and imported ethanol, providing support for domestic ethanol compared to imports of around \$300 million over the decade, including \$276.5 million over the forward estimates, as included in the 2010-11 Budget.

- ii. Providing further assistance to the ethanol industry during this transition, by halving the speed that the effective rate on domestic ethanol increases (so the excise rate increases to 12.5 cents per litre over ten years instead of five years). This will provide around an extra \$140 million in transitional assistance over the next decade including about \$33 million over the forward estimates, to be funded from the Renewable Energy Future Fund
 - b) Providing a further \$20 million to establish a new Australian Biofuels Research Institute at James Cook University in Townsville. The main focus of the Institute will be research into second generation biofuels and addressing food security issues. The cost of this institute will be met from funds held by the Australian Centre for Renewable Energy.
5. A minority Labor Government will continue its current commitments (funding and/or planning, where relevant) to the following projects:
- a) Chaffey Dam near Tamworth Upgrade.
 - b) Appropriate water supply for Barraba.
 - c) Namoi Valley Water Study.
 - d) Maintenance of \$290 million for the previous budget to the Liverpool Range rail redevelopment.

A minority Labor Government will also ensure appropriate consideration is given to road reconstruction on the New England Highway at Bolivia Hill south of Tenterfield and the Tenterfield Heavy Vehicle Bypass, when suitable funding programs become available.

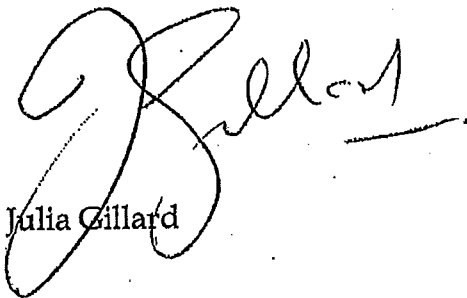
6. A minority Labor Government will also pursue the following other matters:
- a) A referendum during the 43rd Parliament or at the next election on recognition of Local Government in the Constitution.
 - b) Proposals for improving the nation's investments in dental care, to be considered in the context of the 2011 Budget.
 - c) A Parliamentary Committee inquiry to examine the issues of

mining and gas extraction in 'sensitive' farmland such as the Liverpool Plains and the Darling Downs.

d) A review of Agriculture Research and Development funding.

I look forward to working with you during and beyond the upcoming Parliamentary term.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Julia Gillard', with a long horizontal stroke extending to the right.

SMH: Tony Windsor plans new coal seam gas rules to protect water

Posted on December 5th, 2010 by *mt*

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SMH: "Companies seeking to exploit the lucrative NSW coal seam gas reserves are likely to face a new federal regulatory barrier as the independent MP Tony Windsor prepares to use his balance-of-power position to require region-wide water assessments before new mining proceeds.

Mr Windsor told the Herald he wanted to force miners to conduct "bio-regional assessments" of the cumulative impact of their controversial projects on surface and groundwater, preferably before exploration licences were issued, but if necessary before mining proceeded.

He said he would implement the plan either by amending the Water Act, which covers the Murray-Darling Basin region, or the Environmental Protection and Biodiversity Act, which would mean the new rules applied nationwide.

"I want the federal government to be involved in the assessment process right at the outset, so if a region is assessed as being of high risk, the miners don't even bother going there," Mr Windsor said.

"The process would also allow us to assess the cumulative effects of multiple mines in a region, rather than each being assessed separately."

When he proposed a similar amendment to the Water Act in 2008 Labor opposed it, as did the Coalition after initially offering support.

But the federal MP for New England now wields extra clout as one of the three MPs who delivered government to Labor and as chairman of the parliamentary committee into the politically sensitive Murray-Darling Basin plan, which begins hearings this month.

The issue of coal seam gas mines on the rich NSW Liverpool Plains farmland has also been a fraught issue for Mr Windsor's former colleagues and now fierce rivals, the National Party.

Two of the scores of companies with licences to explore for coal seam gas in NSW are chaired by former National Party leaders: Aston Resources by Mark Vaile and Eastern Star Gas by John Anderson.

Farmers and environmental groups have called for a mining moratorium until fears about groundwater contamination are resolved.

On Friday the national water commissioner, Chloe Munro, said the coal seam gas industry needed to be better managed because it could have a "significant" impact on surface and groundwater.

"The commission acknowledges that the coal seam gas industry represents a significant economic opportunity for Australia," she said, releasing a position statement on it.

"However, we also recognise that if not adequately managed and regulated, the industry risks significant, long-term and adverse impacts on surface and groundwater systems."

She said the commission believed coal seam gas developers should operate under the same rules as other water users.

Last month the Water Minister, Tony Burke, approved \$35 billion worth of coal seam gas projects in Queensland, but documents released later showed his department had "significant concerns" about it and said the gas extraction could have implications for the Murray-Darling Basin.

Lenore Taylor | Sydney Morning Herald | Mon Dec 6, 2010

Queensland coal seam gas overview

February 2011

Industry update

Queensland's coal seam gas industry has experienced remarkable growth over the last 15 years.

During that time the number of coal seam gas wells drilled annually increased from 10 in the early 1990s to over 600 in 2009–10.

The coal seam gas industry has defied the recent global economic downturn with exploration and development activity remaining strong.

As at 30 June 2010, proved and probable reserves (2P) reached 27 992 petajoules (PJ). In 2009–10, production increased to 212 PJ from 151 PJ in 2008–09. This represents more than 70 per cent of Queensland's gas production.

Production from the Jurassic Walloon Coal Measures in the Surat Basin has established the basin as an important supply source. Previously, production had been based on the Permian coal measures of the Bowen Basin.

Further growth is expected for this industry with coal seam gas to serve as the feedstock for an export liquefied natural gas (LNG) industry based mainly at Gladstone in central Queensland.

Many basins are highly prospective for coal seam gas with exploration having commenced in the early 1980s. Exploration to date has resulted in the discovery of commercial coal seam gas accumulations in the Bowen Basin and the Surat Basin.

The current level of coal seam gas production from the Bowen and Surat basins is now more than 70 per cent of the total gas produced in the state. Production from these sources is expected to supply an increasing proportion of the Queensland and other eastern Australian markets.

In the past four years there has been a growing interest in using Queensland's coal seam gas resources to produce LNG for export, taking advantage of increasing global demand for gas.

By June 2009, eight proposals for LNG plants in Queensland had been announced, most involving partnerships between Queensland companies with coal seam gas resources and international petroleum companies. The eight proposals, at full capacity, would represent a potential LNG export market for the state of about 50 million tonnes per annum.

By the end of February 2011, three of the eight LNG consortia had been awarded state and federal government environmental approvals to proceed with their projects.

The future of some of these projects is uncertain following the merger of some of the proponents.

Quick facts (at at 30 June 2010)

Coal seam gas production

1998–99	4 PJ
2002–03	27 PJ
2009–10	212 PJ

2P reserves

Coal seam gas	27 992 PJ
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A locality map and contact details for Queensland's coal seam gas resources are on pages 2–4
For more information go to www.deedi.qld.gov.au

More than 4000 kilometres of gas transmission pipelines have been constructed, with additional links to markets interstate and for supply of gas to the proposed Gladstone LNG plants.

Development and investment in new gas pipelines to service growing markets underpin further development of the state's coal seam gas resources.

The Queensland Government is encouraging a transition from coal to gas, as an effective mechanism to reduce greenhouse gas emissions. Its 2007 Smart Energy Policy required that 15 per cent of all electricity sold in Queensland was to be sourced from gas-fired generation by 2010.

The Queensland Government is also supporting the growth of the petroleum industry by making available geoscientific information and company exploration data, and coordinating approvals for major petroleum projects.

Access to petroleum exploration acreage in Queensland is provided through a tender process, conducted at least annually.

For further information contact:

Department of Employment, Economic Development and Innovation
Geoscience Manager, Energy
Level 10, 119 Charlotte Street, Brisbane QLD 4000

Email: petroleum@dme.qld.gov.au

www.deedi.qld.gov.au

Note: Data sourced from Statutory Tenure Reports as at 30 June 2010
Department of Employment, Economic Development and Innovation.

Table 1: Queensland coal seam gas – statistics for financial year 2009–10 (Source: Statutory Tenure Reports 30 June 2010)

Project name	2P Reserves (PJ)	Gas (PJ)	Water (ML)	Status	Basin	Location – stratigraphic unit	Tenure
Anglo Coal (Dawson) Limited							ph: +61 7 3834 1333 fx: +61 73834 1390 www.anglocoal.com.au
1. DAWSON VALLEY Includes Moura, Mungi, Dawson River, Nipan	171.7	•	•	op	Bowen	Moura area – (Baralaba Coal Measures)	PL 94, ATP 564
2. DAWSON RIVER	n/a	0.37	19.5	op	Bowen	Moura area – (Baralaba Coal Measures)	PL 94
3. MOURA	n/a	0.48	1.2	op	Bowen	Moura area – (Baralaba Coal Measures)	PL 94
4. MUNGI	n/a	0.47	2.7	op	Bowen	Moura area – (Baralaba Coal Measures)	PL 94
5. NIPAN	n/a	0.48	13.4	op	Bowen	Moura area – (Baralaba Coal Measures)	PL 94
Arrow Energy Limited							ph: +61 7 3012 4400 fx: +61 7 3012 4401 www.arrowenergy.com.au
6. Bowenville	834.8	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 683
7. Burunga Lane	328.9	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	ATP 810
8. Carborough	158.6	•	•	ud	Bowen	Morandah area – (Moranbah Coal Measures)	PL 223
9. Castledean	203.9	•	•	ud	Surat	Miles area – (Walloon Coal Measures)	ATP 810
10. DAANDINE	318.8	9.12	1165.9	op	Surat	Dalby area – (Walloon Coal Measures)	PL 230
11. Dalby South	130.6	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 683
12. Dundee	101	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 676; PLA 185
13. Hopelands	135.7	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 676; PLA 185
14. Kedron	91.5	•	•	ud	Surat	Miles area – (Walloon Coal Measures)	ATP 810
15. KOGAN NORTH	165.2	3.7	880.1	op	Surat	Dalby area – (Walloon Coal Measures)	PL 194
16. Long Swamp	447	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 683; PLA 260
17. Meenawarra	301.1	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 683; PLA 258
18. Millmerran	108.2	•	•	ud	Surat	Millmerran area – (Walloon Coal Measures)	ATP 683
19. MORANBAH GAS PROJECT	1352.2	16.85	660.8	op	Bowen	Moranbah area – (Moranbah Coal Measures)	PL 191, 196, 222, 224; ATP 364
20. Plainview	609.3	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 683; PLA 238
21. S1 and S2	13.3	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 676
22. Stratheden	264.3	•	128.8	ud	Surat	Dalby area – (Walloon Coal Measures)	PL 252
23. TIPTON WEST	675.3	12.3	2415.3	op	Surat	Dalby area – (Walloon Coal Measures)	PL 198
Bow Energy Ltd							ph: +61 7 3238 6300 fx: +61 7 3238 6399 www.bowenergy.com.au
24. Blackwater	61.2	•	•	ud	Surat	Blackwater area – (Rangal Coal Measures)	ATP 1025
25. Don Juan	57.2	•	•	ud	Surat	Roma area – (Walloon Coal Measures)	ATP 771
Origin Energy							ph: +61 7 3858 0600 fx: +61 7 3369 7840 www.originenergy.com.au
26. Combabula	2534.9	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	ATP 606
27. Condabri	1288.6	•	•	ud	Surat	Miles area – (Walloon Coal Measures)	ATP 702
28. Dalwogen	109.3	•	•	ud	Surat	Miles area – (Walloon Coal Measures)	PL 216
29. Gilbert Gully	146.1	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 663
30. Kalnama	61.3	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 692
31. Kalnama North	11.2	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 692
32. Membrane	15.3	•	•	ud	Bowen	Injune area – (Bandanna Formation)	PL 219
33. Orana	311.7	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	PL 215
34. Orana North	451.6	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 692
35. PEAT	134	3.29	12.1	op	Bowen	Wandoan area – (Baralaba Coal Measures)	PL 101
36. Ramyard	395.7	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	ATP 847
37. SPRING GULLY	1704.9	40.82	1899.8	op	Bowen	Injune area – (Bandanna Formation)	PLs 195, 200, 203, 204; ATP 592
38. TALINGA	578.4	8.44	1624.2	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 226
39. Woleebee	64.4	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	PL 209

Table 1: Queensland coal seam gas — statistics for financial year 2009–10 (Source: Statutory Tenure Reports 30 June 2010)

Project name	aP Reserves (PJ)	Gas (PJ)	Water (ML)	Status	Basin	Location – stratigraphic unit	Tenure
Queensland Gas Company Limited (a BG Group business)						ph: +61 7 3024 9000 fx: +61 7 3024 8999	www.qgc.com.au
40. Aberdeen, Ridgewood	378.2	•	•	ud	Surat	Dalby area – (Walloon Coal Measures)	ATP 621
41. ARGYLE	200.1	5.06	864.2	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 179
42. ARGYLE EAST	71.5	2.14	337.4	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 229
43. BELLEVUE	278.8	2.91	462.2	ud	Surat	Chinchilla area – (Walloon Coal Measures)	PL 247
44. BERWYNDALE	246.6	0.27	31.9	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 211
45. Berwyndale and Berwyndale Deep	102	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 632
46. BERWYNDALE SOUTH	241.2	35.97	1624.9	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 201
47. Cameron	991.6	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	ATP 852
48. CODIE/LAUREN	654.9	7.3	539.4	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 180
49. KENYA	655.4	5.65	1299.2	op	Surat	Chinchilla area – (Walloon Coal Measures)	PL 228
50. Kenya East/Jammat/Jen/Sean	2896.7	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 648
51. Lacerta	110.9	•	•	ud	Surat	Roma area – (Walloon Coal Measures)	ATP 767, 795
52. Matilda John	367	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 620
53. Owen/McNulty/Avon Downs	22.5	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 676
54. Polaris	423.5	•	•	ud	Surat	Wandoan area – (Walloon Coal Measures)	ATP 768
55. Woleebee Ck/Ross/Cam/Kathleen	740.2	•	•	ud	Surat	Chinchilla area – (Walloon Coal Measures)	ATP 651
Santos Ltd						ph: +61 7 3838 3000 fx: +61 7 3838 3700	www.santos.com.au
56. Arcadia	356.4	•	•	ud	Bowen	Injune area – (Walloon Coal Measures)	PL 233-4, ATP 653
57. ATP 631	1031	•	•	ud	Surat	Miles area – (Walloon Coal Measures)	ATP 631
58. COXON CREEK	1336.3	0.46	44.1	op	Surat	Roma area – (Walloon Coal Measures)	PLs 3-8, 13, 93, ATP 336
59. FAIRVIEW	2370.6	47.18	2971.5	op	Bowen	Injune area – (Bandanna Formation)	PLs 90-92, 99, 100
60. SCOTIA	179.2	8.84	•	op	Bowen	Wandoan area – (Baralaba Coal Measures)	PL 176

Inset

op – operating field ud – under development ATP – Authority to Prospect PLA – Petroleum Lease Application PL – Petroleum Lease

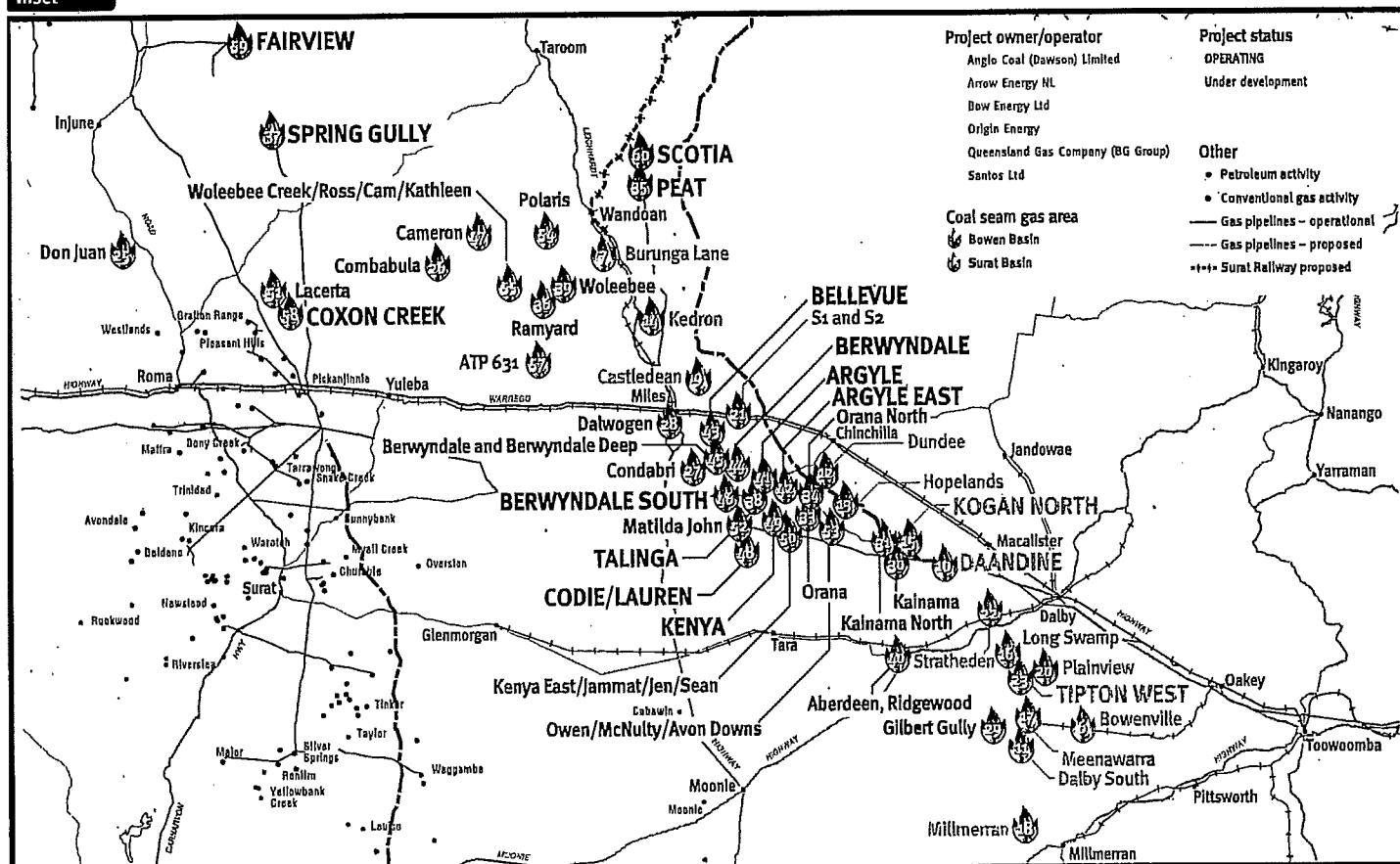
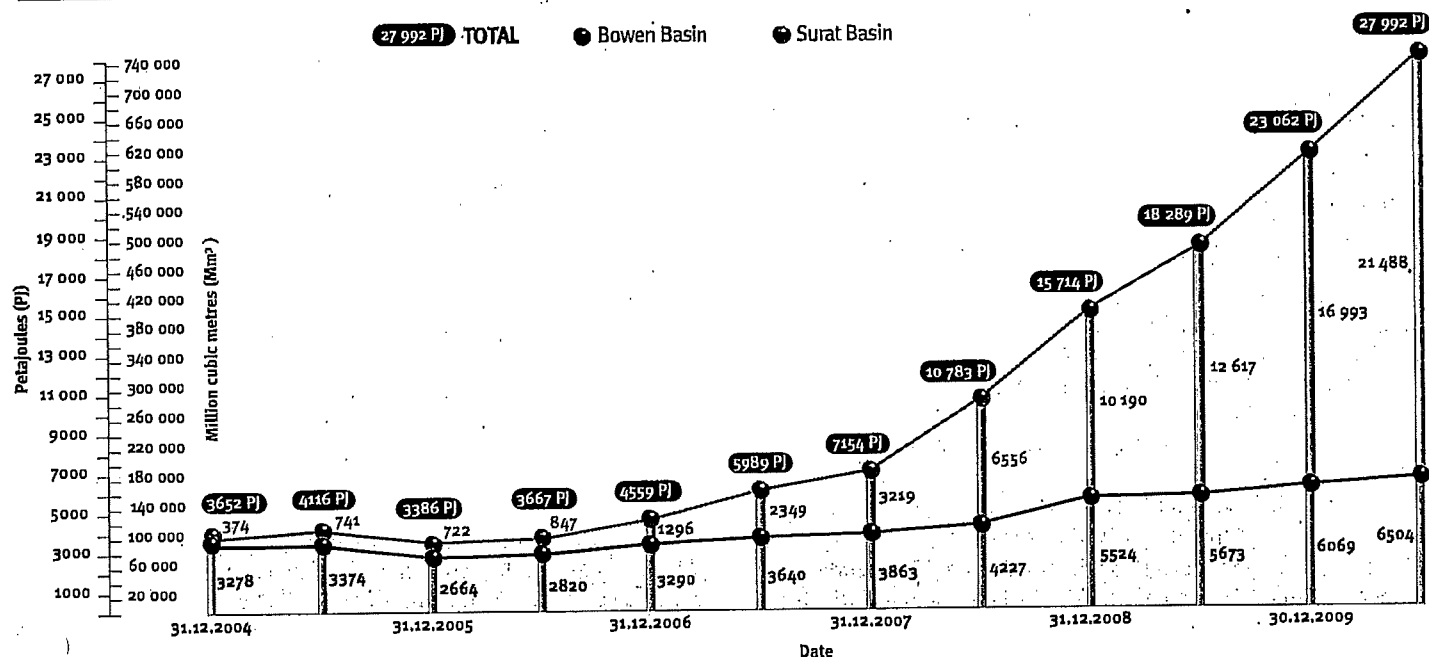


Figure 2: Queensland coal seam gas — 2P reserves (proved and probable)



Bowen Basin

The Permian-Triassic Bowen Basin is the birthplace of the coal seam gas industry in Queensland. The first commercial production commenced from the Dawson River coal seam gas area near Moura in 1996 and later from the Fairview coal seam gas area near Injune in 1998. Currently commercial production of coal seam gas occurs in the central and southern parts of the basin near Moranbah, Injune, Moura and Wandoan.

The Permian coal measures are the main targets in this basin. Coal seam gas is produced from the Moranbah Coal Measures near Moranbah with the overlying Rangal Coal Measures and Fort Cooper Coal Measures also being actively explored elsewhere. Coal seam gas produced from the areas east of Injune is sourced from the Bandanna Formation and from the Baralaba Coal Measures in the Moura and Wandoan areas.

Production from this basin has provided the majority of coal seam gas supplied to the Queensland market to date. Certified proved and probable coal seam gas reserves are increasing steadily.

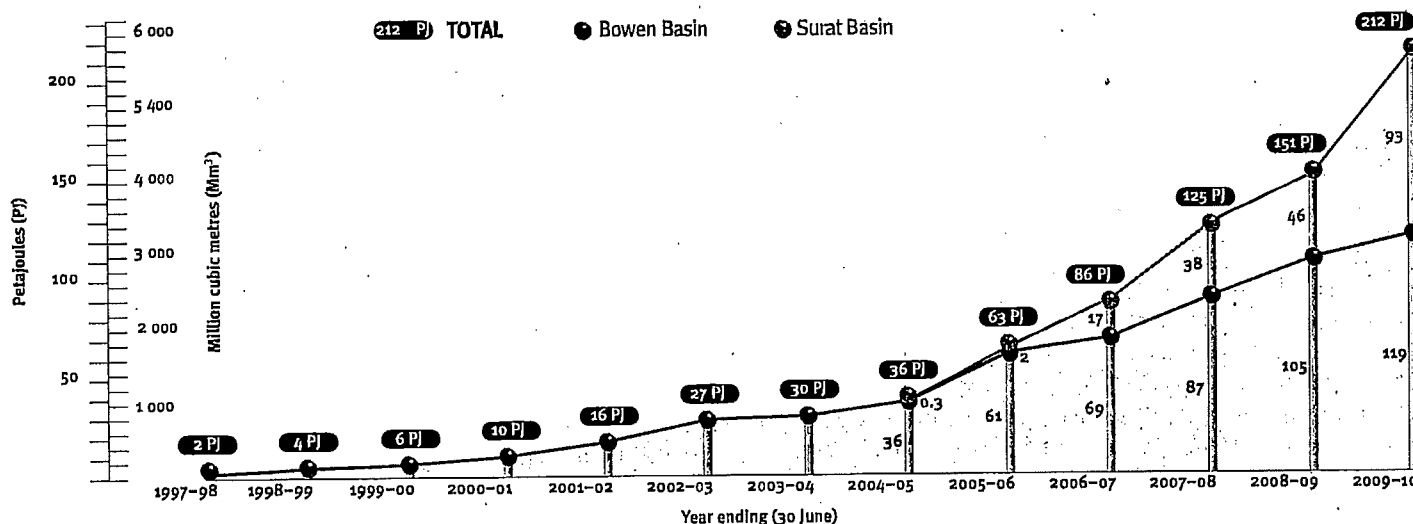
Surat Basin

Over the last few years, the Jurassic-Cretaceous Surat Basin in southern Queensland has grown in importance as a source of coal seam gas. Coals here were not buried as deeply as those in the Bowen Basin and therefore are less thermally mature, with generally lower gas contents. This is compensated for by having higher permeability. The coal is generally shallower, resulting in lower drilling and completion costs. Production is from the Walloon Coal Measures.

Commercial production of coal seam gas from the Surat Basin began in January 2006 from the Kogan North coal seam gas area west of Dalby. This was followed in May 2006 by production from the Berwyndale South coal seam gas area, south-west of Chinchilla. Coal seam gas is also currently produced from several areas from Dalby through to Chinchilla.

Certified proved and probable reserves in the Surat Basin have increased significantly in recent years. As at 30 June 2008, the certified coal seam gas reserves in the Surat Basin overtook those in the Bowen Basin.

Figure 3: Queensland coal seam gas — production period 1997–2010



Export liquefied natural gas projects

In the past four years, there has been a growing interest by Australian and international energy companies in using Queensland's CSG reserves to develop an export LNG sector. Eight export LNG projects have been publicly announced. If all eight materialise, over 50 million tonnes per annum (Mtpa) of LNG could be exported from Queensland, commencing in 2013. The status of each of these projects as at February 2011 is summarised below:

1. Gladstone Liquefied Natural Gas Project — Santos/PETRONAS/Total/Kogas

- Santos Ltd/PETRONAS/Total/Kogas propose to develop an LNG plant at Hamilton Point West on Curtis Island, called the Gladstone Liquefied Natural Gas Project (GLNG). The project will have an initial capacity of 7.8 Mtpa, with the first LNG cargo expected in 2014. The proposal includes the further development of Santos' gas fields in the Bowen and Surat basins and construction of a 450 km gas pipeline linking the gas fields to Gladstone.
- The project will have a construction workforce of about 3500, with a permanent operational workforce of 960.
- On 16 July 2007, the project was declared a 'significant project' under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). On 28 May 2010, the Coordinator-General's Evaluation Report was issued, with 1200 conditions.
- On 22 October 2010, the Honourable Tony Burke, MP, Australian Minister for Sustainability, Environment, Water, Population and Communities, announced that he had conditionally approved the GLNG project, subject to an additional 300 conditions.
- Board sanction (final investment decision) of the \$16 billion project was given to this project on 13 January 2011.

2. Queensland Gas Company

- Queensland Gas Company Pty Ltd (QGC), a wholly-owned subsidiary of British Gas Group (BG), proposes to develop an LNG plant at North China Bay on Curtis Island, called the Queensland Curtis LNG Project (QCLNG). It will have an initial capacity of 8.5 Mtpa, with the potential to increase production to 12 Mtpa. The first LNG cargo is expected in 2014. The proposal includes the further development of QGC's coal seam gas fields around Miles in the Surat Basin and the construction of a 380 km pipeline linking the fields to Gladstone.
- The project will have a construction workforce of about 5000, with a permanent operational workforce of 1000.
- On 4 July 2008, the project was declared a 'significant project' under the SDPWO Act. On 23 June 2010, the Coordinator-General's Evaluation Report for the project was issued, with 1200 conditions.
- On 22 October 2010, the Honourable Tony Burke MP, Australian Minister for Sustainability, Environment, Water, Population and Communities, announced that he had conditionally approved the project, subject to an additional 300 conditions.
- Final investment decision of US\$15 billion was given on 31 October 2010.

3. Gladstone LNG Project — Fisherman's Landing — LNG Limited

- LNG Limited (LNL) proposes to develop an LNG plant at Fisherman's Landing, Gladstone, called the Gladstone LNG Project — Fisherman's Landing. It will have an initial capacity of 1.5 Mtpa and first cargo is expected in 2013. An additional train is proposed to be added within two years of the commencement of operations, increasing total output to about 3 Mtpa.
- The Environmental Impact Statement (EIS) was approved under the *Environmental Protection Act 1994* in April 2009.
- On 27 September 2010, LNL announced an agreement with Metgasco Limited to jointly study the feasibility of supplying CSG from Metgasco's field in the Clarence–Moreton Basin to the Fisherman's Landing project in Gladstone.
- Final investment decision is yet to be announced.

4. Australia Pacific LNG — Origin and ConocoPhillips

- Origin and ConocoPhillips propose to construct a four-train LNG plant on Curtis Island near Gladstone called Australia Pacific LNG (APLNG), a 50:50 joint venture between Origin and ConocoPhillips. The first train is expected to begin production in 2015, up to a total production of 14 Mtpa in due course.
- The project will have a construction workforce of about 5000, with a permanent operational workforce of about 1000.
- On 7 April 2009, the project was declared a 'significant project' under the SDPWO Act, with the Coordinator-General's Evaluation Report for the project being released on 9 November 2010.
- On 22 February 2011, APLNG gained federal environmental approval for its Gladstone CSG to LNG project.
- Final investment decision is expected to occur in mid 2011.

5. Arrow Energy LNG (formerly Shell Australia LNG)

- Royal Dutch Shell (Shell)/Arrow Energy initially proposed to construct a 9 to 10 Mtpa plant at Boatshed Point on Curtis Island near Gladstone. No formal statement on when the first cargo was expected to occur has been provided.
- Following the completion of Shell–PetroChina's acquisition of Arrow Energy, the new operating company name is CSCSG Pty Ltd — a 50:50 joint venture between Shell and PetroChina.
- The project is now called the Arrow Energy LNG Project.
- The project will have a construction workforce of about 3000, with a permanent operational workforce of 300.
- On 12 June 2009, the project was declared a 'significant project' under the SDPWO Act. Arrow Energy is currently preparing its EIS for the project, which is expected to be lodged for the Coordinator-General's consideration by mid 2011.
- No final investment decision has been announced.

6. Southern Cross LNG — Impel LNG

- Impel LNG (Southern Cross LNG) proposes to construct an open-access LNG terminal on Curtis Island, which would have a capacity of 0.7 to 1.3 Mtpa. Impel LNG also proposes to build an open access, 400 km pipeline (the Southern Cross Gas Pipeline) to Gladstone. The project is in the early planning stages.

7. Project Sun — Sojitz Corporation

- Sunshine Gas and Sojitz Corporation initially proposed to establish a mid-scale LNG plant at Fisherman's Landing to produce 0.5 Mtpa of LNG. In the second stage, production is expected to increase to 1 Mtpa.
- Sunshine Gas has since been acquired by QGC, necessitating Sojitz to seek an alternative gas supplier.
- This project is in the early planning stages.

8. LNG Plant, Abbott Point (Energy World Corporation)

- Energy World Corporation proposes to establish a 0.5 Mtpa LNG plant at Abbott Point. The proposal includes the development of Energy World's tenures in the Cooper Basin near Eromanga and the construction/operation of a pipeline linking the fields to Abbott Point. In the second stage, production would increase to 2 Mtpa. The project is in the early planning stages.

Summary

As at February 2011, three of the proposed LNG projects, the Gladstone Liquefied Natural Gas Project (GLNG), the Queensland Curtis LNG Project (QCLNG) and the Australia Pacific LNG Project (APLNG) had received state and federal government environmental approval. The boards for two of the projects (GLNG and QCLNG) have since sanctioned their respective projects. Sanction of the APLNG project is expected in mid 2011. Decisions to proceed with each of the other five projects will continue to be based on commercial viability (including proving sufficient reserves to supply the LNG plants).

Coal Seam Gas

Ron Sait (contact aden.mckay@ga.gov.au)

Coal Seam Gas (CSG) is a naturally occurring methane gas which is formed during coalification (the process whereby organic matter is converted into coal). The methane is usually mixed with carbon dioxide, other hydrocarbons and nitrogen. CSG also is referred to as Coal Seam Methane (CSM) and Coal Bed Methane (CBM). Methane which is produced or released as part of coal mining operations is called Coal Mine Methane (CMM)

CSG is similar to conventional natural gas and is used to power water heaters, stoves and space heaters for both domestic and business settings as well as to fuel industrial facilities and generate electricity. Water is produced as a by-product of CSG production, although any beneficial reuse of the water depends on a number of factors including its quality, the cost of treatment and required pipeline infrastructure. Water of suitable quality can be used for town water, aquaculture, recharging aquifers, wetlands and recreational lakes or at mining operations and power stations. Poor quality water may be required to be contained in storage ponds.

Resources

In December 2009, the proven and probable (reported as '2P' under the Society of Petroleum Engineers—Petroleum Resources Management System <http://www.spe.org/industry/reserves/prms.php>) reserves of CSG in Australia were 26 132 Petajoules (PJ) a 61.5% increase over the 2008 2P reserves of 16 179 PJ. The life of the resource is more than 130 years at the current annual rate of extraction of 195 PJ. Queensland has 23 038 PJ (or 88.1%) of the 2P reserves with the remaining 3094 PJ in New South Wales. Queensland's Surat Basin has 64.9% and the Bowen Basin has 23.2% of Australia's 2P CSG reserves respectively. Note that there are no CMM reserves.

Exploration expenditure

Data relating to exploration expenditure are not published by the Australian Bureau of Statistics (ABS) on either a State or Australia-wide basis.

Production

In 2009, CSG production was 195 PJ, which is a 41% increase on the 2008 production of 138.5 PJ. Queensland produced 189 PJ (or 97%) from the Bowen Basin (117 PJ) and Surat Basin (72 PJ). In New South Wales, 5.8 PJ was produced from the Sydney Basin (5.6 PJ) and Gunnedah Basin (0.2 PJ). Note that CMM is not counted in CSG production statistics.

Industry Developments

QUEENSLAND.

Shell Australia: The company is investigating the development of a liquefied natural gas (LNG) plant at Curtis Island near Gladstone. The plant is expected to produce up to 16 million tonnes per annum (Mtpa) of LNG from 2015. Shell has acquired 30% of Arrow Energy's CSG resources.

Arrow Energy: The Stratheden project located in the Surat Basin, 20km northwest of Dalby commenced producing CSG in July 2009. The Arrow Energy and ERM Power Braemar 2 \$545 million 450 megawatt (MW) open cycle CSG fired power station was completed in June 2009. The 540MW Braemar 3 open cycle CSG fired power station is planned to be in operation from 2012. Arrow Energy is planning to develop a CSG to LNG project at Fisherman's Landing in Gladstone. The project is expected to produce up to 3Mtpa of LNG from late 2012 for a period of 12 years. The proposed Surat Gas Project involves the staged development of approximately 1500 production wells and infrastructure in an area around Arrow's existing Surat fields.

Australia Pacific LNG (APLNG): In October 2009, Origin Energy and ConocoPhillips formed a 50:50 joint venture called Australia Pacific LNG. The joint venture plans to develop four LNG plants at Laird Point on Curtis Island near Gladstone. The first train is expected to be commissioned in late 2014. With all plants operational by 2020 the project will produce 14 to 16Mtpa of LNG. Stage 1 of the Talinga CSG Project near Chinchilla was commissioned in November 2009. In January 2010, commissioning commenced on Stage 2 of the Talinga Project and in December 2009, Origin Energy commissioned the Darling Downs 630MW CSG fuelled power station.

Santos Ltd: The \$7 billion Gladstone LNG Project (60% Santos/40% Petronas) is a 3 to 4Mtpa LNG plant which is planned to commence exports in 2014. CSG is planned to be sourced from Santos' CSG fields in the Bowen and Surat Basins.

Queensland Gas Company (a Division of BG Group): The CSG fuelled 135MW Condamine Power Station was commissioned in late 2009. The \$8 billion Queensland Curtis LNG Project involves transporting CSG via a 340km pipeline to Gladstone where the gas is converted into LNG on Curtis Island. Construction of the 12Mtpa project is planned to commence in 2010 with commissioning in 2013. In March 2010, the company and BOC Ltd signed a \$100 million agreement which will result in the construction of a LNG plant next to the Condamine Power Station. The plant will produce LNG to fuel trucks. Construction is expected to start in early 2011.

Pacific GTL Ltd: The \$1.5 billion SunState GTL Project is planned to produce 6 million barrels per annum of liquid fuels. Construction of the CSG to liquids project is expected to commence in 2010 at a site east of Miles.

Molopo Australia: Molopo plans to construct a \$65 million 60MW power station in Moura fuelled by CSG from the Mungi field. Molopo is investigating a 100MW CSG fuelled power station on the Harcourt South field also located near Moura.

Bow Energy: The 30MW CSG fired power station located at Blackwater is expected to be commissioned in early 2011.

NEW SOUTH WALES

Coal and Allied Ltd: At the Mount Thorley Warkworth in the Hunter Valley a \$5.5 million pilot project is aimed at reducing fugitive emissions of methane released during mining.

Metgasco Ltd: The Richmond Valley 30MW CSG fired power station is planned to provide electricity to northeast New South Wales. Metgasco plans to provide CSG to southeast Qld via the 145km long Lions Way pipeline.

AGL: The northern expansion of the Camden Gas Project includes the proposed establishment of a gas extraction plant at Varroville.

Eastern Star Gas (ESG): The Wilga Park gas fired power station is being expanded to 40MW. The first new 3MW generator was commissioned in July 2009. Gas for the power station is primarily sourced from the company's Narrabri Coal Seam Gas Project.

Macquarie Generation: Seventy-five kilometres of pipelines are planned to supply mine methane gas from local underground coal mines to the Liddell Power Station in the Hunter Valley.

Coal to Liquids

Ron Sait (contact aden.mckay@ga.gov.au)

The production of liquids from coal requires the breakdown of the chemical structures present in coal with the simultaneous elimination of oxygen, nitrogen and sulphur and the introduction of hydrogen to produce a stable liquid product. Coal can be converted into a variety of products including petrol, diesel, jet fuel, plastics, gas, ammonia, synthetic rubber, naphtha, tars, alcohols and methanol. There has been extensive research into converting coal to a liquid, for which there are basically three approaches, pyrolysis (direct method), hydrogenation (direct method) and gasification and synthesis (indirect method).

CTL technology was developed in the early 20th century and was used in Germany in the 1930s and 1940s. Since 1955 in South Africa, SASOL has operated a CTL plant and in late 2008 the Shenhua Group commissioned a CTL plant at Ordos in China. In Australia from 1955 to 1969 a Lurgi gasification plant in Victoria produced gas for the Melbourne market using briquettes made from Yallourn brown coal. From 1985 to 1990 a Japanese consortium operated a CTL pilot plant at Morwell which demonstrated that hydrogenation of La Trobe Valley brown coal was technically feasible.

Underground Coal Gasification (UCG) Synthetic gas (syngas), can be produced by underground, or in-situ coal gasification. In this method, fuel gases are produced underground when a coal seam gets enough air to burn,



Australian Government
National Water Commission

Position Statement
Coal Seam Gas and Water

The Coal Seam Gas and water challenge

The Coal Seam Gas (CSG) industry offers substantial economic and other benefits to Australia. At the same time, if not adequately managed and regulated, it risks having significant, long-term and adverse impacts on adjacent surface and groundwater systems.

In light of the scale of potential benefits and associated risks, the National Water Commission is highlighting the need for appropriate management of CSG developments, consistent with the objectives of the National Water Initiative (NWI). To meet NWI objectives, the Commission recommends that industry, water and land-use planners, and governments adopt a precautionary approach to CSG developments, ensuring that risks to the water resource are carefully and effectively managed.

Current projections indicate the Australian CSG industry could extract in the order of 7,500 gigalitres of co-produced water from groundwater systems over the next 25 years, equivalent to ~300 gigalitres per year. In comparison, the current total extraction from the Great Artesian Basin is approximately 540 gigalitres per year.

Potential impacts of CSG developments, particularly the cumulative effects of multiple projects, are not well understood.

Potential risks to sustainable water management

- Extracting large volumes of low-quality water will impact on connected surface and groundwater systems, some of which may already be fully or overallocated, including the Great Artesian Basin and Murray-Darling Basin.
- Impacts on other water users and the environment may occur due to the dramatic depressurisation of the coal seam, including:
 - changes in pressures of adjacent aquifers with consequential changes in water availability
 - reductions in surface water flows in connected systems
 - land subsidence over large areas, affecting surface water systems, ecosystems, irrigation and grazing lands.
- The production of large volumes of treated waste water, if released to surface water systems, could alter natural flow patterns and have significant impacts on water quality, and river and wetland health. There is an associated risk that, if the water is overly treated, 'clean water' pollution of naturally turbid systems may occur.
- The practice of hydraulic fracturing, or fracing, to increase gas output, has the potential to induce connection and cross-contamination between aquifers, with impacts on groundwater quality.
- The reinjection of treated waste water into other aquifers has the potential to change the beneficial use characteristics of those aquifers.

In addition to these water management risks, CSG development could also cause significant social impacts by disrupting current land-use practices and the local environment through infrastructure construction and access.

The Commission is concerned that CSG development represents a substantial risk to sustainable water management given the combination of material uncertainty about water impacts, the significance of potential impacts, and the long time period over which they may emerge and continue to have effect. Therefore, an adaptive and precautionary management approach will be essential to allow for progressive improvement in the understanding of impacts, including cumulative effects, and to support timely implementation of 'make good' arrangements.

CSG and the National Water Initiative

Under clause 34 of the NWI, the signatory governments agreed that there may be special circumstances facing the petroleum and minerals sectors that need to be addressed by policies and measures beyond the scope of the NWI Agreement. In this context, all governments noted that specific project proposals would be assessed according to environmental, economic and social considerations, and that factors specific to resource development projects (such as isolation, relatively short project duration, water quality issues, and obligations to remediate and offset impacts) may require specific management arrangements outside the scope of the NWI.

Progress on CSG related reforms

In its 2009 Biennial Assessment of national water reform progress, the Commission found that the circumstances in which special clause 34 would apply are not defined and identified in a consistent and transparent manner. Little progress had been made in the five years since the signing of the NWI in fleshing out the special provisions for the minerals, petroleum and related industries. As a consequence, there has been little integration of those industries with broader water markets and water planning processes, despite the potential for considerable benefits in many cases.

The potential impacts of CSG extraction are currently managed through state and territory laws and policies, including environmental approval processes with subsequent conditions or special arrangements often implemented to mitigate risks to the environment and communities. These conditions are set by the approving authority which can be a state government minister or appointed official. In certain circumstances, the Commonwealth Minister for the Environment will have a role in approving and setting conditions for projects under the Commonwealth *Environment Protection and Biodiversity Conservation Act*.

While these processes have the capacity to address many of the issues relating to water and CSG development, they are often not well integrated with state and territory water planning and management arrangements.

The Commission's work on CSG

The Commission is completing a discussion paper on CSG water issues and potential impacts to provide useful background information for regulators, water managers and other water users. A \$1.8 million *Potential local and cumulative effects of mining on groundwater resources* project funded by the Commission is also developing tools and guidelines to account for potential local and cumulative effects of mining on groundwater resources. These guidelines and tools are intended to assist in the management of CSG.

Principles for managing CSG and water

The Commission believes that wherever there is potential for significant water resource impacts, CSG activities should be incorporated into NWI consistent water planning and management regimes from their inception. Given the high level of uncertainty around water impacts, and the temporal nature of CSG developments, this will likely require a precautionary approach that demands innovation from water managers and planners, and significantly greater coordination with existing project approval processes.

Specifically, the Commission proposes the following principles be applied by state and territory jurisdictions to managing the cumulative impacts of CSG water:

- The interception of water by CSG extraction should be licensed to ensure it is integrated into water sharing processes from their inception.
- Project approvals should be transparent, including clear and public articulation of predicted environmental, social and economic risks along with conditions implemented to manage the risks.
- Adequate monitoring, including baseline assessment of surface and groundwater systems, should be undertaken to provide a benchmark for assessing cumulative impacts on other water users and water-dependent ecosystems.

- Jurisdictions should work to achieve consistent approaches to managing the cumulative impacts of CSG extraction. Such arrangements should consider and account for the water impacts of CSG activities in water budgets and manage those impacts under regulatory arrangements that are part of, or consistent with, statutory water plans and the National Water Initiative.
- Potential options to minimise the cumulative impacts of extraction on the water balance should be pursued as a first priority. These options include aquifer reinjection, where water quality impacts are acceptable, and groundwater trading or direct substitution for other water use.
- If discharges to surface waters are unavoidable, discharges should be conditioned so that environmental values and water quality objectives, including water quality to meet public health objectives, are protected. In such circumstances discharges to ephemeral streams should be pulsed to avoid flows in naturally dry periods.
- Jurisdictions should undertake water and land-use change planning and management processes in an integrated way to ensure that water planning implications of projects are addressed prior to final development approval.
- Clear accountabilities should be identified for any short- or long-term cumulative impacts from CSG processes, clarifying which organisations are responsible for managing and rectifying or compensating for any impacts.
- The full costs, including externalities, of any environmental, social and economic water impacts and their management should be borne by the CSG companies. This includes, if not already in place, mechanisms such as bonds and sureties that deal with uncertainty and the timeframes associated with potential impacts. Given that these timeframes may extend for 100 or more years, current systems need to be re-evaluated.
- A precautionary and adaptive approach to managing and planning for CSG activities is essential to enable improved management in response to evolving understanding of current uncertainties. This includes impacts such as long-term reductions in adjacent aquifer pressures and levels, and impacts on environmental assets that are not adequately protected by current 'make good' mechanisms.
- Water produced as a by-product of CSG extraction, that is made fit for purpose for use by other industries or the environment, should be included in NWI-compliant water planning and management processes. This will enable CSG producers to manage this resource in accordance with the principles of the National Water Initiative.

The consequences of not managing the water risks and uncertainties associated with the economic benefits of CSG are substantial. Therefore, the Commission strongly argues for the careful, transparent and integrated consideration of water-related impacts in all approval processes.

The Commission's position is that NWI-consistent water access entitlements should be made available to coal seam gas activities wherever possible, as the use of Clause 34 of the NWI is only intended to operate in exceptional circumstances. Where Clause 34 is used, a clear and transparent explanation of why it was used, rather than complying with the normal water planning and management regime, should be provided.

National Water Commission
December 2010

UNCLASSIFIED



Australian Government
Department of Agriculture, Fisheries and Forestry

Minute No: MNMT2011/04363
Allen Grant
Ph: 6272 5777 / 0407 436 159
Agricultural Productivity Division

TO Minister for Agriculture, Fisheries and Forestry

TITLE QUEENSLAND STRATEGIC CROPPING LAND
LEGISLATION

ACTION REQUIRED For noting

PRIORITY Normal business

CRITICAL DATE N/A

EXPLANATION OF CRITICAL DATE AND ROLE OF SIGNATORY

Your office has asked for briefing on the Queensland government's proposed legislation on strategic cropping land and its impacts on agriculture in Queensland. There is no critical date.

RECOMMENDATIONS

That you:

a. Note that:

- the Queensland government is introducing a strategic cropping land policy and planning framework which aims to protect Queensland's most productive cropping land from competing development activities;
- legislation to implement the framework is expected to be in place by the end of 2011 and will require increased levels of assessment before approval is given for developments on land classified as strategic cropping land;
- [REDACTED] s47B
- [REDACTED] s47B
- details of the framework and how it will apply will become available in the near future when a draft State Planning Policy and a Regulatory Assessment Statement are released for public consultation.

Noted / Please Discuss

.....
Joe Ludwig
/ / 2011

MINISTER'S COMMENTS

COPIES: Secretary
Deputy Secretary – Dickson

Deputy Secretary – Glyde
Executive Manager – CPD

Deputy Secretary – Mellor
Executive Manager

FILE REF NUMBER:

Minute to Minister or Parl Sec v2.7

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KEY ISSUES

1. The Queensland government is implementing a strategic cropping land policy and planning framework to address the issue of land use competition in agricultural areas with the aim of protecting Queensland's most productive cropping land from competing development activities.
2. The new policy framework will complement the state's existing sustainable planning and resources legislation. It will require assessment of proposed development activities that could temporarily or permanently affect land classified as strategic cropping land (land which has the soil, rainfall and topography to support more than one quality commercial crop) before developments on that land are approved. It comprises three elements:
 - a new State Planning Policy to regulate the impacts of urban development and other developments under the *Sustainable Planning Act 2009*;
 - amendments to existing resources legislation to regulate mining and other resource developments; and
 - new legislation applying specifically to strategic cropping land resources.
3. The Queensland government is currently considering options for further developing the framework. A draft State Planning Policy and a Regulatory Assessment Statement are expected to be released shortly for a 40 day public consultation period, along with guidelines to help land owners and developers determine whether their land is strategic cropping land. These documents will provide details on how the new policy framework will work and where it will apply. Legislation and associated instruments to implement the framework will then be drafted and there will be further consultation with stakeholders during this process.
4. The legislation is expected to be in place by the end of 2011 and commence in 2012. It will set out the science-based criteria for identifying and protecting areas of strategic cropping land as a part of the assessment of development proposals. It will be supported by maps that show where strategic cropping land policy may apply and provide mechanisms for land owners to apply to have these maps amended.
5. The Queensland government has released draft criteria to identify strategic cropping land. The eight key criteria are slope, rockiness, soil depth, drainage, soil pH, salinity, soil water storage and gilgai microrelief (small depressions in the land caused by wet weather).
6. The Queensland government has also released a series of draft 'trigger maps' to provide an indication of where strategic cropping land is likely to exist but actual areas of strategic cropping land will be determined by on-ground assessment against the criteria. Currently, 2.2 per cent of land in Queensland is used for cropping but, because both current and potential future cropping land will be considered, up to 4 per cent of land has the potential to become strategic cropping land.

s47B

7

8. Grazing land is not covered by the policy framework but is addressed under another state government planning instrument (SP1/92) which protects agricultural land (including grazing land). This instrument will continue to apply to any agricultural land not captured by the new State Planning Policy and should protect important farming land not classified as strategic

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cropping land.

9. The horticulture industry has expressed concern that the focus of the draft criteria is too narrow and could exclude highly productive regions growing major horticultural crops such as pineapples, citrus and grapes from protection. However, because strategic cropping land will be determined on the basis of the quality of the soil resource, rather than the specific crop that the land is, or could be, used for, the new policy framework does not include or exclude particular crops.
10. The Queensland government has indicated that some mining operations on the most fertile agricultural land will be banned. This has led to claims from the resources industry that the criteria are flawed and will set too much land aside and put up to \$22 billion of resources projects at risk.

SENSITIVITY

N/A.

CONSULTATION – INTERNAL STAKEHOLDERS

N/A.

CONSULTATION – EXTERNAL STAKEHOLDERS

Queensland Department of Employment, Economic Development and Innovation.

RESOURCE IMPLICATIONS

N/A.

COMMUNICATIONS STRATEGY

N/A.

PREVIOUS REF/S

N/A.

BACKGROUND

1. Tasmania has implemented a strategic planning model for protecting agricultural land along similar lines to that being pursued in Queensland. In New South Wales, the New South Wales Farmers' Association has developed a model for statewide strategic land use planning, which aims to provide a framework for future development across NSW. The new NSW Government included strategic land use planning in its electoral platform.

BRIEF APPROVED BY:	Peter Ottesen General Manager Crops, Horticulture and Wine Agricultural Productivity Division Phone: 6272 3060 / 0419 732 043 / / 2011
CONTACT OFFICER:	Des Naughton Phone: 6272 5674	

Kirby, Aaron

From: Hamel, Daniel [Daniel.Hamel@ret.gov.au]
Sent: Thursday, 12 May 2011 2:15 PM
To: Kirby, Aaron
Cc: mark.hall@environment.gov.au; Croker, Michelle; Locke, Chris; Rentsch, Dale
Subject: RET's Coal Seam Gas Input [SEC=UNCLASSIFIED]
Attachments: CSG_PMC.doc

Categories: Coal Seam Gas

Hi Aaron

Please find attached the input you requested on Australia's coal seam gas industry.

If there is any additional information you are after please let me know.

Regards

Daniel

Daniel Hamel
Assistant Manager (A/g)
Gas Market Development
Energy and Environment Division

Department of Resources, Energy and Tourism

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Australia's Coal Seam Gas (CSG) and CSG to liquefied natural gas (LNG) Industry

Natural gas is a combustible mixture of hydrocarbon gas, consisting mainly of methane. When accumulated in a subsurface reservoir (often with oil) that can be readily produced it is known as **conventional gas**. Natural gas can also be found in more difficult to extract **unconventional** deposits, such as coal seams (CSG), shales (shale gas) or low permeability reservoirs (tight gas). Unconventional gas may be similar in chemical composition to conventional gas and may be added to natural gas pipelines and utilised in the economy without any special additional treatment.

CSG is natural gas produced from underground coal seams located at depths of 200-1,000 metres below the surface. The gas is trapped in coal seams which are saturated with water (known as 'associated water') and is extracted through production wells drilled into the coal seams. As the water is pumped from the coal seam, the pressure reduces and the gas is released to be piped to a processing plant. CSG is also suitable for liquefaction and export as LNG.

The use of CSG as an energy source is long-standing and accounts for 30 per cent of eastern states' domestic gas production. Its use both as a domestic energy source and for export as LNG will increase significantly in the foreseeable future. With regard to climate change, gas-fired electricity generation, depending on the technology used, emits 40-50 per cent less carbon dioxide equivalent emissions than coal – potentially enabling significant emissions savings domestically and for our trading partners.

Geoscience Australia has put demonstrated and inferred CSG resources at over 150 trillion cubic feet - this is almost equal to the offshore conventional gas reserves of western and northern Australia on which Australia's liquefied natural gas (LNG) industry was founded. Currently all CSG production is located in the coal basins of Queensland and New South Wales (NSW) (**refer maps below**).

Community concern over the potential impacts of CSG extraction has increased as CSG companies begin construction of production facilities, LNG plants and export terminals near Gladstone, Queensland; and exploration activities intensify in NSW.

The Australian Government is not involved in assessing or approving CSG exploration or production wells, as the states and territories have primary responsibility for regulating onshore petroleum activities. However, under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Australian Government has responsibility to assess projects designated as having a potential impact on matters of national environmental significance. All CSG-LNG projects have been assessed under the EPBC Act to date and it is expected that all future CSG-LNG projects will be assessed in this manner.

The Australian Government commissioned Geoscience Australia to analyse the potential risks of Queensland's CSG projects on groundwater. ^{s47C}

s47C

BG Group's Queensland Curtis LNG (QCLNG) and the Santos-led Gladstone LNG (GLNG) projects received state and federal environmental approval in 2010, were sanctioned on 31 October 2010 and 13 January 2011 respectively, and are now under construction. The Origin Energy-led Asia Pacific LNG (APLNG) project was given Queensland environmental approval on 9 November 2010 and was approved by Minister Burke under the EPBC Act on 22 February 2011. APLNG expect to sanction their project mid-2011. The CSG fields of these projects are located in central and southern Queensland and the gas will be transported by pipeline to Gladstone for export.

As the CSG-LNG industry in Queensland has grown, the Queensland Government has moved to address environmental, health and landowner concerns through a number of new policy initiatives, including the development of the Blueprint for Queensland's LNG Industry, the establishment of a Well-Head Safety Program, the release of a CSG Water Management Policy, the formation of a CSG Stakeholder Advisory Committee, a Land Access Code of Conduct, a Standard Conduct and Compensation Agreement for landholders and multiple community information forums in the Surat Basin.

In addition, the Queensland Government has formed a 36-member LNG enforcement unit made up of environmental and groundwater experts, petroleum and gas safety specialists, and staff specialising in land access issues. The unit is based in local communities and acts as a central point of contact for safety, land access and environmental concerns. Furthermore, the Queensland Government has set up a hotline to answer questions related to all aspects of the CSG-LNG industry and respond to public concerns. The number is 13 25 23.

AGL and Eastern Star Gas both have CSG projects under EPBC Act assessment with Minister Burke. These projects are based in the Gloucester and Narrabri regions of NSW respectively.

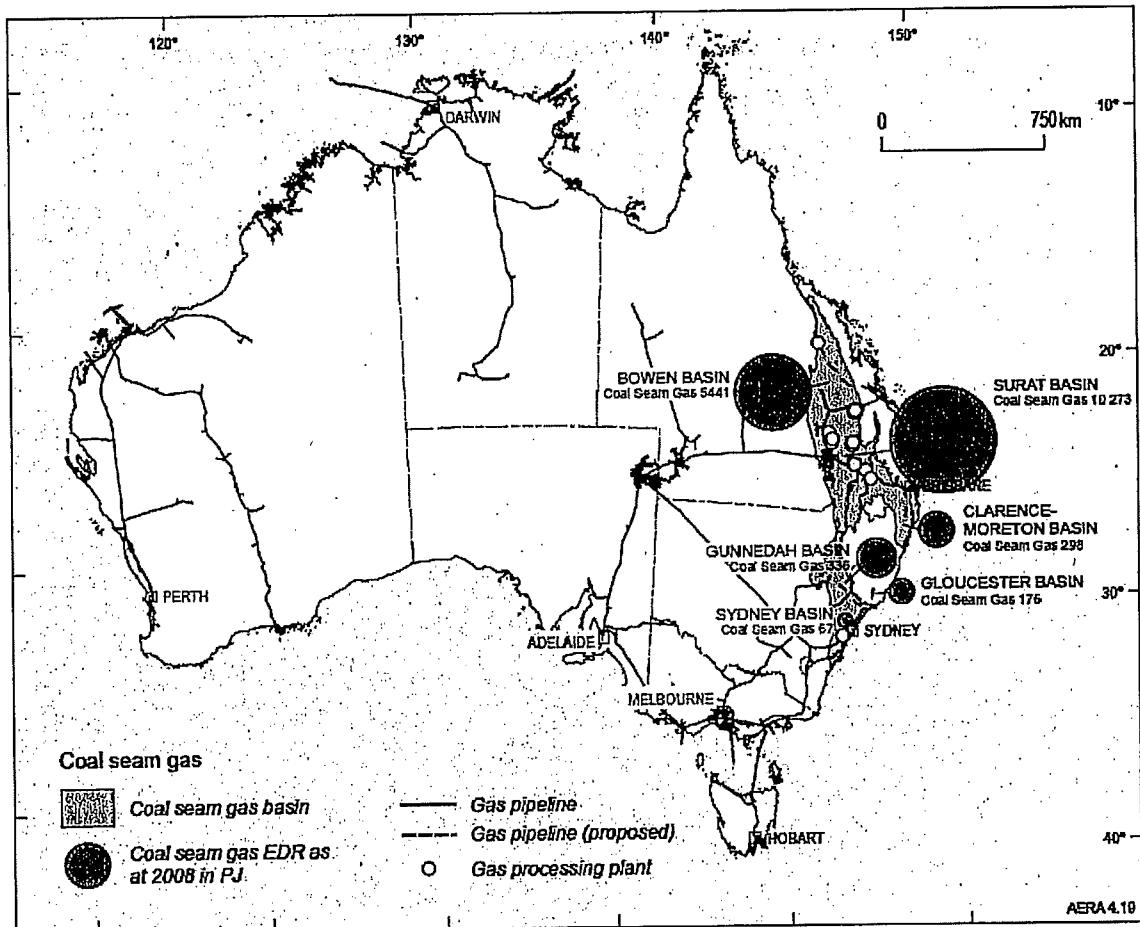
In NSW, the recently elected Government has also announced its intention to strengthen the regulation of their growing CSG industry. The publicly available Strategic Regional Land Use policy commits to banning the use of BTEX chemicals, reforming the project approvals system and implementing tighter environmental controls, amongst other measures. This policy can be accessed through: <http://www.nsw.liberal.org.au/policies/regional-nsw/strategic-regional-land-use.html>.

In late 2010, Origin Energy and Arrow Energy announced separate incidents where routine testing had found traces of the banned BTEX¹ chemicals in CSG wells in rural Queensland. Both companies stated they do not use BTEX chemicals in their operations and work was suspended while further investigation and independent testing was carried out. Supplementary independent testing and analysis of landowner water bores in the area did not identify unsafe levels of BTEX.

¹ BTEX is an acronym for the group of chemicals benzene, toluene, ethylbenzene and xylene.

With regards to the film Gasland, it is important to highlight that the CSG industry in Australia is different in a number of respects to the United States (US). CSG in Australia is extracted from different geological structures to those in the US, using different techniques. The Australian industry is also subject to significant environmental regulation which provides for the protection of land and water resources.

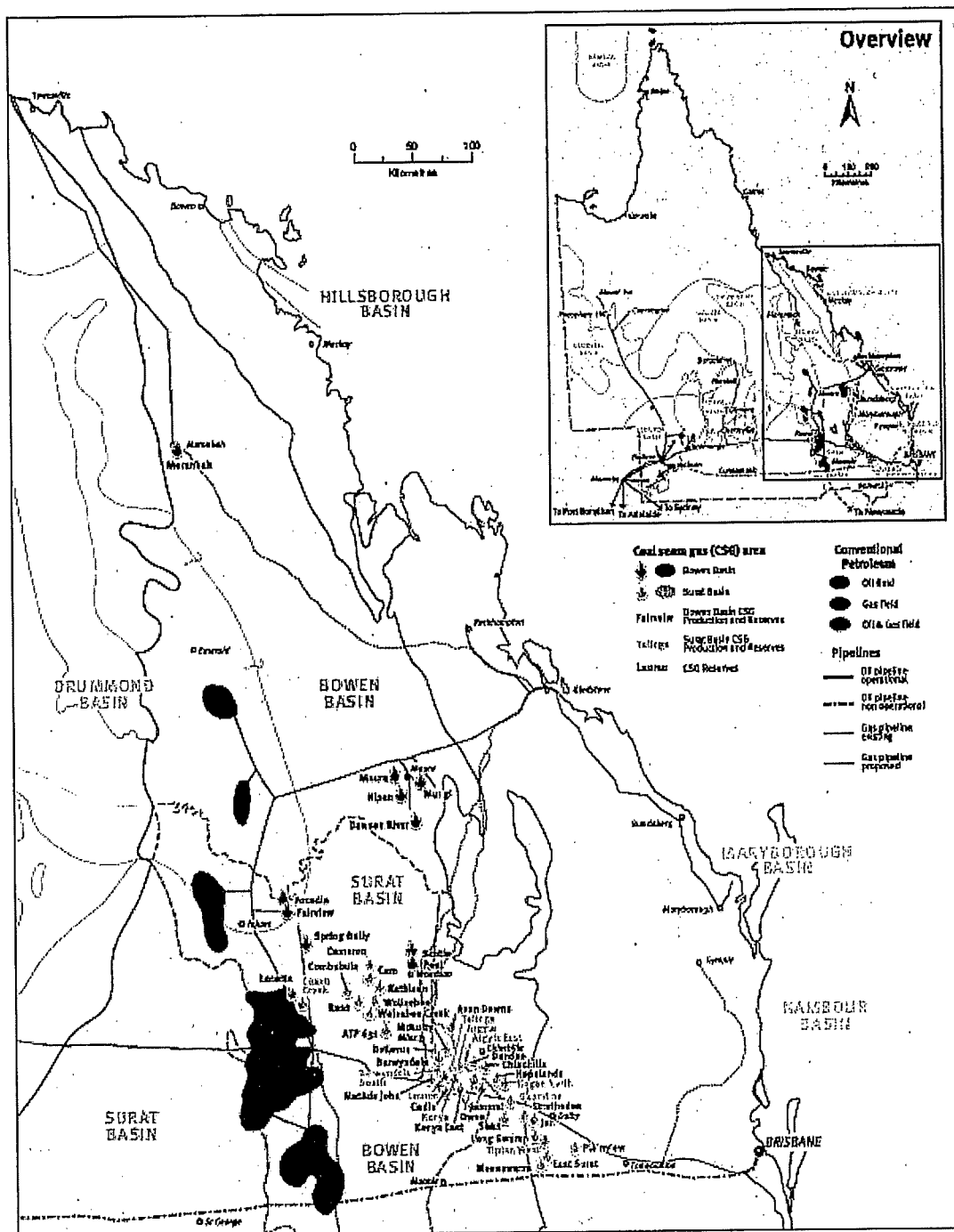
Australia's Coal Seam Gas Basins



Australian Energy Resource Assessment 2010, p. 98 - <https://www.ga.gov.au>

Queensland Coal Seam Gas Fields and Infrastructure

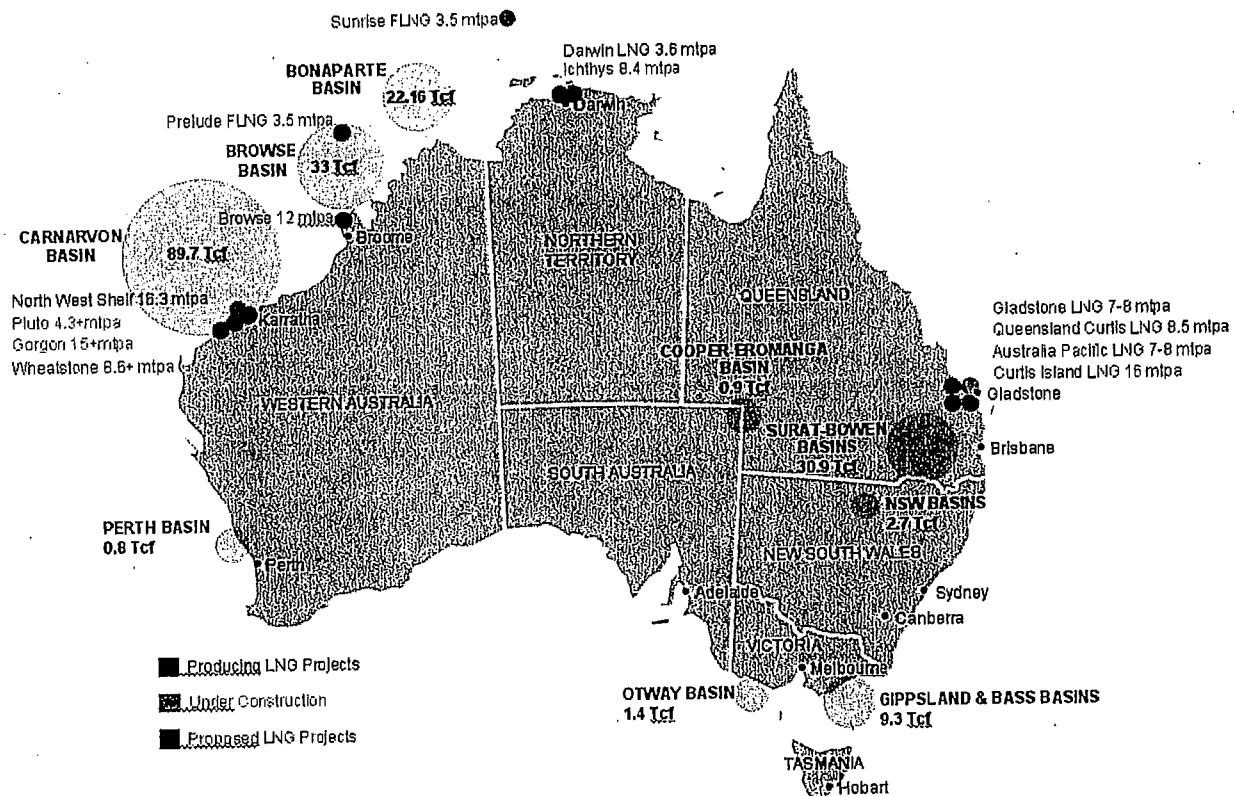
Figure 4: Queensland – coal seam gas



Queensland's petroleum – Exploration and development potential
www.deed.qld.gov.au

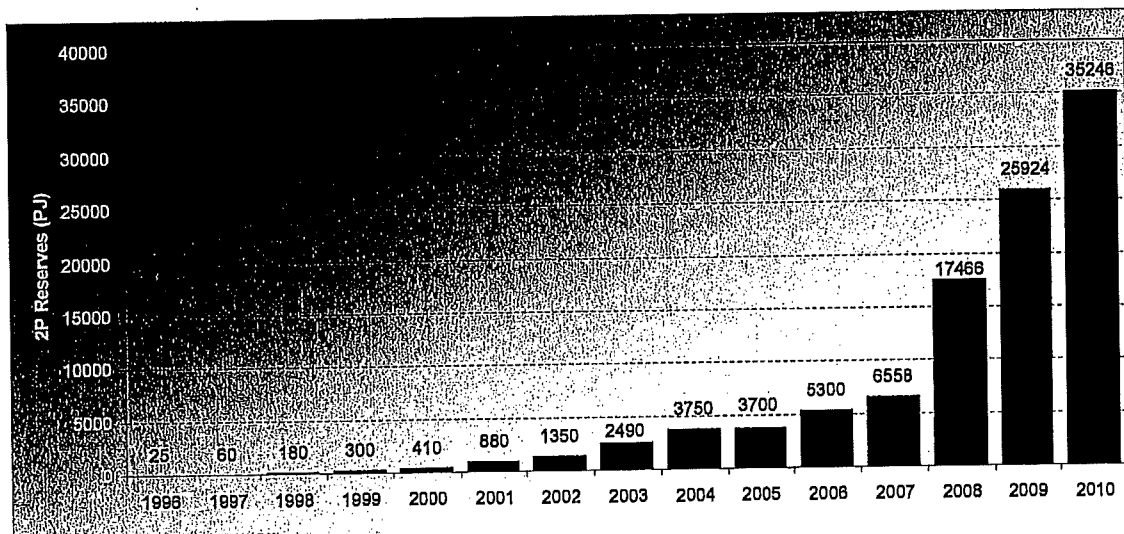
Queensland's Petroleum Exploration and development potential February 2011, p. 6 -
http://www.dme.qld.gov.au/mines/petroleum_gas.cfm

Australia's Conventional and CSG Reserves and Projects



Source: Geoscience Australia and EnergyQuest

Growth in Australia's CSG Reserves



Kirby, Aaron

From: Hall, Mark [Mark.Hall@environment.gov.au]
Sent: Thursday, 12 May 2011 3:20 PM
To: Kirby, Aaron
Cc: michelle.crocker@ret.gov.au; Barker, James; Gascoigne, Nick
Subject: coal seam gas developments and the EPBC Act [SEC=UNCLASSIFIED]

Hi Aaron

As discussed earlier today, I think the information that you will receive from the Department of Resources, Energy and Tourism on the coal seam gas industry will be more generally useful than anything we can provide. However, I can give you some information on the consideration of individual coal seam gas projects under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act).

It is important to note that the Australian Government's role in regulating proposals relates to impacts on matters protected by the EPBC Act. This includes matters of national environmental significance, actions involving the Commonwealth and actions taken on, or impacting on, Commonwealth land. Matters relating to the regulation of the coal seam gas industry more generally are the responsibility of state and territory governments.

The following table summarises the consideration of individual projects.

project / proponent reference status

Queensland Curtis LNG Project (BG International Limited / Queensland Gas Company Limited) EPBC 2008/4398 approved 22/10/2010

EPBC 2008/4399

EPBC 2008/4401

EPBC 2008/4402

EPBC 2008/4405

Gladstone Liquefied Natural Gas (Santos Ltd) EPBC 2008/4057 approved 22/10/2010

EPBC 2008/4058

EPBC 2008/4059

EPBC 2008/4096

Port of Gladstone Western Basin Strategic Dredging and Disposal

Project (Gladstone Ports Corporation Ltd) EPBC 2009/4904 approved 22/10/2010

Walloon gas fields and associated infrastructure (Australia Pacific LNG Pty Limited)

EPBC 2009/4974 approved 21/2/2011

EPBC 2009/4976

EPBC 2009/4977

Gloucester Coal Seam Methane Gas Project (AGL Upstream Infrastructure Investments Pty Ltd) EPBC 2008/4432 proposed approval decision pending

Arrow LNG Project (Arrow Energy (was Shell CSG)) EPBC 2009/5007 draft environmental impact statement in preparation

EPBC 2009/5008

EPBC 2009/5029

EPBC 2010/5344

Bowen pipeline yet to be referred

Illawarra coal seam gas exploration drilling and gas monitoring program (Apex Energy NL)

EPBC 2011/5821 referral decision pending

Narrabri Coal Seam Gas Field Development (Eastern Star Gas Limited) EPBC 2011/5913
 referral decision due 12/5/2011

EPBC 2011/5914 referral decision due 12/5/2011

EPBC 2011/5915 referral decision due 12/5/2011

EPBC 2011/5917 referral decision due 17/5/2011

CSG Upstream and Gas Pipeline Project (Bow Energy Ltd) N/A yet to be referred

Gunnedah CSG Project N/A yet to be referred
Gulf country exploration (Armour Energy) N/A preliminary contact only

Regards

Mark Hall

Acting Director

Mining Section (1)

Environment Assessment Branch

Department of Sustainability, Environment, Water, Population and Communities

Telephone: (02) 6274 1933 | Facsimile: (02) 6274 1789 | E-mail: mark.hall@environment.gov.au

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Kirby, Aaron

From: Hall, Mark [Mark.Hall@environment.gov.au]
Sent: Thursday, 12 May 2011 3:27 PM
To: Kirby, Aaron
Cc: Croker, Michelle; Locke, Chris; Rentsch, Dale; Hamel, Daniel; Hicks, Christopher; Barker, James
Subject: RE: RET's Coal Seam Gas Input [SEC=UNCLASSIFIED]
Categories: Coal Seam Gas

Hi Aaron

Please note that the statement in DRET text that "The Australian Government is not involved in assessing or approving CSG exploration or production wells, as the states and territories have primary responsibility for regulating onshore petroleum activities." is not strictly correct, as discussed in my earlier e-mail to you and elsewhere in DRET text.

The Australian Government does have an albeit limited role in assessing and approving CSG operations.

Regards

Mark Hall

Acting Director
Mining Section (1)
Environment Assessment Branch
Department of Sustainability, Environment, Water, Population and Communities
Telephone: (02) 6274 1933 | Facsimile: (02) 6274 1789 | E-mail: mark.hall@environment.gov.au

From: Hamel, Daniel [<mailto:Daniel.Hamel@ret.gov.au>]
Sent: Thursday, 12 May 2011 14:15
To: aaron.kirby@pmc.gov.au
Cc: Hall, Mark; Croker, Michelle; Locke, Chris; Rentsch, Dale
Subject: RET's Coal Seam Gas Input [SEC=UNCLASSIFIED]

Hi Aaron

Please find attached the input you requested on Australia's coal seam gas industry.

If there is any additional information you are after please let me know.

Regards

Daniel

Daniel Hamel

Assistant Manager (A/g)
Gas Market Development
Energy and Environment Division

Department of Resources, Energy and Tourism

- Level 9, 10 Binara Street, Canberra
GPO Box 1564, Canberra ACT 2601
Phone +61 2 6243 7253
Fax +61 2 6213 6319
- ABN 46 252 861 927
<http://www.ret.gov.au/>

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Kirby, Aaron

From: Wallace, Heather [Heather.Wallace@environment.gov.au]
Sent: Thursday, 12 May 2011 4:26 PM
To: Kirby, Aaron
Cc: Barker, James; Gascoigne, Nick
Subject: Expert panel cold seam gas water management

Categories: Coal Seam Gas
Security Classification: UNCLASSIFIED

Hi Aaron

The Minister has approved the appointment of the expert panel, however the individual members have not yet been formally engaged by the department, we are in the process of sending them draft contracts for review and agreement.

The Minister has approved the appointment of the following, please note this is still confidential:

Professor Paul Greenfield, vice chancellor of UQ
 Professor Chris Moran, Director, Sustainable Minerals Institute at UQ
 Dr Richard Creswell, formerly CSIRO, now a consultant to Sinclair, Knight Mertz
 Dr Jane Coram, Geoscience Australia
 s47C

The Panel has not undertaken work to date, as this is subject to its formal (contractual) engagement. However, subject to that step occurring soon, we aim to have the panel's first meeting at the end of this month.

The initial focus for the panel will be to provide advice on the adequacy of water management plans provided by Santos and QGC, which were provided a bit more than a week ago.

James Barker is the contact for all queries on the panel and can be contacted on 6274 2694.

Thanks
 Heather

Heather Wallace
 Public Affairs
 Department of Sustainability, Environment, Water, Population and Communities
 Ph: 02 6274 2170

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Kirby, Aaron

From: Ice, Lachlan [Lachlan.Ice@daff.gov.au]
Sent: Thursday, 12 May 2011 4:56 PM
To: Kirby, Aaron
Cc: Ottesen, Peter; Harman, Tony; Ryan, Michael
Subject: NSW Government regional land use planning [SEC=UNCLASSIFIED]

Dear Aaron,

We have prepared the following words on NSW government regional land use planning. We consulted with our food security team to develop these words.

The Australian Government understands that many Australians are concerned that mining and urban expansion may impact on productive agricultural lands and have an impact on Australia's capacity to produce food.

While the Australian Government has a policy interest in land use changes, particularly those that affect our agricultural industries, decision-making with regard to land use planning rests with state governments. The Government is aware that a number of states have, or are developing policies for protection of prime agricultural land.

It is also important to remember that the Australian food industry maintains a strong trade surplus. Australia is a net food exporter by a significant margin, with more than half of our food production exported. In 2009-10, Australian food exports were valued at \$24.3 billion while imports were \$10.1 billion, despite the impact of severe drought. Australia has a significant capacity to meet our future food needs, while continuing to be a significant and reliable supplier to the world food market.

The NSW Coalition went to the 2011 State election with a policy paper proposing the development of a Strategic Regional Land Use Plan, the paper outlined a triple bottom line approach to development of regional land, aimed at achieving a better balance in the growth of regional areas.

On 5 May 2011 the New South Wales Government announced an interim assessment process to be applied to mining and coal seam gas extraction applications. The policy applies to regional areas and aims to reduce conflict between agriculture and tourism and the expanding coal and coal seam gas industries. The Department expects more details to be released in the next few weeks.

The Department understands that this new assessment regime is an interim measure while legislative reforms are drafted.

Hope this helps.

Don't hesitate to get back in touch with us if you need any further information.

Regards

Lachlan Ice

Rural Infrastructure & Water

Agricultural Productivity Division

Department of Agriculture, Fisheries and Forestry

GPO Box 858

Canberra ACT 2601

Australia

Tel: +61 2 62724060

Email: lachlan.ice@daff.gov.au

Kirby, Aaron

From: Wallace, Andrew
Sent: Wednesday, 8 June 2011 11:55 PM
To: Kirby, Aaron
Cc: Sedgwick, Ashley; Tsirbas, Nektarios; Kennedy, Samantha; Pyne, Tim
Subject: RE: For comment - Coal Seam Gas brief [~~SEC=IN-CONFIDENCE~~]

Categories: Coal Seam Gas
Security Classification: IN-CONFIDENCE

Aaron

s47C



Andrew

From: Kirby, Aaron
Sent: Wednesday, 8 June 2011 11:22 AM
To: Sedgwick, Ashley; Wallace, Andrew
Cc: Tsirbas, Nektarios
Subject: For comment - Coal Seam Gas brief

Colleagues,

s47C



Note the letter referred to at Attachment F is not included.

Regards,

Aaron Kirby

Environment and Water Section
Industry, Infrastructure and Environment Division
Department of the Prime Minister and Cabinet

Direct: (02) 6271 5371
Mobile: 0417 475 172

Kirby, Aaron

From: Wallace, Andrew
Sent: Tuesday, 14 June 2011 2:26 PM
To: Kirby, Aaron
Cc: Tsirbas, Nektarios; Kennedy, Samantha
Subject: RE: CSG letter [SEC=UNCLASSIFIED]

Security Classification: UNCLASSIFIED

Aaron

s47C



Happy to discuss.

Andrew

From: Kirby, Aaron
Sent: Tuesday, 14 June 2011 1:59 PM
To: Wallace, Andrew
Cc: Tsirbas, Nektarios
Subject: CSG letter [SEC=UNCLASSIFIED]

Hi Andrew,

Sorry to bother you about this again, but have you had a chance to look at that letter? Happy to take feedback verbally if you are pressed for time.

Best

Aaron Kirby

Environment and Water Section
Industry, Infrastructure and Environment Division
Department of the Prime Minister and Cabinet

Direct: (02) 6271 5371
Mobile: 0417 475 172

Kirby, Aaron

From: Tsirbas, Nektarios
Sent: Monday, 20 June 2011 7:16 PM
To: Taylor, Marie; de Brouwer, Gordon
Cc: Kirby, Aaron; Laduzko, Mark
Subject: RE: Update [SEC=PROTECTED]

Gordon/Marie

s47C



Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 Fax: 61 2 6271 5177

From: Taylor, Marie
Sent: Monday, 20 June 2011 7:11 PM
To: Tsirbas, Nektarios; de Brouwer, Gordon
Cc: Kirby, Aaron
Subject: Re: Update [SEC=PROTECTED]

s47C



Marie

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This message has been sent from a mobile device.

From: Tsirbas, Nektarios
To: de Brouwer, Gordon; Taylor, Marie
Cc: Kirby, Aaron

Sent: Mon Jun 20 17:40:06 2011
Subject: Update [SEC=PROTECTED]

Gordon/Marie

Spoken to Martin Hoffman. He is going to provide some comments on the ToR but was broadly happy with them. He didn't have any additional names for a review [REDACTED] s47C

s47C He also asked who would lead the inquiry, I indicated Minister Burke possibly which he seemed relaxed about – they also thought it could be a joint inquiry with RET Minister. I also wonder whether it could actually be run by PM&C to add gravitas and the nature of the cross-cutting issues.

Have given all until 6pm for comments and will then circulate electronically the brief and ToR to you.

Nektarios Tsirbas
Senior Adviser
Environment and Water
Industry, Infrastructure and Environment Division
Department of the Prime Minister and Cabinet
Ph: +61 2 6271 5486
Fax: 61 2 6271 5177

Kirby, Aaron

From: Hoffman, Martin [Martin.Hoffman@ret.gov.au]
Sent: Tuesday, 21 June 2011 2:30 PM
To: Tsirbas, Nektarios; Phillip.Glyde@daff.gov.au; michael.ryan@daff.gov.au; Grimes, Paul; Burnett, Peter; Colreavy, Mary; Constable, Tania
Cc: Laduzko, Mark; Taylor, Marie; Kirby, Aaron; Wallace, Andrew
Subject: RE: [REDACTED] s47C [SEC=IN-CONFIDENCE]

thanks Nektarios

s47B and s47C

neers.
 Martin

From: Tsirbas, Nektarios [mailto:Nektarios.Tsirbas@pmc.gov.au]
Sent: Tuesday, 21 June 2011 2:19 PM
To: Hoffman, Martin; 'Phillip.Glyde@daff.gov.au'; 'michael.ryan@daff.gov.au'; Grimes, Paul; Burnett, Peter; Colreavy, Mary; Constable, Tania
Cc: Laduzko, Mark; Taylor, Marie; Kirby, Aaron; Wallace, Andrew
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]

Dear all

s47C

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 Fax: 61 2 6271 5177

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Kirby, Aaron

From: Ryan, Michael [Michael.Ryan@daff.gov.au]
Sent: Tuesday, 21 June 2011 4:42 PM
To: Tsirbas, Nektarios; martin.hoffman@ret.gov.au; Glyde, Phillip; Grimes, Paul; Burnett, Peter; Colreavy, Mary; Constable, Tania
Cc: Laduzko, Mark; Taylor, Marie; Kirby, Aaron; Wallace, Andrew
Subject: RE: [REDACTED] s47C [SEC-~~IN-CONFIDENCE:GOVERNMENT~~]

Nektarios

s47C



Regards

Mike

Michael Ryan

A/g General Manager | Research and Development and Food Security Branch | Department of Agriculture, Fisheries and Forestry

T: 02 6272 4425 | M: 0409 814 202

GPO Box 858, Canberra ACT 2601

From: Tsirbas, Nektarios [mailto:Nektarios.Tsirbas@pmc.gov.au]

Sent: Tuesday, 21 June 2011 2:19 PM

To: 'martin.hoffman@ret.gov.au'; Glyde, Phillip; Ryan, Michael; Grimes, Paul; Burnett, Peter; Colreavy, Mary; Constable, Tania

Cc: Laduzko, Mark; Taylor, Marie; Kirby, Aaron; Wallace, Andrew

Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]-

Dear all

s47C

Nektarios Tsirbas
Senior Adviser
Environment and Water
Industry, Infrastructure and Environment Division
Department of the Prime Minister and Cabinet
Ph: +61 2 6271 5486
Fax: 61 2 6271 5177

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Ref: B11/1481

DEPARTMENT OF THE PRIME MINISTER AND CABINET

To: Prime Minister (for signature/decision)

MINING ISSUES – STRIKING THE RIGHT BALANCE BETWEEN COMPETING LAND USE PRIORITIES

s47C

Key Points

1. There is significant community and environmental stakeholder unease about the impacts of mining, particularly open cut coal mines and CSG developments, on farmland and rural communities. This is particularly the case in the CSG growth states of New South Wales (NSW) and Queensland. Key concerns have focused on the impact of CSG on groundwater resources (predominantly with CSG) and of open-cut coal mines on competing land use, in particular agriculture (Attachment C).

s47C

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s47C

2.

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3.

s47C

4.

- a. State governments have primary responsibility for the development and management of mining, including issuing exploration and mining licences, environmental approvals and dealing with land access disputes as, in most cases, they own the minerals concerned. Recently, NSW and Queensland have taken steps to address community concerns (at Attachment E.)
- b. The Commonwealth's role in the approval of onshore mining projects is focused on its environmental approval role, under the EPBC Act, for projects which have a significant impact on a matter of National Environmental Significance. The EPBC Act also provides for regionally focussed 'strategic assessments' which can take account of cumulative impacts on ecosystems and biodiversity but would need to be initiated by the relevant state.

s47C

5.

s47B and s47C

a.

s47C

6.

Marie Taylor
Marie Taylor
Acting First Assistant Secretary
Industry, Infrastructure and
Environment

23 June 2011

Gordon de Brouwer
Gordon de Brouwer
Associate Secretary
Domestic Policy

Policy Officer: Aaron Kirby
Phone no: 6271 5371
Consultation: DSEWPac, DAFF, DRET,
Fiscal Branch, Government Division.

~~IN-CONFIDENCE~~

~~IN-CONFIDENCE~~

ATTACHMENTS

ATTACHMENT A

s47C

ATTACHMENT B

ATTACHMENT C

Background, technical aspects

ATTACHMENT D

Issues raised by the country independents

ATTACHMENT E

State initiatives

ATTACHMENT F

s47C

~~IN-CONFIDENCE~~

Pages 4 - 15 exempt in full under section 47C of the FOI Act

DEPARTMENT OF THE PRIME MINISTER AND CABINET

ATTACHMENT C

Coal seam gas technical issues (developed with input provided by DRET)

1. Natural gas is a combustible mixture of hydrocarbon gas, consisting mainly of methane. When accumulated in a subsurface reservoir (often with oil) that can be readily produced it is known as conventional gas. Natural gas can also be found in more difficult to extract unconventional deposits, such as coal seams, shales (shale gas) or low permeability reservoirs (tight gas). Unconventional gas may be similar in chemical composition to conventional gas and may be added to natural gas pipelines and utilised in the economy without any special additional treatment.
2. CSG is natural gas produced from underground coal seams located at depths of 200-1,000 metres below the surface. The gas is trapped in coal seams which are saturated with water (known as 'associated' or 'produced' water) and is extracted through production wells drilled into the coal seams. As the water is pumped from the coal seam, the pressure reduces and the gas is released to be piped to a processing plant. CSG is also suitable for liquefaction and export as LNG.
3. The use of CSG as an energy source is long-standing and accounts for 30 per cent of eastern states' domestic gas production. Its uses both as a domestic energy source and for export as LNG will increase significantly in the foreseeable future. With regard to climate change, gas-fired electricity generation, depending on the technology used, emits 40-50 per cent less carbon dioxide equivalent emissions than coal – potentially enabling significant emissions savings domestically and for our trading partners.
4. In 2009, Geoscience Australia estimated CSG resources at over 150 trillion cubic feet, almost equal to the offshore conventional gas reserves of western and northern Australia. This estimate is likely to be revised upwards for some time to come.
 - a. Geoscience Australia has also developed a proposal to develop a framework to understand aquifers, their connectivity, how groundwater pressures in connected aquifers are likely to be affected by the cumulative impacts of CSG production, and how this is likely to impact on users and environmental values of groundwater resources.
5. In December 2010, the National Water Commission (NWC) released a position paper on CSG (Annex A) which called for a precautionary approach to CSG development, given that the impacts of CSG were not well understood.
6. Section 255AA of the Water Act 2007 requires that mining operations on Murray Darling floodplains be subject to an independent study to determine the impacts of those operations.
 - a. One such study investigated the impacts of the Queensland Gas Company (British Gas) CSG development in Gladstone, Queensland. Mr Burke, on the basis of the study, allowed the developments to proceed, but imposed conditions on the companies concerned, including the publication of their detailed plans for water management and monitoring.
 - b. Mr Burke appointed an expert panel in December 2010 to advise him on CSG water management. Members of the panel have not yet been formally engaged, but DSEWPac advises the panel engaged in a preliminary meeting at the end of May 2011.
7. Currently all CSG production is located in the coal basins of Queensland and New South Wales (refer to Figure 1).
8. "Fracking" is an industry term (short for 'fracturing') referring to the process used for extracting CSG that is difficult to extract. Fracking is done to open up paths for gas to travel through the coal seam and into the well to the surface. The fracturing occurs as a result of a bore being drilled into

reservoir rock formations, followed by injection of a combination of liquid chemicals designed to hold open the newly created spaces.

- a. In the past, Fracking has involved highly toxic chemicals, which are now better regulated. Companies now only use biodegradable chemicals. Fracking is only used in limited circumstances in Australia, unlike in North America, where the film *Gasland* has leveled criticism at the industry and its practices.
9. CSG is an emerging energy source in Australia which has become increasingly attractive as a liquid energy source as natural gas resources on the east coast of Australia have declined. Although total resources of CSG have not yet been fully assessed, CSG represents a significant and quickly developing energy resource for Australia.
10. The key environmental impacts of CSG centre on the large amounts of water extracted from natural aquifers during the mining process. Sometimes, rock is fractured to ease the release of gas in a process known as 'fracking'. This has the potential to seriously and permanently damage aquifers. However, there is a deficit in knowledge of how Australian rock and water systems will react to CSG extraction.

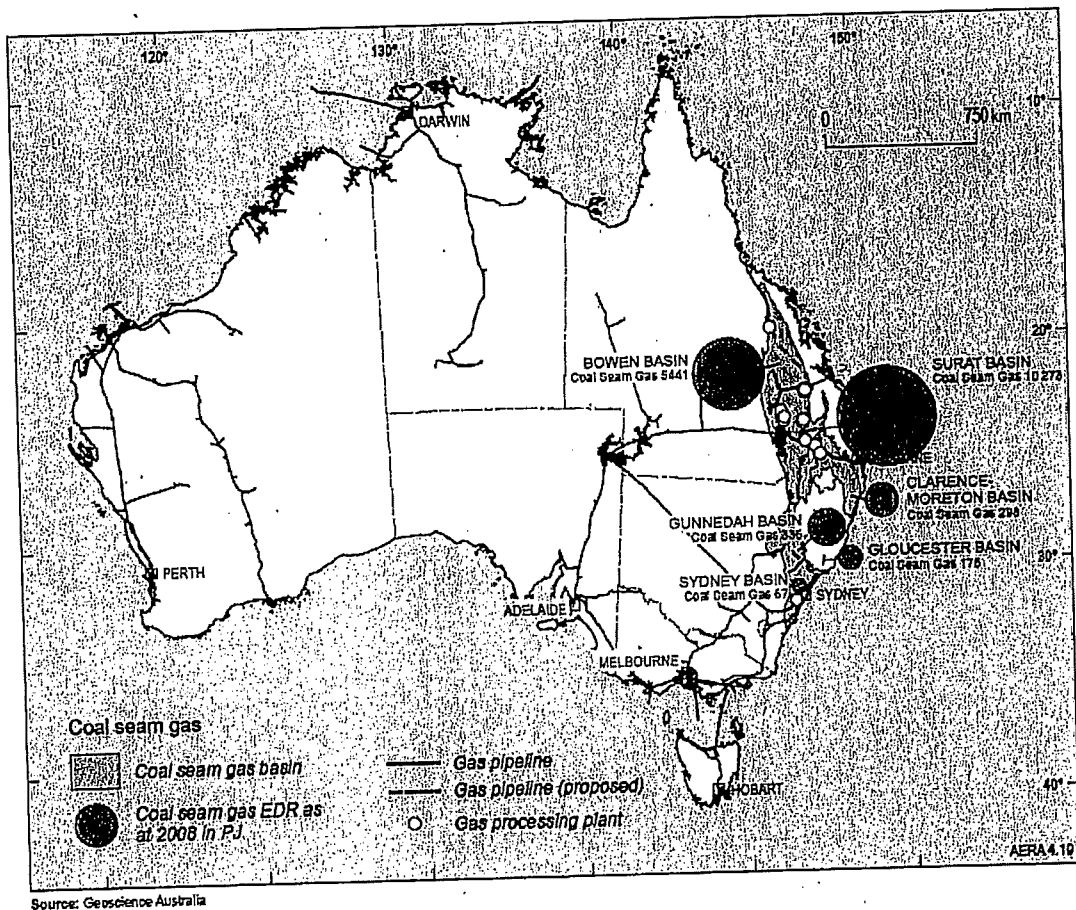


Figure 1: Coal Seam Gas in Australia. (Australian Energy Resource Assessment 2010, p. 98)



Australian Government
National Water Commission

Position Statement
Coal Seam Gas and Water

The Coal Seam Gas and water challenge

The Coal Seam Gas (CSG) industry offers substantial economic and other benefits to Australia. At the same time, if not adequately managed and regulated, it risks having significant, long-term and adverse impacts on adjacent surface and groundwater systems.

In light of the scale of potential benefits and associated risks, the National Water Commission is highlighting the need for appropriate management of CSG developments, consistent with the objectives of the National Water Initiative (NWI). To meet NWI objectives, the Commission recommends that industry, water and land-use planners, and governments adopt a precautionary approach to CSG developments, ensuring that risks to the water resource are carefully and effectively managed.

Current projections indicate the Australian CSG industry could extract in the order of 7,500 gigalitres of co-produced water from groundwater systems over the next 25 years, equivalent to ~300 gigalitres per year. In comparison, the current total extraction from the Great Artesian Basin is approximately 540 gigalitres per year.

Potential impacts of CSG developments, particularly the cumulative effects of multiple projects, are not well understood.

Potential risks to sustainable water management

- Extracting large volumes of low-quality water will impact on connected surface and groundwater systems, some of which may already be fully or overallocated, including the Great Artesian Basin and Murray-Darling Basin.
- Impacts on other water users and the environment may occur due to the dramatic depressurisation of the coal seam, including:
 - changes in pressures of adjacent aquifers with consequential changes in water availability
 - reductions in surface water flows in connected systems
 - land subsidence over large areas, affecting surface water systems, ecosystems, irrigation and grazing lands.
- The production of large volumes of treated waste water, if released to surface water systems, could alter natural flow patterns and have significant impacts on water quality, and river and wetland health. There is an associated risk that, if the water is overly treated, 'clean water' pollution of naturally turbid systems may occur.
- The practice of hydraulic fracturing, or fraccing, to increase gas output, has the potential to induce connection and cross-contamination between aquifers, with impacts on groundwater quality.
- The reinjection of treated waste water into other aquifers has the potential to change the beneficial use characteristics of those aquifers.

In addition to these water management risks, CSG development could also cause significant social impacts by disrupting current land-use practices and the local environment through infrastructure construction and access.

The Commission is concerned that CSG development represents a substantial risk to sustainable water management given the combination of material uncertainty about water impacts, the significance of potential impacts, and the long time period over which they may emerge and continue to have effect. Therefore, an adaptive and precautionary management approach will be essential to allow for progressive improvement in the understanding of impacts, including cumulative effects, and to support timely implementation of 'make good' arrangements.

CSG and the National Water Initiative

Under clause 34 of the NWI, the signatory governments agreed that there may be special circumstances facing the petroleum and minerals sectors that need to be addressed by policies and measures beyond the scope of the NWI Agreement. In this context, all governments noted that specific project proposals would be assessed according to environmental, economic and social considerations, and that factors specific to resource development projects (such as isolation, relatively short project duration, water quality issues, and obligations to remediate and offset impacts) may require specific management arrangements outside the scope of the NWI.

Progress on CSG related reforms

In its 2009 Biennial Assessment of national water reform progress, the Commission found that the circumstances in which special clause 34 would apply are not defined and identified in a consistent and transparent manner. Little progress had been made in the five years since the signing of the NWI in fleshing out the special provisions for the minerals, petroleum and related industries. As a consequence, there has been little integration of those industries with broader water markets and water planning processes, despite the potential for considerable benefits in many cases.

The potential impacts of CSG extraction are currently managed through state and territory laws and policies, including environmental approval processes with subsequent conditions or special arrangements often implemented to mitigate risks to the environment and communities. These conditions are set by the approving authority which can be a state government minister or appointed official. In certain circumstances, the Commonwealth Minister for the Environment will have a role in approving and setting conditions for projects under the Commonwealth *Environment Protection and Biodiversity Conservation Act*.

While these processes have the capacity to address many of the issues relating to water and CSG development, they are often not well integrated with state and territory water planning and management arrangements.

The Commission's work on CSG

The Commission is completing a discussion paper on CSG water issues and potential impacts to provide useful background information for regulators, water managers and other water users. A \$1.8 million *Potential local and cumulative effects of mining on groundwater resources* project funded by the Commission is also developing tools and guidelines to account for potential local and cumulative effects of mining on groundwater resources. These guidelines and tools are intended to assist in the management of CSG.

Principles for managing CSG and water

The Commission believes that wherever there is potential for significant water resource impacts, CSG activities should be incorporated into NWI consistent water planning and management regimes from their inception. Given the high level of uncertainty around water impacts, and the temporal nature of CSG developments, this will likely require a precautionary approach that demands innovation from water managers and planners, and significantly greater coordination with existing project approval processes.

Specifically, the Commission proposes the following principles be applied by state and territory jurisdictions to managing the cumulative impacts of CSG water:

- The interception of water by CSG extraction should be licensed to ensure it is integrated into water sharing processes from their inception.
- Project approvals should be transparent, including clear and public articulation of predicted environmental, social and economic risks along with conditions implemented to manage the risks.
- Adequate monitoring, including baseline assessment of surface and groundwater systems, should be undertaken to provide a benchmark for assessing cumulative impacts on other water users and water-dependent ecosystems.

- Jurisdictions should work to achieve consistent approaches to managing the cumulative impacts of CSG extraction. Such arrangements should consider and account for the water impacts of CSG activities in water budgets and manage those impacts under regulatory arrangements that are part of, or consistent with, statutory water plans and the National Water Initiative.
- Potential options to minimise the cumulative impacts of extraction on the water balance should be pursued as a first priority. These options include aquifer reinjection, where water quality impacts are acceptable, and groundwater trading or direct substitution for other water use.
- If discharges to surface waters are unavoidable, discharges should be conditioned so that environmental values and water quality objectives, including water quality to meet public health objectives, are protected. In such circumstances discharges to ephemeral streams should be pulsed to avoid flows in naturally dry periods.
- Jurisdictions should undertake water and land-use change planning and management processes in an integrated way to ensure that water planning implications of projects are addressed prior to final development approval.
- Clear accountabilities should be identified for any short- or long-term cumulative impacts from CSG processes, clarifying which organisations are responsible for managing and rectifying or compensating for any impacts.
- The full costs, including externalities, of any environmental, social and economic water impacts and their management should be borne by the CSG companies. This includes, if not already in place, mechanisms such as bonds and sureties that deal with uncertainty and the timeframes associated with potential impacts. Given that these timeframes may extend for 100 or more years, current systems need to be re-evaluated.
- A precautionary and adaptive approach to managing and planning for CSG activities is essential to enable improved management in response to evolving understanding of current uncertainties. This includes impacts such as long-term reductions in adjacent aquifer pressures and levels, and impacts on environmental assets that are not adequately protected by current 'make good' mechanisms.
- Water produced as a by-product of CSG extraction, that is made fit for purpose for use by other industries or the environment, should be included in NWI-compliant water planning and management processes. This will enable CSG producers to manage this resource in accordance with the principles of the National Water Initiative.

The consequences of not managing the water risks and uncertainties associated with the economic benefits of CSG are substantial. Therefore, the Commission strongly argues for the careful, transparent and integrated consideration of water-related impacts in all approval processes.

The Commission's position is that NWI-consistent water access entitlements should be made available to coal seam gas activities wherever possible, as the use of Clause 34 of the NWI is only intended to operate in exceptional circumstances. Where Clause 34 is used, a clear and transparent explanation of why it was used, rather than complying with the normal water planning and management regime, should be provided.

National Water Commission
December 2010

Issues raised by the country independents

- In the Government's 7 September 2010 agreement with Mr Windsor, you agreed a minority Labor Government would establish a Parliamentary Committee inquiry examining the issues of the effect of mining and gas extraction in sensitive farmland areas. Mr Ferguson has yet to address this matter.
 - The electorate of the Hon Tony Windsor MP takes in the Liverpool Plains, an agricultural region which has potential for CSG development.
 - In response to concerns in his community, the Hon Tony Windsor MP signalled his intention in December 2010 to introduce into Parliament legislation to provide that mining companies would be required to make regional assessments of the impact of their mining operations on water.
- In March 2011, Mr Rob Oakeshott MP called for the Commonwealth to undertake a review of the NSW Government's decision to approve more than 100 CSG wells in his electorate of Lyne.
 - The AGL project (located in Gloucester) is currently under review by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) under the EPBC Act, and a decision is due before the end of June.

Queensland and NSW Responses to CSG Development

Queensland

- As the CSG-LNG industry in Queensland has grown, the Queensland Government has moved to address environmental, health and landowner concerns through a number of new policy initiatives, including:
 - the development of the Blueprint for Queensland's LNG Industry;
 - the establishment of a Well-Head Safety Program;
 - the release of a CSG Water Management Policy;
 - the formation of a CSG Stakeholder Advisory Committee;
 - a Land Access Code of Conduct;
 - a Standard Conduct and Compensation Agreement for landholders; and
 - multiple community information forums in the Surat Basin.
- In addition, the Queensland Government has formed a 36-member LNG enforcement unit made up of environmental and groundwater experts, petroleum and gas safety specialists, and staff specialising in land access issues. The unit is based in local communities and acts as a central point of contact for safety, land access and environmental concerns.
- The Queensland Government is also planning to introduce legislation to protect 'strategic cropping land' (defined as land with the capacity to support more than one commercial quality crop) from competing development activities. This land might include up to 4% of that state's total land area. Some mining operations on the most fertile agricultural land will be banned entirely under this measure.

New South Wales

- In NSW, the recently elected government has also announced its intention to strengthen the regulation of their growing CSG industry. The publicly available Strategic Regional Land Use policy released prior to the last election commits to banning the use of BTEX chemicals, reforming the project approvals system and implementing tighter environmental controls, amongst other measures.
- This includes "reforms to mining and coal seam gas legislation to protect strategic agricultural land and associated water resources".

Pages 23-24 exempt in full under section 47C FOI Act

Kirby, Aaron

From: Taylor, Marie
Sent: Thursday, 23 June 2011 7:07 PM
To: Davidoff, Ian; Penrose, Clare
Cc: de Brouwer, Gordon; Laduzko, Mark; Tsihras, Nektarios; Kirby, Aaron
Subject: [REDACTED] s47C
Attachments: [REDACTED]

Security Classification: ~~PROTECTED~~

Ian, Clare

[REDACTED] s47C

Please let me know if you need anything further.

Kind regards

Marie

Marie Taylor
Acting First Assistant Secretary
Industry, Infrastructure & Environment
Department of the Prime Minister & Cabinet
ph (02) 6271 5362

M&C
ecretary
ir de Brou
As Cross
Mr Turvey
Mr Yeaman
As Taylor
Mr Laduzk

MO
Mr Hubbar
Mr Bentley
As Penros
As Gelger

s47C

Key Points

1. There is significant community and environmental stakeholder unease about the impacts of mining, particularly open cut coal mines and CSG developments, on farmland and rural communities. This is particularly the case in the CSG growth states of New South Wales (NSW) and Queensland. Key concerns have focused on the impact of CSG on groundwater resources (predominantly with CSG) and of open-cut coal mines on competing land use, in particular agriculture (Attachment C).

s47C

~~CABINET-IN-CONFIDENCE~~Ref: B11/2372
Urgent/High Complexity

DEPARTMENT OF THE PRIME MINISTER AND CABINET

PM&C
Secretary
Dr de Brouwer
Ms Cross
Dr Schreier
Ms Taylor
Mr Beresford
Mr Tsirbas
Mr Pyne

To: Prime Minister (for decision by 28 October)

COMMONWEALTH HANDLING OF THE COAL SEAM GAS ISSUE

s47C

PMQ
Mr Bentley
Mr Hubbard
Mr Davidoff
Ms Gordon
Smith

File

Purpose: To formalise the outcomes of your meeting with Ministers Crean, Burke and Ferguson on coal seam gas (CSG) issues.

Key Points:

1. You met with Ministers Crean, Burke and Ferguson on 29 August 2011 to discuss Commonwealth handling of CSG issues. s47C

s47C

2. Ministers also noted that Geoscience Australia (GA) and the Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) are developing a proposal for further scientific work to better understand the groundwater issues associated with CSG and other forms of mining. An outline of current work in this area is provided at Attachment B. Approval of funding for this project is being sought at Ministerial level.
3. As CSG activities involve the injection of a broad range of chemicals into the ground to assist in the extraction of gas (also called hydraulic fracturing or 'fracking'), concerns have been raised about the potential for contamination of water resources used for human consumption. s47C

s47C

- a. The Commonwealth's involvement on relevant health matters lies mainly in the assessment of chemicals by the national industrial chemicals regulator, the

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~~CABINET IN CONFIDENCE~~

National Industrial Chemicals Notification and Assessment Scheme (NICNAS) under the Health and Ageing portfolio. NICNAS provides a national notification and assessment scheme to protect the health of the public, workers and the environment from the harmful effect of industrial chemicals. It assesses the environmental and human health impacts of all new and some existing (on a priority basis) chemicals in response to concerns about their safety on human health and environmental grounds.

- b. NICNAS advises that, of around 60-100 chemicals used in the 'fracking' process, none have been assessed by NICNAS for use in the CSG process. ^{s47C}

s47C

- c. The Commonwealth's National Health and Medical Research Council (NHMRC) also sets the 'Australian Drinking Water Guidelines'. While there is no formal or legislative requirement for states and territories to apply the guidelines, jurisdictions do refer to them in establishing the formal drinking water requirements under their responsibility. NICNAS also refers to these guidelines in assessing the potential impacts of chemicals on drinking water supplies.

s47C

Background

There are two Private Member's Bills related to CSG issues which have been tabled in Parliament. Inquiries are also underway in the Parliaments of Australia and NSW (further detail at Attachment C). A summary of coal seam gas proposals currently being assessed under the EPBC Act is provided at Attachment D.



Mark Laduzko
Assistant Secretary
Agriculture, Customs and
Environment

25 October 2011



Gordon de Brouwer
15 Associate Secretary
PM

Policy Officer: Adam Jagla
Phone no: 6271 5167
Consultation: DRET, SEWPAC,
DHA (NICNAS, NHMRC),
PM&C (CC, Energy & Industry)

~~CABINET IN CONFIDENCE~~

ATTACHMENTS

ATTACHMENT A

s47C

ATTACHMENT B Commonwealth activities in relation to CSG matters

ATTACHMENT C CSG-related Private Members' Bill and Parliamentary Inquiries

ATTACHMENT D Summary of CSG proposals being assessed under the EPBC Act

~~CABINET IN CONFIDENCE~~

Pages 4-7 exempt in full under section 47C FOI Act

ATTACHMENT B

Overview of Current Commonwealth Coal Seam Gas-related Activities

COAG - Standing Council on Energy and Resources

- A Land Access Working Group (LAWG) has been established under the newly formed Standing Council on Energy and Resources chaired by Minister Ferguson. The LAWG held a Coal Seam Gas Forum in Adelaide on 14 September and agreed to work cooperatively to develop a nationally harmonised framework for Coal Seam Gas. The framework will be developed under four key themes:
 - a. co-existence;
 - b. best practice standards;
 - c. land access; and
 - d. water management.
- The initial areas of focus of the work program (chosen on the basis that they represent the areas of greatest community sensitivity) will be to develop a national regulatory and best practice framework to cover:
 - a. well integrity (including fracking and chemical use); and
 - b. groundwater management and monitoring.
- Consideration will be given to the most appropriate means of achieving harmonised arrangements, including:
 - a. legislation (prescriptive or objective based);
 - b. regulation;
 - c. standards;
 - d. leading practice guidelines; and
 - e. protocols.
- The work plan and draft proposals on well integrity and groundwater management and monitoring will be submitted to the Standing Council on Energy and Resources at its next meeting scheduled for 9 December 2011.
- The LAWG also agreed to develop a communications strategy to ensure consistency of messaging across all jurisdictions.

Geoscience Australia (GA) – understanding the resource base

- In 2010 GA undertook an assessment of Australia's energy resources, including unconventional gas (CSG, shale gas, tight gas) and oil. The work has been published in the Australian Energy Resource Assessment.
- GA is continuing to lead an assessment of Australia's CSG, shale gas/oil and tight gas resources. To that end it held a workshop on 12 August 2011 which was attended by experts from the states and territories. There is agreement to collaborate on a high-level national assessment based on existing data. Future work will apply the research into the occurrence and distribution of prospective basin formations in onshore Australia.

Geoscience Australia - groundwater

- GA has recently established a groundwater group to better understand the link between groundwater systems and CSG developments. The group aims to provide an improved evidence base for making decisions about the impacts of CSG developments on groundwater resources, whilst building a strong technical advisory function to support ongoing Commonwealth regulatory responsibilities.
 - a. To date, GA has provided expert advice to SEWPAC to inform its assessment under the EPBC Act of the proposed CSG operations in Queensland by Santos, QGC Pty Ltd and Australia Pacific LNG (an overview of current assessments is provided at Attachment D).
 - o GA's advice recommended a precautionary approach to characterise and quantify the potential impacts of CSG developments on Great Artesian Basin water flows.
 - o Minister Burke approved the projects, subject to over 300 conditions to help protect groundwater dependent species and minimise environmental impacts.

Great Artesian Basin (GAB) Water Resource Assessment

- SEWPAC has engaged CSIRO and GA to undertake a two-year study to conceptualise the hydrogeology of the GAB and assess the potential impacts of future development, including CSG. The project is scheduled for completion by the end of 2012.

SEWPAC Expert Panel

- SEWPAC has established an Expert Panel to assess information provided by Santos, QGC Pty Ltd and Australia Pacific LNG under their Water Monitoring and Assessment Plans. GA is a member of the Expert Panel and has provided advice in areas including:
 - a. minimum allowable groundwater draw-downs;
 - b. methods to survey springs;
 - c. modelling;
 - d. water production use and disposal;

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- e. brine management; and
- f. the adequacy of the Stage 1 Water Monitoring and Management Plans for the 3 CSG projects.

Namoi Catchment Water Study

- The study to examine risks associated with mining and coal development on water resources was established following discussion between farmer and petroleum representatives. SEWPAC is a member of the oversight committee. The Australian Government has contributed \$1.5 million to the \$4.5 million study. DRET has sought and received advice from GA on the Phase 2 Namoi Catchment Water Study that included data collation, data analysis and model conceptualisation for the Namoi catchment.

ATTACHMENT C

1. There are two Private Member's Bills linked to the CSG issue which have been tabled in Parliament. These include the:
 - Landholders' Right to Refuse (Coal Seam Gas) Bill 2011 – introduced on 24 August 2011 by Senator Waters (Australian Greens). s47C
[REDACTED]
 - Environment Protection and Biodiversity Conservation Amendment (Mining, Petroleum and Water Resources) Bill 2011 – introduced on 12 September 2011 by Mr Tony Windsor MP. The Bill was referred to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry for inquiry on 15 September 2011. s47C
[REDACTED]
2. In addition, two inquiries have been initiated on CSG in the Parliaments of Australia and New South Wales, including the:
 - 'Inquiry into management of the Murray Darling Basin – impact of mining coal seam gas' by the Senate Standing Committee on Rural Affairs and Transport References (Parliament of Australia). The inquiry will examine the economic, social and environmental impacts of mining coal seam gas on water resources, property rights, use of prime agricultural land, and other matters such as human health impacts. The Committee's report is due to be tabled by 30 November 2011; and
 - 'Coal seam gas inquiry' by the NSW Legislative Council (Parliament of NSW). This inquiry will report on the environmental, health, economic and social impacts of coal seam gas activities. The role of coal seam gas in meeting the future energy needs of NSW will also be examined. A final report is due for completion on 6 April 2012.

Current coal seam gas proposals: completed and ongoing assessments under the Environment Protection and Biodiversity Conservation Act 1999

Current Projects – Queensland

- Ironbark Project (Origin Energy) – A gas field (approximately 800 wells) in the Surat Basin has been referred by Origin Energy including a short 28km pipeline that will feed into existing infrastructure. The initial assessment 'clock' is stopped pending further information from the proponent.
- Arrow Surat Gas Project (Arrow Energy) – A gas field (approximately 1500 wells) in the Surat Basin is proposed by Arrow Energy with associated pipelines and LNG facility on Curtis Island, north of Gladstone. This proposal is being assessed by the Queensland Government under bilateral agreement with the Commonwealth.
- Bow Energy Ltd – three referrals for coal seam gas fields and pipelines in Central Queensland were received on 8 July 2011, and determined to be controlled actions on 12 August 2011. An assessment approach has not yet been decided, pending further information on the state assessment process.

Current Projects – New South Wales

- Gloucester Coal Seam Methane Gas (AGL) – A gas field (approximately 110 wells) in the Upper Hunter Valley is proposed along with a 90km pipeline from the Gloucester Valley to Newcastle. The deadline for the final decision was extended to seek expert advice on hydrogeological matters.
- Eastern Star Gas – On 12 May 2011, a gas field and two pipelines were determined controlled actions. On 2 June 2011, a related liquefied natural gas export facility on Kooragang Island near Newcastle was determined a controlled action. Final guidelines for an environmental impact statement for the gas fields and two pipelines were provided to the proponent on 26 August 2011. Separate guidelines were provided for the liquefied natural gas facility.
- Illawarra coal seam gas exploration and monitoring (Apex Ltd) – An exploration gas field (approximately 16 wells) in the southern Sydney Basin around the Darks Forest area is proposed. A referral decision is pending further information in the form of state approvals and associated management plans.

Approved Queensland Projects

- Proposals by Queensland Gas Company and Santos to extract coal seam gas from Queensland's Surat Basin and pipe the gas to Curtis Island for conversion to liquefied natural gas for export were approved under the EPBC Act on 22 October 2010. A proposal from Australia Pacific LNG for similar activities in Queensland was approved on 21 February 2011.
- The Santos and British Gas/QGC projects were the first coal seam gas projects to be approved in Australia under the EPBC Act. In taking a precautionary approach, more than 300 detailed conditions have been imposed on each of the Santos and British Gas coal seam gas projects and 270 conditions on the APLNG proposal.

~~CABINET-IN-CONFIDENCE~~

- An expert scientific panel will assess the plans and provide advice to Minister Burke. The expert panel is currently reviewing initial plans which have been submitted by three companies. Stage 1 Water Management and Monitoring Plans were submitted by QGC and Santos at end of April 2011, and by APLNG at end of August 2011.
- On 10 December 2010, under the Water Act 2007, an independent expert report on the impacts of coal seam gas operations in south-east Queensland on surface water and groundwater was released.

Other recent decisions

- On 25 August 2011, a delegate of Minister Burke determined that the George's Island Pilot Wells development near Gunnedah, New South Wales, is not a controlled action provided that it is undertaken in a particular manner. The proposed development consists of three pilot wells and impacts only a small area of mixed native and agricultural land.



Media Release

28 October 2011
MR 81/11

Government listens to farmers on national CSG approach

The National Farmers' Federation (NFF) has welcomed the call from the Minister for Agriculture, Fisheries and Forestry that a harmonised framework be developed across all States and Territories on future coal seam gas developments.

NFF President Jock Laurie said the Minister's comments reflect the NFF's recent discussions with the Prime Minister.

"We spoke to the Prime Minister just last week about the need for a consistent approach across all jurisdictions on the issue of coal seam gas," Mr Laurie said.

"The regulation that currently governs the exploration and development of coal seam gas is primarily a state responsibility, and varies markedly across state boundaries.

"But many of the issues that the agricultural industry has raised, including the potential impact on water resources, the regulation of the use of chemicals and the interaction between coal seam gas companies, landholders and the communities, are issues across all jurisdictions so there is a real need for a common approach.

"In addition to today's Primary Industries Ministerial Council meeting, we also think this issue should be elevated to COAG, due to the potential ramifications of coal seam gas developments on the broader issues of land use and food security, and the intense frustration in the community around these issues.

"Just yesterday we saw a blockade start on the Liverpool Plains in NSW against coal seam gas exploration – yet another sign that farmers and communities do not feel like they are being heard.

"We note that the Minister for Resources has already started discussions at COAG on the harmonisation of mining legislation, so now is the perfect time for a national discussion on issues underpinning both mining and coal seam gas developments on a federal level," Mr Laurie said.

Mr Laurie's comments come as the NFF Mining and Coal Seam Gas Taskforce met in the Hunter Valley, NSW, earlier today to look at land use change issues from both a local and national perspective.

- Ends -

Media Contact: Ruth Redfern on 02 6269 5666, 0408 448 250 or rredfern@nff.org.au

~~CABINET-IN-CONFIDENCE~~

Ref: B11/2318
Urgent/High Complexity

DEPARTMENT OF THE PRIME MINISTER AND CABINET

To: Prime Minister (for information)

REVISED PRIVATE MEMBER'S BILL (WINDSOR) CONCERNING WATER RESOURCES AND
MINING

PM&C
Secretary
Dr de Brouwer
Ms Cross
Dr Schreier
Ms Leon
Ms Lynch
Ms Taylor
Mr Hazlehurst
Mr Tsiaras
Mr Pyne
Mr Macgill

PMO
Mr Hubbard
Mr Bentley
Mr Davidoff
Ms Gordon-Smith
Ms Penrose

s47C

Key Points:

1. Mr Windsor is proposing that the EPBC Act be amended so that any mining action that has, or is likely to have, a significant impact on the quality, structural integrity or hydraulic balance of a water resource is subject to approval by the Commonwealth environment minister under the Act.

a. s47C

b. s47C

2. Mr Windsor has revised his proposed Amendment Bill. Key changes to the Bill are the replacement of the complicated transitional arrangements with inclusion of a 'grandfathering' provision for existing approvals, as well as a new accreditation process.

s42

- b. The new accreditation provisions under the Bill would allow the Minister to accredit state processes to ensure that the new water requirements are addressed. The process is similar to the accreditation process under bilateral agreements already

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established under the EPBC Act. However, the provisions would enable parliamentary disallowance of the accreditation (further detail at Attachment A).

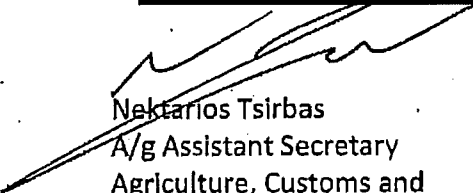
- c. The Bill would still create a new matter of National Environmental Significance (NES) and involve the Commonwealth directly in the approval and assessment of mining operations where there is likely to be a significant impact on the quality, structural integrity or hydraulic balance of a water resource.

3.

s47C

4.

s42


Nektarios Tsirbas
A/g Assistant Secretary
Agriculture, Customs and
Environment Branch
13 September 2011


Gordon de Brouwer
Associate Secretary

Policy Officer: Adam Jagla
Phone no: 6271 5167
Consultation: PM&C (Legal),
SEWPAC, DRET

ATTACHMENTS

ATTACHMENT A Revisions to Mr Windsor's Private Member's bill

2010-2011

The Parliament of the
Commonwealth of Australia

HOUSE OF REPRESENTATIVES

Presented and read a first time

**Environment Protection and Biodiversity
Conservation Amendment (Mining,
Petroleum and Water Resources) Bill
2011**

No. , 2011

(Mr Windsor)

**A Bill for an Act to amend the *Environment
Protection and Biodiversity Conservation Act 1999*,
and for related purposes**

Contents

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Schedule 1—Amendments 3

<i>Environment Protection and Biodiversity Act 1999</i>	3
---	---

1 **A Bill for an Act to amend the *Environment***
2 ***Protection and Biodiversity Conservation Act 1999,***
3 **and for related purposes**

4 The Parliament of Australia enacts:

5 **1 Short title**

6 This Act may be cited as the *Environment Protection and*
7 *Biodiversity Conservation Amendment (Mining, Petroleum and*
8 *Water Resources) Act 2011.*

9 **2 Commencement**

- 10 (1) Each provision of this Act specified in column 1 of the table
11 commences, or is taken to have commenced, in accordance with
12 column 2 of the table. Any other statement in column 2 has effect
13 according to its terms.

1

Commencement information

Column 1	Column 2	Column 3
Provision(s)	Commencement	Date/Details
1. Sections 1 to 3 and anything in this Act not elsewhere covered by this table	The day this Act receives the Royal Assent.	
2. Schedule 1	The day after the Bill for this Act is introduced into the House of Representatives.	

2

3

4

Note: This table relates only to the provisions of this Act as originally enacted. It will not be amended to deal with any later amendments of this Act.

5

6

7

- (2) Any information in column 3 of the table is not part of this Act. Information may be inserted in this column, or information in it may be edited, in any published version of this Act.

8

3 Schedule(s)

9

10

11

12

13

Each Act that is specified in a Schedule to this Act is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this Act has effect according to its terms.

Schedule 1—Amendments

Environment Protection and Biodiversity Act 1999

1 After Subdivision FA of Division 1 of Part 3

Insert:

Subdivision FB—Protection of water resources from mining operations

24D Requirement for approval of mining operations with a significant impact on water resources

- (1) A constitutional corporation, the Commonwealth or a Commonwealth agency must not take an action in the course of mining operations that has, will have or is likely to have a significant impact on the quality, structural integrity or hydraulic balance of a water resource.

Civil Penalty:

- (a) for an individual—5,000 penalty units;
- (b) for a body corporate—50,000 penalty units.

- (2) A person must not, for the purposes of trade or commerce:

- (a) between Australia and another country; or
- (b) between 2 States; or
- (c) between a State and Territory; or
- (d) between 2 Territories;

take an action in the course of mining operations that has, will have or is likely to have a significant impact on the quality, structural integrity or hydraulic balance of a water resource.

Civil Penalty:

- (a) for an individual—5,000 penalty units;
- (b) for a body corporate—50,000 penalty units.

- (3) A person must not take an action in the course of mining operations in:

- (a) a Commonwealth area; or

- 1 (b) a Territory;
2 that has, will have or is likely to have a significant impact on the
3 quality, structural integrity or hydraulic balance of a water
4 resource.
- 5 Civil Penalty:
6 (a) for an individual—5,000 penalty units;
7 (b) for a body corporate—50,000 penalty units.
- 8 (4) Subsections (1) to (3) (inclusive) do not apply to an action if:
9 (a) an approval of the taking of the action by the constitutional
10 corporation, Commonwealth agency, Commonwealth or
11 person is in operation under Part 9 for the purposes of this
12 section; or
13 (b) Division 2, 5A or 6 of Part 4 lets the constitutional
14 corporation, Commonwealth agency, Commonwealth or
15 person take the action without an approval under Part 9 for
16 the purposes of this section; or
17 (c) there is in force a decision of the Minister under Division 2
18 of Part 7 that this section is not a controlling provision for the
19 action and, if the decision was made because the Minister
20 believed the action would be taken in a manner specified in
21 the notice of the decision under section 77, the action is taken
22 in that manner; or
23 (d) the action is an action described in subsection 160(2) (which
24 describes actions whose authorisation is subject to a special
25 environmental assessment process).

26 **24E What are *mining operations*?**

- 27 (1) The following are *mining operations*:
28 (a) operations or activities connected with, or incidental to, the
29 mining or recovery of minerals (including petroleum or gas)
30 or the production of material from minerals, including:
31 (i) prospecting and exploration for minerals; and
32 (ii) milling, refining, treatment and processing of minerals;
33 and
34 (iii) storage and disposal of minerals and materials produced
35 from minerals;

-
- 1 (b) the construction and use of towns, camps, dams, pipelines
2 power lines or other structures for the purposes of operations
3 or activities described in paragraph (a);
4 (c) the performance of any other work for the purposes of
5 operations or activities described in paragraph (a).
6 (2) A *mineral* is any non-living substance that can be extracted from
7 the ground, whether naturally occurring or created by or during the
8 process of extraction:
9 (a) including, but not limited to, coal, ores, petroleum, natural
10 gas, coal seam gas, rock, sand and gravel; but
11 (b) not including water, except where water is extracted as a part
12 of the process of extracting another substance.

13 **24F What is a *water resource*?**

- 14 A *water resource* is:
15 (a) the whole or any part of a river, lake, aquifer or other place
16 where water occurs naturally on or below the surface of the
17 ground, whether permanently, seasonally or during unusually
18 wet seasons; or
19 (b) any recharge zone or system for such a place.

20 **24G Offences relating to mining operations**

- 21 (1) A constitutional corporation, or a Commonwealth agency that does
22 not enjoy the immunities of the Commonwealth, commits an
23 offence if:
24 (a) the corporation or agency takes an action in the course of
25 mining operations; and
26 (b) the action results or will result in a significant impact on the
27 quality, structural integrity or hydraulic balance of a water
28 resource.
29 Penalty: Imprisonment for 7 years or 420 penalty units, or both.
30 (2) A constitutional corporation, or a Commonwealth agency that does
31 not enjoy the immunities of the Commonwealth, commits an
32 offence if:
33 (a) the corporation or agency takes an action in the course of
34 mining operations; and

1 (b) the action is likely to have a significant impact on the quality,
2 structural integrity or hydraulic balance of a water resource.

3 Penalty: Imprisonment for 7 years or 420 penalty units, or both.

4 (3) A person commits an offence if:

5 (a) the person takes an action in the course of mining operations;
6 and

7 (b) the action is taken for the purposes of trade or commerce:

8 (i) between Australia and another country; or

9 (ii) between 2 States; or

10 (iii) between a State and Territory; or

11 (iv) between 2 Territories; and

12 (c) the action results or will result in a significant impact on the
13 quality, structural integrity or hydraulic balance of a water
14 resource.

15 Penalty: Imprisonment for 7 years or 420 penalty units, or both.

16 (4) A person commits an offence if:

17 (a) the person takes an action in the course of mining operations;
18 and

19 (b) the action is taken for the purposes of trade or commerce:

20 (i) between Australia and another country; or

21 (ii) between 2 States; or

22 (iii) between a State and Territory; or

23 (iv) between 2 Territories; and

24 (c) the action is likely to have a significant impact on the quality,
25 structural integrity or hydraulic balance of a water resource.

26 Penalty: Imprisonment for 7 years or 420 penalty units, or both.

27 (5) A person commits an offence if:

28 (a) the person takes an action in the course of mining operations;
29 and

30 (b) the action is taken in:

31 (i) a Commonwealth area; or

32 (ii) a Territory; and

- 1 (c) the action results or will result in a significant impact on the
2 quality, structural integrity or hydraulic balance of a water
3 resource.
- 4 Penalty: Imprisonment for 7 years or 420 penalty units, or both.
- 5 (6) A person commits an offence if:
- 6 (a) the person takes an action in the course of mining operations;
7 and
- 8 (b) the action is taken in:
9 (i) a Commonwealth area; or
10 (ii) a Territory; and
- 11 (c) the action is likely to have a significant impact on the quality,
12 structural integrity or hydraulic balance of a water resource,
- 13 Penalty: Imprisonment for 7 years or 420 penalty units, or both.
- 14 Note 1: An executive officer of a body corporate convicted of an offence
15 against this section may also commit an offence against section 495.
- 16 Note 2: If a person takes an action on land that contravenes this section, a
17 landholder may commit an offence against section 496C.
- 18 (7) Subsections (1) to (6) (inclusive) do not apply to an action if:
- 19 (a) an approval of the taking of the action by the constitutional
20 corporation, Commonwealth agency or person is in operation
21 under Part 9 for the purposes of this section; or
- 22 (b) Division 2, 5A or 6 of Part 4 lets the constitutional
23 corporation, Commonwealth agency or person take the action
24 without an approval under Part 9 for the purposes of this
25 section; or
- 26 (c) there is in force a decision of the Minister under Division 2
27 of Part 7 that this section is not a controlling provision for the
28 action and, if the decision was made because the Minister
29 believed the action would be taken in a manner specified in
30 the notice of the decision under section 77, the action is taken
31 in that manner; or
- 32 (d) the action is an action described in subsection 160(2) (which
33 describes actions whose authorisation is subject to a special
34 environmental assessment process).
- 35 Note: The defendant bears an evidential burden in relation to the matters in
36 this subsection. See subsection 13.3(3) of the *Criminal Code*.

2 Section 34 (after table item 13G)

Insert:

13H	section 24D	water resources
13I	section 24G	water resources

3 After Division 5 of Part 4

Insert:

**Division 5A—Mining operations covered by Ministerial
declarations and accredited mining authorisation
processes**

Subdivision A—Effect of declarations

43AA Actions declared by Minister not to need approval

A person may take an action described in a provision of Subdivision FB of Division 1 of Part 3 (Protection of water resources from mining operations) without an approval under Part 9 for the purposes of the provision if:

- (a) the action is one of a class of actions declared by the Minister under section 43AB not to require approval under Part 9 for the purposes of the provision (because the action is approved in accordance with an accredited mining authorisation process for the purposes of the declaration); and
- (b) the declaration is in operation when the action is taken; and
- (c) the action is taken in accordance with the accredited mining authorisation process.

1 **Subdivision B—Making declarations**

2 **43AB Making declaration that actions do not need approval under**
 3 **Part 9**

4 *Declaration of actions not needing approval*

- 5 (1) The Minister may, by legislative instrument, declare that actions in
 6 a class of actions specified in the declaration wholly or partly by
 7 reference to the fact that their taking has been approved under a
 8 law of a State or self-governing Territory, in accordance with an
 9 authorisation process that is an accredited mining authorisation
 10 process for the purposes of the declaration, do not require approval
 11 under Part 9 for the purposes of a provision of Subdivision FB of
 12 Division 1 of Part 3.

13 Note 1: Subdivisions C and D set out rules about prerequisites for making a
 14 declaration and limits on making a declaration.

15 Note 2: Section 43AD provides for revocation of a declaration.

16 *What is an accredited mining authorisation process?*

- 17 (2) An authorisation process is an **accredited mining authorisation**
 18 **process** for the purposes of a declaration that certain actions do not
 19 require approval under Part 9 for the purposes a provision of
 20 Subdivision FB of Division 1 of Part 3 if and only if:
 21 (a) the authorisation process is set out in a law of a State or
 22 self-governing Territory, and the law and the authorisation
 23 process are identified in or under the declaration; and
 24 (b) the authorisation process has been accredited in writing by
 25 the Minister in accordance with this section for the purposes
 26 of the declaration.

27 *Accrediting authorisation process*

- 28 (3) For the purposes of subsection (2), the Minister may accredit by
 29 written instrument an authorisation process for the purposes of a
 30 declaration. However, the Minister may do so only if the Minister
 31 is satisfied that:
 32 (a) the authorisation process and the law under which it is in
 33 operation, or in which it is set out, meet the criteria
 34 prescribed by the regulations (if any); and

- 1 (b) there has been or will be adequate assessment of the impacts
2 that actions approved in accordance with the authorisation
3 process:
4 (i) have or will have; or
5 (ii) are likely to have;
6 on water resources protected by Subdivision FB of Division 1
7 of Part 3; and
8 (c) actions approved or taken in accordance with the
9 authorisation process will not have unacceptable or
10 unsustainable impacts on water resources protected by
11 Subdivision FB of Division 1 of Part 3.

12 The Minister must publish in accordance with the regulations (if
13 any) the instrument accrediting the authorisation process.

14 *Tabling of authorisation process before accreditation*

- 15 (4) The Minister must cause to be laid before each House of the
16 Parliament:
17 (a) a copy of the relevant part of the law in which the
18 authorisation process is set out that the Minister is
19 considering accrediting for the purposes of subsection (2);
20 and
21 (b) a notice that the Minister proposes to accredit the
22 authorisation process for the purposes of a declaration under
23 this section.

24 *Limitations on accreditation during period for opposition*

- 25 (5) The Minister must not accredit an authorisation process for the
26 purposes of subsection (2):
27 (a) before, or within 15 sitting days after, a copy of the
28 authorisation process is laid before each House of the
29 Parliament under this section; or
30 (b) if, within those 15 sitting days of a House, notice of a motion
31 to oppose accreditation of the authorisation process is given
32 in that House—subject to subsection (6), within 15 sitting
33 days of that House after the notice is given.
- 34 (6) If:
35 (a) notice of a motion to oppose accreditation of the
36 authorisation process is given in a House of the Parliament

within 15 sitting days after the authorisation process is laid before the House under this section; and
(b) the notice is withdrawn or otherwise disposed of within 15 sitting days of that House after the notice is given; then, subject to paragraph (5)(a), the Minister may accredit the authorisation process after the motion is withdrawn or otherwise disposed of.

No accreditation after accreditation opposed

- (7) The Minister must not accredit the authorisation process if either House of the Parliament passes a resolution opposing accreditation of the authorisation process following a motion of which notice has been given within 15 sitting days after the relevant part of the law has been laid before the House under this section.

No accreditation if motion not defeated in time

- (8) The Minister must not accredit the authorisation process if, at the end of 15 sitting days after notice of a motion to oppose accreditation of the authorisation process that was given in a House of the Parliament within 15 sitting days after the relevant part of the law was laid before the House under this section:
(a) the notice has not been withdrawn and the motion has not been called on; or
(b) the motion has been called on, moved and seconded and has not been withdrawn or otherwise disposed of.

Extended time after dissolution or prorogation

- (9) If:
(a) notice of a motion to oppose the accreditation of the authorisation process is given in a House of the Parliament (the *opposing House*); and
(b) before the end of 15 sitting days of the opposing House after the notice is given:
(i) the House of Representatives is dissolved or expires; or
(ii) the Parliament is prorogued; and
(c) at the time of the dissolution, expiry or prorogation (as appropriate):

- 1 (i) the notice has not been withdrawn and the motion has
2 not been called on; or
3 (ii) the motion has been called on, moved and seconded and
4 has not been withdrawn or otherwise disposed of;
5 the relevant part of the law is taken for the purposes of
6 subsections (5), (6), (7) and (8) to have been laid before the
7 opposing House on the first sitting day of that House after the
8 dissolution, expiry or prorogation (as appropriate).

9 **Subdivision C—Prerequisites for making declarations**

10 **43AC Minister may only make declaration if prescribed criteria are**
11 **met**

- 12 The Minister may make a declaration under section 43AB only if
13 the Minister is satisfied that the declaration:
14 (a) accords with the objects of this Act; and
15 (b) meets the requirements (if any) prescribed by the regulations.

16 **Subdivision D—Other rules about declarations**

17 **43AD Revoking declarations**

18 *Revoking declarations*

- 19 (1) The Minister may, by legislative instrument, revoke a declaration
20 made under section 43AB.

21 *Revocation does not affect some actions*

- 22 (2) If:
23 (a) a declaration made under section 43AB is revoked; and
24 (b) before the revocation, an action was being taken that could be
25 taken without approval under Part 9 because its taking was
26 covered by the declaration; and
27 (c) the action had not been completed before the revocation;
28 this Act continues to operate in relation to the action as if the
29 declaration had not been revoked.

43AE Other rules about declarations

Minister must not give preference

In making a declaration or accrediting an authorisation process under section 43AB, or revoking a declaration under section 43AD, relating to an action taken:

(a) by a person for the purposes of trade between Australia and another country or between 2 States; or

(b) by a constitutional corporation;
the Minister must not give preference (within the meaning of section 99 of the Constitution) to one State or part of a State over another State or part of a State.

43AF Minor amendments of accredited mining authorisation process

If:

(a) an authorisation process is an accredited mining authorisation process; and

(b) the authorisation process is amended, or is proposed to be amended; and

(c) the Minister is satisfied that the amendments are, or will be, minor; and

(d) the Minister is satisfied that the authorisation process as amended meets, or will meet, the requirements of:

(i) paragraphs 43AB(3)(a), (b) and (c); and

(ii) section 43AC;

the Minister may, by legislative instrument, determine that the authorisation process as amended continues in effect, for the purposes of this Act, as the accredited mining authorisation process.

4 At the end of Division 6 of Part 4

Add:

1 **43C Mining operations with prior authorisation**

2 A person may take an action described in a provision of
3 Subdivision FB of Division 1 of Part 3 without an approval under
4 Part 9 for the purposes of the provision if taking the action:

5 (a) was, or would have been, lawful immediately before the
6 commencement of Subdivision FB of Division 1 of Part 3;
7 and

8 (b) would be lawful at the time it is taken if Subdivision FB of
9 Division 1 of Part 3 had not been enacted.

10 **5 At the end of subsection 25AA(2)**

11 Add:

12 ; (i) subsections 24G(1) to (6).

13 **6 At the end of subsection 25AA(3)**

14 Add:

15 ; (i) subsections 24D(1) to (3).

16 **7 After subparagraph 495(2)(a)(vi)**

17 Insert:

18 (vib) section 24G (Offences relating to mining operations); or

19 **8 After subparagraph 496C(1)(a)(vii)**

20 Insert:

21 (viib) section 24G (Offences relating to mining operations); or

22 **9 At the end of subsection 355(1)**

23 Add:

24 Note: For *mining operations*, see section 24E.

25 **10 Subsections 355(2) and (3)**

26 Repeal the subsections.

27 **11 Section 528 (definition of *mineral*)**

28 Omit "355(3)", substitute "24E(2)".

29 **12 Section 528 (definition of *mining operations*)**

1 Omit "355(2)", substitute "24E(1)".

2 **13 Section 528**

3 Insert:

4 *water resource* has the meaning given by section 24F.

Date: 15 September 2011

File**SENATE**

Landholders' Right to Refuse (Coal Seam Gas) Bill 2011	
Status:	For debate and/or vote in the Senate on Thursday 22 September 2011
Sponsoring Member:	Senator Larissa Waters
Government Minister:	The Hon Tony Burke MP / Senator the Hon Stephen Conroy
Brief description:	<ul style="list-style-type: none"> The purpose of the Bill is to provide Australian landholders the right to refuse the undertaking of coal seam gas mining activities on their land without prior written authorisation. The provisions would only apply to food producing land as defined under the Bill.
Relationship to Government policy:	<ul style="list-style-type: none"> States and territory governments are responsible for conditions and controls over access to land (including mining and exploration) under their respective mining and petroleum legislation. The way these laws control land use varies across jurisdictions and depends on the type of land involved, e.g. Crown Land, Pastoral leases and Private Land. s47C s47C s47C o The Australian Government is currently working with the states to improve consistency of planning approvals and access arrangements.
Possible talking points:	<ul style="list-style-type: none"> We understand that many Australians are concerned that mining and urban expansion may impact on productive agricultural lands and have an impact on Australia's capacity to produce food. While the Australian Government has an interest in land use changes, particularly those that affect our agricultural industries and food production, decision-making with regard to land use planning and the granting of mining licences rests with state and territory governments. A number of states already have policies which protect our prime agricultural land, and some states are currently addressing community concerns by developing such policies. The Government is confident that mining and farming communities can co-exist, but we recognise that this is a significant policy issue which must be considered carefully.

Date: 15 September 2011

SENATE

Will the Commonwealth incur expenditure under this bill?	Unknown
Branch Head (authorising)	Phone: Nektarios Tsirbas, 6271 5486.
Contact Officer:	Phone: Adam Jagla 6271 5167.

2010-2011

The Parliament of the
Commonwealth of Australia

THE SENATE

Presented and read a first time

Landholders' Right to Refuse (Coal Seam Gas) Bill 2011

No. , 2011

(Senator Waters)

**A Bill for an Act to provide Australian landholders
the right to refuse the undertaking of coal seam gas
mining activities on their land without prior written
authorisation, and for related purposes**

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1 **A Bill for an Act to provide Australian landholders**
2 **the right to refuse the undertaking of coal seam gas**
3 **mining activities on their land without prior written**
4 **authorisation, and for related purposes**

5 The Parliament of Australia enacts:

6 **Part 1—Preliminary**
7

8 **1 Short title**

9 This Act may be cited as the *Landholders' Right to Refuse (Coal*
10 *Seam Gas) Act 2011*.

Section 2

2 Commencement

This Act commences on the day after this Act receives the Royal Assent.

3 Definitions

In this Act:

coal seam gas mining activity means any activity undertaken for the purpose of exploration for or production of coal seam gas.

constitutional corporation means a corporation to which paragraph 51(xx) of the Constitution applies.

court means the Federal Court of Australia.

food producing land means land that has produced food at any time in the previous 10 years from the day the first coal gas seam mining activity has been, or is proposed to be, undertaken on the land.

at a commercial level.
- backyard veggie garden

land includes:

- (a) land within the beds and banks of streams, watercourses and inundated land; and
- (b) waters in, upon and above land; and
- (c) subterranean land.

ownership interest in food producing land: see section 4.

prior written authorisation means an authorisation given under section 11 that has not expired.

4 Meaning of *ownership interest* in food producing land

- (1) A person has an *ownership interest* in food producing land if the person has a legal or equitable interest in it or a right to occupy it.
- (2) Despite subsection (1), a person does not have an ownership interest in food producing land if the interest or right in the land arises as a result of a right granted under a law of the

1 Commonwealth, a State or a Territory to engage in coal seam gas
2 mining activities.

3 **5 Act binds the Crown**

4 This Act binds the Crown in each of its capacities.

5 **6 Extension to external Territories**

6 This Act extends to every external Territory.

7 **7 Relationship to State and Territory laws**

8 This Act is not intended to exclude or limit the operation of any
9 law of a State or Territory, to the extent that that law is capable of
10 operating concurrently with this Act.

Section 8

**Part 2—Coal seam gas mining on food producing
land without prior written authorisation is
unlawful**

8 Application of this Part

- (1) This Part applies in relation to any coal seam gas mining activity engaged in by a constitutional corporation on, or in relation to, food producing land on or after the day this section commences.
- (2) Despite subsection (1), this Part does not apply in relation to a coal seam gas mining activity engaged in by a constitutional corporation on, or in relation to, particular food producing land after the day this section commences if:
 - (a) the activity is for the purpose of exploring for coal seam gas; and
 - (b) the constitutional corporation commenced exploring for coal seam gas on, or in relation to, the land before the day this section commences.
- (3) Despite subsection (1), this Part does not apply in relation to a coal seam gas mining activity engaged in by a constitutional corporation on, or in relation to, particular food producing land after the day this section commences if:
 - (a) the activity is for the purpose of producing coal seam gas; and
 - (b) the constitutional corporation commenced producing coal seam gas on, or in relation to, the land before the day this section commences.

**9 Coal seam gas mining on food producing land without prior
written authorisation is unlawful**

- (1) A constitutional corporation commits an offence if:
 - (a) the corporation either:

Section 10

- (i) enters, or remains on, food producing land for the purposes of engaging in a coal seam gas mining activity; or
- (ii) engages in a coal seam gas mining activity on, or in relation to, food producing land; and
- (b) the corporation is not the owner of the food producing land.

Penalty: 5,000 penalty units

- (2) A constitutional corporation that contravenes subsection (1) commits a separate offence in relation to each day (including a day of conviction for the offence or any later day) during which the contravention continues.

- (3) Subsection (1) does not apply if the corporation has a prior written authorisation from each person with an ownership interest in the food producing land to engage in the coal seam gas mining activity on, or in relation to, the food producing land.

Note: A defendant bears an evidential burden in relation to the matter in subsection (3): see subsection 13.3(3) of the *Criminal Code*.

10 Action for coal seam gas mining on food producing land without prior written authorisation

- (1) A person (an *owner*) with an ownership interest in food producing land may bring an action against another person if:
- (a) the other person is a constitutional corporation; and
- (b) the other person either:
- (i) enters, or remains on, the food producing land for the purpose of engaging in a coal seam gas mining activity; or
- (ii) engages in a coal seam gas mining activity on, or in relation to, the food producing land; and
- (c) the other person does not have a prior written authorisation from the owner to engage in the coal seam gas mining activity on, or in relation to, the food producing land.
- (2) An action under subsection (1) may be commenced by the owner at any time within 6 years after the day on which the cause of action accrued.

Section 11

**Part 3—Prior written authorisations for coal seam
gas mining on food producing land**

11 Obtaining prior written authorisation

- (1) A constitutional corporation wishing to enter, or remain on, food producing land to engage in a coal seam gas mining activity may apply to a person with an ownership interest in the food producing land for an authorisation (a *prior written authorisation*) to engage in that activity on that land.

Note: If more than one person has an ownership interest in the food producing land, the constitutional corporation must obtain a prior written authorisation from each of them to avoid an action under section 10.

- (2) A prior written authorisation must contain the following information:

- (a) the names and details of the parties to the authorisation;
- (b) the food producing land to which the authorisation relates;
- (c) the coal seam gas mining activity proposed to be undertaken by the constitutional corporation in relation to the land;
- (d) when and where the activity is proposed to be engaged in;
- (e) an independent assessment of the current and future risks associated with the proposed coal seam gas mining activity on, or affecting, the food producing land and any associated groundwater systems ; and
- (f) the date the authorisation has effect and its expiry date;
- (g) any other information prescribed by the regulations (if any).

- (3) A prior written authorisation is invalid unless:

- (a) the authorisation contains the information required by subsection (2); and
- (b) the authorisation is in writing; and
- (c) the person with the ownership interest in the food producing land (the *owner*) has been advised, in writing, by the constitutional corporation that is a party to the authorisation, that the owner:

Section 11

- 1 (i) may refuse to sign the authorisation; and
- 2 (ii) should seek independent advice about the authorisation
- 3 before signing it; and
- 4 (d) the authorisation is signed and dated by the owner.

Section 12

Part 4—Remedies

12 Remedies in actions for coal seam gas mining on food producing land without prior written authorisation

- (1) Without limiting the relief that a court may grant to a person (the *plaintiff*) in an action under section 10 (coal seam gas mining without a prior written authorisation), the relief may include an injunction (including an interim injunction).
- (2) The court must order that all costs incurred by a person commencing an action under this Act are to be paid by the defendant to the action unless the court considers that:
 - (a) the person instituted the action vexatiously or without reasonable cause; or
 - (b) it would be unreasonable, in all the circumstances, to do so.
- (3) The court may discharge or vary an injunction or other order made under this section.

Part 5—Other matters**13 Application of this Act to joint ventures and partnerships**

- (1) This section sets out the way this Act applies to a partnership or joint venture (an *entity*) that consists of 2 or more constitutional corporations. Those corporations are referred to in this section as *the participants*.
- (2) If this Act requires or permits something to be done by a constitutional corporation, the thing may be done by one or more of the participants on behalf of the entity.
- (3) If a provision of this Act refers to a constitutional corporation bearing any costs, the provision applies as if the provision referred to any of the participants bearing any costs.
- (4) If a provision of this Act refers to a constitutional corporation doing something, the provision applies as if the provision referred to one or more of the participants doing that thing on behalf of the entity.
- (5) If a provision of this Act requires a constitutional corporation to do something, or prohibits a constitutional corporation doing something, the provision applies as if the reference to the constitutional corporation were a reference to each participant.

14 Regulations

- The Governor-General may make regulations prescribing matters:
- (a) required or permitted by this Act to be prescribed; or
 - (b) necessary or convenient to be prescribed for carrying out or giving effect to this Act.



C11/77385

TONY WINDSOR B.Ec. MP
INDEPENDENT
FEDERAL MEMBER FOR NEW ENGLAND
PARLIAMENT OF AUSTRALIA
HOUSE OF REPRESENTATIVES

11E/CCER/

Document 26

Neht-105



13 July 2011

The Hon Julia Gillard MP
Prime Minister
PO Box 6022
House of Representatives
Parliament House
CANBERRA NSW 2600

Dear Prime Minister

I enclose a copy of letter dated 7 July 2011 from [REDACTED] s47F concerning the issue of mining in prime agricultural areas and the accountability of mining companies for costs associated with their impact on the surrounding environment and communities.

I would be grateful if consideration could be given to the points raised by [REDACTED] s47F and for your advices as soon as possible.

I have written along similar lines to the Minister for Resources and Energy and Minister for Tourism, the Hon Martin Ferguson MP.

Yours sincerely

Tony Windsor

Tony Windsor MP
Member for New England

tw.mo.tam



RECEIVED

8 JUL 2011

Mr Tony Windsor,
Federal Member for New England,
Tamworth, 2340

Dear Tony,

If you read no other personal letter this year I hope you will take the time to read this one; not because it has been authored by anyone special but because it comes as the impassioned plea from a very ordinary Australian. One whose views I believe are representative of a growing groundswell of community outrage at the way big business interests – in this case coal mining and coal-seam-gas (CSG) industries – and the Wall Street view of the world are being allowed to manipulate the political processes to the benefit of a privileged few, to the ultimate destruction of other, very important long-term community values. Ones that don't appear on any balance sheet nor have a listing on the ASX!

To quote from the American philosopher Henry David Thoreau...

"I went into the woods because I wished to live deliberately. To confront only the essential facts of life and see if I could not learn what it had to teach; and not when it came my turn to die, discover that I had not lived."

I include this quote because as a husband and father, biologist, teacher, son of a Soil Conservationist, photographer, outdoor educator, member of a rural community and keen bush-walker, I am passionate about Australia and its natural landscapes. I am also passionate about our need to protect tracts of that landscape from the current rampant expansionism of the coal industry in NSW. (I am not however advocating a tree-hugging, barefoot, hair-shirt wearing mentality.)

The most cursory glance across the popular media over the last twelve to eighteen months will reveal a seething indignation, especially among agricultural communities who are under increasing siege from the coal mining industry (read also CSG) to further rape and plunder the landscape, with consequent loss of livelihood and productive capacity of valuable farming land. The rise in interest in the 'Lock the Gate' movement is testament to the resilience of a farming community who are prepared to fight for values that mean much more than short-term income.

The internet has provided a valuable vehicle of communication among the many community groups mobilising against being walked all over by big mining interests across large slabs of NSW. These are areas of the state's prime agricultural food bowls.

I have driven the New England Highway from Tamworth to Newcastle on a regular basis and observed the increasing number of very lengthy trains full of coal from the region to the port's coal loading facilities, bound for China via the queue of bulk carrying ships lined up off the coast of Newcastle. I have watched the expansion of gaping holes in the lower Hunter Valley gradually transform a rural landscape into a Swiss-cheese moonscape of craters and massive mullock heaps. I have heard the concerns of nearby residents about the health implications of atmospheric dust from the mines. I have wondered whether my taxes are helping to pay for the dual rail line being established to allow these massive trains to pass on their way to and from the Gunnedah basin to Newcastle. (or is this rail a 'community asset' and therefore a legitimate target for the use of taxpayers' dollars?).

I have driven the road from Muswellbrook via Denman, Bylong, Rylstone and Kandos and observed the diversity of other rural businesses – vineyards, olive groves, horse and cattle studs among them - blossoming in those valleys. With coal mines on their horizons I've wondered how their owners feel knowing that their livelihoods are potentially deemed of less worth than the black stuff beneath! Then my question is answered by the numerous signs on fences telling the mining industry to keep out in no uncertain terms. The scenario is repeated in both the Liverpool Plains and the area around Narrabri.

I have heard the arguments about 'rehabilitation' of the mine sites as the mullock heaps are bulldozed smooth and covered in grass to look like smooth mullock heaps covered in grass. Do they seriously believe that that is rehabilitating a landscape that has taken millions of years to mature?! Watercourses are changed; ecological communities are destroyed in the process! Why does the cost of winning the coal from the ground not also include the environmental cost of replacing all of the overburden back into the hole it came from as part of returning the landscape to a more natural state? Such a move might help to level the very uneven playing field that currently prevents the alternative energy players from competing successfully in the coal-dominated marketplace.

I have listened to the television propaganda by Santos, using a farmer to extol their virtues as the big safe and friendly organisation that "looks after the people and looks after the land" and will therefore "always be welcome here."

I have witnessed the mass roadside tree plantings, foretelling of the impending scar that will need to be hidden from the public gaze. Could it be that the coal mining industry is more than a little ashamed of what they're doing behind all those screens of trees and hastily created earth embankments beside the New England Highway?

I've heard the State Minister for Resources, Chris Hartcher on television news after a recent local community meeting, claim that only "real science" will be used to determine the way forward regarding coal-seam-gas exploration in the Gunnedah basin and its impact on underground water aquifers and hence on the farming community. I'd like to believe him but would this be the same "real science" that brought us asbestos mining, thalidomide, Hiroshima, Chernobyl and the most recent Japanese nuclear accident?

The truth is that real science – coming from the Latin 'to know' – is the result of systematic measurement and observation of physical phenomena, not from the sort of modelling and supposition used by pro-industry spokespeople to justify their course of action. Truly knowing the resultant impacts of CSG extraction on subsequent decades of farming practice can only happen in the rear view mirror – after the event. Pseudo-science on the other hand is easily bought by big business concerns wanting to do a 'snow' job on the community at large by wearing their 'caring hat' in public whilst conducting business as usual. The sort of real science that is needed is an extensive, frank and transparent analysis of the observable effects of hydraulic fracturing where it has been practised in the US over many years. This needs to be conducted and funded by a body completely independent of the CSG lobby.

I've heard about the industry doing its own Environmental Impact Assessments prior to approval being granted. Who thinks that it's a good idea to leave the fox in charge of the henhouse with an issue as far-reaching as this? "Sorry" won't be good enough in fifty years after they've moved on! Fresh water is everything – we tamper with it at our peril!

One has only to visit sites like the now abandoned Woodsreef asbestos mine near Barraba to be reminded of the (sadly majority) 'environmental concern' of the mining industry once the prize has been won from the soil. Have we witnessed any outpouring of concern by the executives of James Hardy Industries as they rushed forward with open arms to embrace the pain and suffering of those affected by asbestosis?

It seems that after having successfully 'cleaned up' Newcastle as a steel producing city, we are now content to ship our polluting industry to China in pieces to allow them to grow fat while ignoring the more stringent anti-pollution laws of Australia. (I understand too that there's talk of yet another coal-loader to be developed at the port of Newcastle to handle the promised increase in coal exports.) Do we seriously think that Chinese air pollution stays in China any more than Chilean volcanic ash stays in Chile? We need to pay much closer attention to the voices of those like David Suzuki when he says that as members of ecosystem-earth we need clean air, clean water and fertile soils as the fundamental basis of life on the planet. Without these we are as doomed as any Tasmanian tiger to a similar fate at the hands of human interference.

It seems that the loudest arguments being put forward in support of the unlimited expansion of the coal-mining industry revolve around our balance of payments in the international marketplace, jobs, jobs, jobs and the resources-led boom in the Australian economy. All very real but short term outcomes! All measures that return huge immediate benefits to allow a few mining magnates to drive around in Ferraris as they survey the damage at a secure distance from the lives of those most affected by this industry.

I was similarly amused recently to hear a coal mining representative refer to the state's coal reserves as belonging to the NSW government as if by implication they belonged to us all. Are we seriously supposed to believe him that we all share equally in the benefits won via the coal mining industry? Despite our mineral wealth genuinely being a resource for Australians, it seems that those nearer the top of the business food-chain do disproportionately well when it comes to feeding time! If we are to keep allowing the unfettered expansion of the coal/CSG industries are governments not responsible for ensuring that the revenues so obtained are distributed more equitably across the community by way of compensation for the livelihoods disrupted and environmental costs born in the process?

I'm not suggesting that the coal industry is likely to close down any time soon. It was suggested some thirty years ago that one way of getting industries responsible for polluting nearby waterways to clean up their act would be to ensure that their water intake was downstream from their water outlet. Industries would then be more inclined to invest in the sort of technology to ensure that their effluent was less polluting. Perhaps there's a message here for coal-fired power stations. Rather than building taller and taller chimneys to put polluting gases way out of sight above our heads technology should be employed that fed their exhaust gases back into the process until only clean air is emitted.

Surely enough scientists and environmentalists have been alerting us for years to the dangers of treating our atmosphere, waterways, oceans and land surfaces as bottomless sinks into which we think we can keep emptying the trash. Is the coal industry really paying their way when it comes to cleaning up after themselves? Again, if the true environmental costs were added to their ledger, other forms of energy generation might begin to look more competitive.

Apparently in the United States there remains sufficient unresolved controversy surrounding the current implementation of hydraulic fracturing technology (CSG) to suggest that we err on the side of much greater caution rather than bolting headlong down a similar path. There the hydraulic fracturing industry has been very reticent to disclose the specific chemical components contained in the fracturing liquid, many of which are highly toxic and pose significant potential environmental hazards. Accidents happen! Spills occur! Refer to the case of the well blowout in Clearfield County, Pennsylvania on June 3rd, 2010 where a massive amount of contaminated hydraulic fracturing fluid was accidentally released into the environment and the resources company concerned was ordered to cease all operations in that state from then on.

Yes there are many jobs created by such industries. Are we as a nation so poor in our thinking that we can't come up with some vision for where we want to be in fifty or one hundred years time, when the coal reserves have been exhausted and we have had to move to something other than a fossil-fuel-based economy? Does this government want to be remembered for having helped to galvanise that forward thinking, and show the world a different model, or as another one who sold our soul to the highest overseas bidder. Sooner or later when the coal runs out we will need to be looking for those alternative jobs. So while Australia has need for coal for our own energy needs in the short term, do we really need to be decimating the landscape with gay abandon in order to keep 'growing our economy' in directions that many of us don't want to go in? Our governments need to be seen to be 'driving' innovation away from our current dependence on fossil fuel economies – lest our civilisation itself become the victim of fossilisation.

As important as job creation is do we want that to be the only or even the main 'driver' of decision making? If we apply that logic then why didn't we make people keep riding horses in order to preserve the employment of many farriers, blacksmiths and saddle makers threatened by the introduction of automobiles? Why do we choose to leave the asbestos and much uranium in the ground despite the potential for job creation there? Is it because we (sadly) know of the potential risks posed by those industries?

And yes nearby towns have benefited from mining dollars with some funding of civic projects to everyone's delight. Who doesn't love 'candy' until they find out what it really costs! We need decision makers who will not cave in to similar promises that help rapacious miners get in under the radar.

We need leaders who will create a vision for who we can be as a nation and then put some \$\$\$ behind that to help steer us to something more than the desire for bigger plasma screens in our home theatres, more powerful mobile phones and cars with more bells and whistles. Where are the core community values being talked about publicly, of the sort that will drive us out of our home entertainment cocoons and into the streets of communal life where together we can apply our minds to solving some of the real issues that confront us as humans? These will not be solved by more people owning Maseratis and living in penthouses overlooking Sydney Harbour.

I note with excitement and due applause the coming together of government and industry in the solar farm initiative recently announced for Moree with its attendant promise of job creation. Let this not be tokenism. Surely this is the sort of forward thinking that we should be looking to on a grand scale, sooner rather than later, before whatever planning legislation turns further tracts of NSW into moonscape.

Back to my earlier Thoreau quote. I have just returned from a photographic excursion into the wilderness area known as the Gardens of Stone National Park – part of the Greater Blue Mountains World Heritage area. You guessed it; the country from here through Rylstone, Kandos and Mudgee is another one of the battle fronts with the coal industry. Already at the Airly, Charbon, Ulan and Baal Bone collieries they are knocking on the door. Through photos I wanted to raise awareness of the value of keeping some areas of such pristine beauty strictly off-limits to the sort of destruction witnessed in the Hunter Valley – rehabilitation notwithstanding! I want to make these images available to as large an audience as possible in the hope that enough community outrage will be generated to make it impossible for any approvals to be given by any government body to any mining concerns with their sights set on expansion in this area. It must not happen!

I want generations of not only my children and their children to know that we thought there was value for the human spirit in wild untouched places; values that could not be measured on any profit sheet. (I hope to leave future generations of Australians some other legacy than a huge abandoned quarry.) That we could still get out from behind our earphones and screens and go to places and be reminded of what life in the raw looks like; even if only to remember that as humans we depend on some fundamental natural processes that no amount of technological innovation can separate us from. We cannot remove ourselves from the nest that we are currently soiling with rabid disregard.

When are the issues of caring for the aged, the sick, the poor and disenfranchised, better education etc. going to be seen by the broad community as being more important to the government via its spending policies than bowing down at the altar of Wall Street and the ASX. The day that a carer in an aged-care facility or a kindergarten teacher can earn the same as someone digging coal from the ground will be the day that we make a much needed shift in our priorities as to what matters most for our community. Will this government be seen as helping to lead that shift?

So what? The coal industry is certainly not going to stop tomorrow. But now is certainly the time to stop the cancer further spreading by making sure that they are truly paying the full cost of all aspects of their profit making, including the full environmental costs of air, water and land pollution as well as proper rehabilitation of the mine sites afterwards. (Talk to the women of Muswellbrook about the effects of living in the shadow of their mullock heaps when the westerlies blow). Time to stop handing out mineral exploration licences allowing for ever increasing expansion of an industry bent on a feeding frenzy in the current political climate. Now is the time to be weaning ourselves off dependence on fossil fuels by seriously funding the sort of research and development of alternatives into the future: to pay greater heed to groups like 'Beyond Zero Emissions': to fund more energy-efficient building design: to show the rest of the world what forward planning looks like as opposed to the here-and-now benefits of profit-taking. It goes without saying that all of this comes on the back of the overwhelming weight of evidence that we are accelerating the rate of global warming with the other effects of our fascination with fossil fuels!

I have raised these matters with Kevin Anderson for consideration at the state level. I trust that you will also bring these matters to the attention of the Federal Minister for Resources and Energy, Mr Martin Ferguson and the Prime Minister, Julia Gillard.

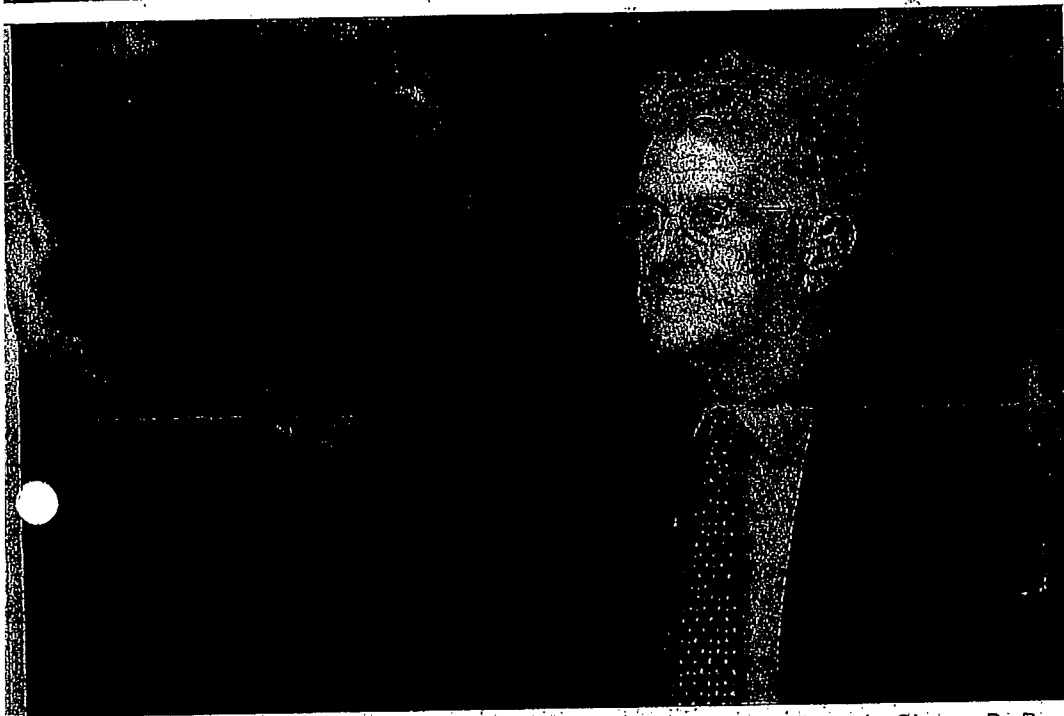
Yours sincerely

s47F

(7-7-11)

REVIEW

H2



FUTURE PLAN Professor Bill Mitchell believes coal is a dying industry. - Picture by Simone De Peak

Looking at life after death

NEWCASTLE University economics professor Bill Mitchell sounded a warning this week as the Hunter talked about hundreds of millions of dollars for infrastructure.

If the region was serious about future planning, he said, it should be thinking about how average people would travel by 2015 or 2020 because by then the working class is not going to be able to afford "cars".

Mitchell also believes that coal is a "dying industry" because of climate change, and "the best thing the government could do for the Hunter is to stop investing in coal infrastructure".

"If coal is viable in the next few years the private sector will invest," he said.

But he said the short-term political cycle did not accord with the long-term thinking needed to consider a post-coal Hunter Region.

Hunter Infrastructure chairman Peter Blackmore, at least, flagged the issue by saying his organisation needed to consider the question "What about life after coal?"

Mitchell said government infrastructure funding should be directed to renewable energy and better public transport systems such as fast rail, particularly given the reliance on cars within the region because of poor public transport.

"The government should be planning for a zero-coal role for the Hunter and investing in non-coal things."

"We're going to be a region that's damaged significantly because the coal industry has to close, and what then?"

"If we're serious about this we should be pitching for what the region will be like in 2030."

Joanne McCarthy

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Wednesday, 2 November 2011 9:09 AM
To: Cox, Zoe; Lai, Judy; Jagla, Adam
Subject: FW: Coal Seam Gas [~~SEC=IN-CONFIDENCE~~]

Security Classification: ~~IN-CONFIDENCE~~

Nektarios Tsirbas
Senior Adviser
Environment and Water
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Ph: +61 2 6271 5486
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)

From: Taylor, Marie
Sent: Tuesday, 1 November 2011 8:00 PM
To: Dripps, Kimberley
Cc: 'Cvijanovic, Tanja'; Laduzko, Mark; Tsirbas, Nektarios; 'Grimes, Paul'
Subject: Coal Seam Gas [~~SEC=IN-CONFIDENCE~~]

Kimberley,

s47C



Thanks in anticipation

Marie

Marie Taylor
Acting First Assistant Secretary
Industry, Infrastructure & Environment
Department of the Prime Minister & Cabinet
ph (02) 6271 5362

Cox, Zoe

From: Dripps, Kimberley [Kimberley.Dripps@environment.gov.au]
Sent: Wednesday, 2 November 2011 5:34 PM
To: Tsirbas, Nektarios; Middleton, Vicki; Barker, James
Cc: Cox, Zoe; Jagla, Adam; Laduzko, Mark
Subject: RE: CSG Brief [SEC=UNCLASSIFIED]

Dear Nektarios,

Still comfortable, thanks.

Key fall-back would be amendment of the EPBC act to create a Coal Seam Gas Scientific Committee which could advise governments (State and Commonwealth) in regard to Coal Seam Gas projects, underpinned by increased investment in research and development. It might also lead the development of national standards, which would be on an 'opt-in' basis for States. It could commission strategic regional assessment of areas of high coal seam gas prospectivity.

s47B

s47C

Hope to send fuller description over the course of the evening.

Cheers

K

From: Tsirbas, Nektarios [mailto:Nektarios.Tsirbas@pmc.gov.au]
Sent: Wednesday, 2 November 2011 4:23 PM
To: Dripps, Kimberley; Middleton, Vicki
Cc: Cox, Zoe; Jagla, Adam; Laduzko, Mark
Subject: CSG Brief [SEC=IN-CONFIDENCE]

Kimberley

s47C

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
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Page 3 exempt in full section 47C FOI Act

DEPARTMENT OF THE PRIME MINISTER AND CABINET

To: Prime Minister (for information)

REVISED PRIVATE MEMBER'S BILL (WINDSOR) CONCERNING WATER RESOURCES AND MINING

s47C

PM&C
Secretary
Mr de Brouwer
Ms Cross
Mr Schreier
Ms Leon
Ms Lynch
Ms Taylor
Mr Hazlehurst
Mr Tsirbas
Mr Pyne
Mr McGill

PMO
Mr Hubbard
Mr Bentley
Mr Davidoff
Ms Gordon-Smith
Ms Penrose

Key Points:

1. Mr Windsor is proposing that the EPBC Act be amended so that any mining action that has, or is likely to have, a significant impact on the quality, structural integrity or hydraulic balance of a water resource is subject to approval by the Commonwealth environment minister under the Act.

s47C

a.

s47C

b.

2. Mr Windsor has revised his proposed Amendment Bill. Key changes to the Bill are the replacement of the complicated transitional arrangements with inclusion of a 'grandfathering' provision for existing approvals, as well as a new accreditation process.

s42

a.

- b. The new accreditation provisions under the Bill would allow the Minister to accredit state processes to ensure that the new water requirements are addressed. The process is similar to the accreditation process under bilateral agreements already

~~CABINET IN CONFIDENCE~~

established under the EPBC Act. However, the provisions would enable parliamentary disallowance of the accreditation (further detail at Attachment A).

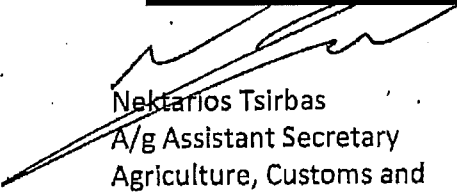
- c. The Bill would still create a new matter of National Environmental Significance (NES) and involve the Commonwealth directly in the approval and assessment of mining operations where there is likely to be a significant impact on the quality, structural integrity or hydraulic balance of a water resource.

3.

s47C

4.

s42


Nektarios Tsirbas
A/g Assistant Secretary
Agriculture, Customs and
Environment Branch
13 September 2011


Gordon de Brouwer
Associate Secretary

Policy Officer: Adam Jagla
Phone no: 6271 5167
Consultation: PM&C (Legal),
SEWPAC, DRET

ATTACHMENTS

ATTACHMENT A Revisions to Mr Windsor's Private Member's bill

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Wednesday, 2 November 2011 11:43 AM
To: Jagla, Adam; Kennedy, Samantha; Goesch, Melissa; Cox, Zoe
Subject: [REDACTED] s47C
Attachments: [REDACTED]

Security Classification: ~~IN-CONFIDENCE~~

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 Fax: 61 2 6271 5177

From: Rogers, Scott [<mailto:Scott.Rogers@TREASURY.GOV.AU>]
Sent: Wednesday, 2 November 2011 9:54 AM
To: Tsirbas, Nektarios
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]

[REDACTED] s47C

Cheers,

Scott Rogers
 Manager, Environment and Agriculture Unit
 Industry, Environment & Defence Division
 The Treasury, Langton Crescent, Parkes ACT 2600
 phone: (02) 6263 3076
 email: scott.rogers@treasury.gov.au

From: Rogers, Scott
Sent: Wednesday, 2 November 2011 9:31 AM
To: 'Hazlehurst, David'; McCulloch, Luise
Cc: Efrossynis, Leah; Taylor, Marie
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]

[REDACTED] s47C

Regards,

Scott Rogers
 Manager, Environment and Agriculture Unit
 Industry, Environment & Defence Division
 The Treasury, Langton Crescent, Parkes ACT 2600
 phone: (02) 6263 3076

email: scott.rogers@treasury.gov.au

From: Hazlehurst, David [<mailto:David.Hazlehurst@pmc.gov.au>]
Sent: Tuesday, 1 November 2011 11:23 PM
To: McCulloch, Luise
Cc: Rogers, Scott; Efrossynis, Leah; Taylor, Marie
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]

Thanks Luise.

[REDACTED] s47C

Cheers

David

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From: McCulloch, Luise <Luise.McCulloch@TREASURY.GOV.AU>
To: Hazlehurst, David
Cc: Rogers, Scott <Scott.Rogers@TREASURY.GOV.AU>; Efrossynis, Leah <Leah.Efrossynis@TREASURY.GOV.AU>; Taylor, Marie
Sent: Tue Nov 01 18:41:58 2011
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE]

David

[REDACTED] s47C

Luise

Luise McCulloch
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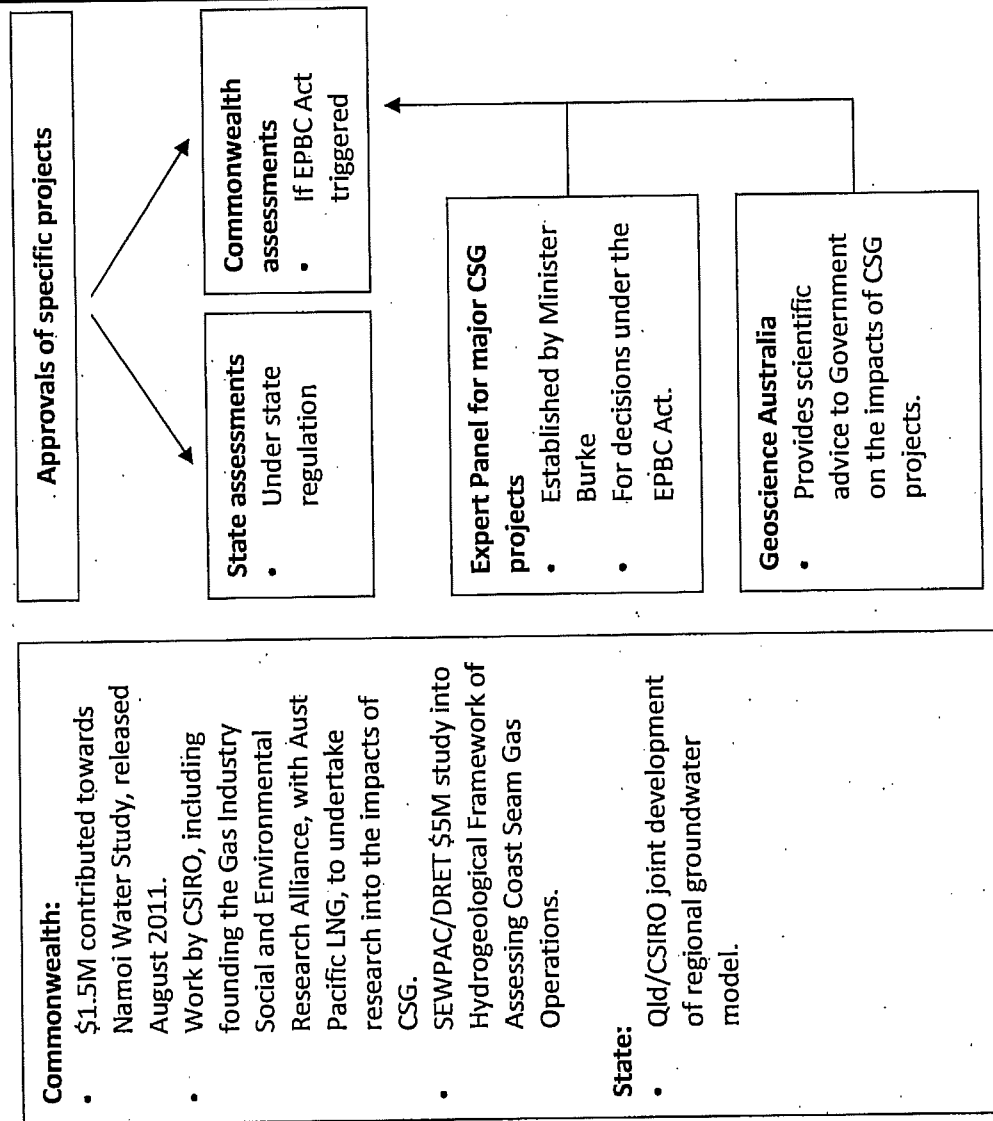
Government activities in relation to Coal Seam Gas

GENERAL: Broad science focus
Ongoing

SPECIFIC: Targeted by region or project
One-off, non-continuing



s47C



Pages 5-6 exempt in full under section 47C of the FOI Act.

What is the Federal Government doing about Coal Seam Gas

1. Coal Seam Gas extraction is regulated in the first instance by state and territory governments.
2. Recognising that the Commonwealth is not the primary regulator, its role entails:
 - a. **facilitating** harmonised and more uniform states and territory regulation of the sector;
 - b. **regulating** in relation to matters of national environmental significance under the Environment Protection and Biodiversity Act (EPBC);
 - c. **scientific researcher and adviser.**

3. Facilitator

- a. The Commonwealth is facilitating a process between the State and Territory Governments in seeking harmonisation in the way they regulate the sector. With the Commonwealth facilitating, the States and Territories have agreed to work co-operatively in seeking to develop a nationally harmonised framework for coal seam gas following four themes:
 - i. Co-existence
 - ii. Best practice standards
 - iii. Land access
 - iv. Water management.

Resources and Energy Ministers will consider this work at the next meeting of the Standing Council on Energy and Resources (SCER) on **9 December**, which will specifically include:

- v. Developing a national regulatory best practice framework focusing on well integrity (including hydraulic fracturing and chemical use) and;
 - vi. Water management and monitoring.
4. **Regulator-** Any CSG project or activity which has the potential to impact matters of national environmental significance is subject to Commonwealth environmental approval under the EPBC (1999) and Water (2001) Acts.
 - a. Projects such as the Queensland Curtis LNG Project, Gladstone LNG Project and the Australia-Pacific LNG Project valued at a total of \$45 billion were subject to approval by the Federal Government under the EPBC Act. Each project attracted 300 conditions, in addition to the 1200 imposed by the QLD Government.
 - b. In addition, the Minister for the Environment established an expert panel to provide advice on groundwater related matters and the adequacy of the potential impacts of CSG production on groundwater.

5. Scientific Researcher and Adviser:

- a. The Commonwealth Government has contributed \$1.5 million towards the Namoi Water Study (released August 2011) covering surface and groundwater resources in the Liverpool Plains to help inform the NSW Government of the best ways to manage any potential impacts from mining on the region's water resources.
- b. The Commonwealth Agency, Geoscience Australia, provides scientific advice to Government to ensure impacts of the coal seam gas

developments on groundwater systems are monitored, and furthermore minimised and mitigated.

- c. The Department of Resources, Energy and Tourism and SEWPAC are conducting a \$5 million study into the Hydrogeological Framework for Assessing Coal Seam Gas Operations.
- d. CSIRO and Australia Pacific LNG with seed funding of \$14 million have founded the Gas Industry Social and Environmental Research Alliance to undertake research in five key social and environmental areas: ground and surface water, biodiversity, land management, the marine environment and social economic impacts of coal seam gas.

Chronology

Namoi Water Study

8 July 2010- Martin Ferguson visited the Gunnedah region with Tony Windsor, and Penny Wong and Martin Ferguson announce \$1.5 million towards Namoi Water Study, with mining and gas companies will provide \$3 million. The study will help inform the NSW Government of the best ways to manage any potential impacts from mining on the region's water resources and farming communities," Mr Ferguson said. The study covers surface and groundwater resources in the Liverpool Plains, including the Peel River and Mooki River, Maules Creek and Plan Creek. The NSW Government's Ministerial Oversight committee, chaired by Mr Mal Peters and with Commonwealth representation, has responsibility for the study and will draw on scientific and other expertise to ensure the study's success.

27/28 August 2011- Release of Namoi Catchment Water Study Phase Two report (phase three being considered for release in November 2011 and four in March 2012)

CSG Water Study

September: Department of Resources, Energy and Tourism and SEWPAC agree to fund Geoscience Australia to conduct a study into the Hydrogeological Framework for Assessing Coal Seam Gas Operations.

SCER harmonisation processes

16 August 2011- Senior Committee of Officials (SCO) of the Standing Committee on Energy and Resources tasked the Land Access Working Group to work together on a coal seam gas regulatory strategy.

14 September 2011- South Australian Government hosted a **Coal Seam Gas Meeting** with officials from state Governments to share information and consider issues. Forum was attended by representatives from South Australia, Queensland, NSW, Victoria, Northern Territory and Western Australian Governments.

Meeting agreed to:

- Work co-operatively to develop a nationally harmonised framework for coal seam gas following four themes:
 - Co-existence
 - Best practice standards
 - Land access
 - Water management; and
- Develop a communications strategy to ensure consistent messaging across jurisdictions.

The first tranche of work to be approved by Ministers at their meeting on **9 December** will include a work program to:

- Develop a national regulatory best practice framework focusing on well integrity (including hydraulic fracturing and chemical use) and;
- Water management and monitoring.

Monitoring / Scientific Research currently underway

A range of modelling and monitoring activities are ongoing in the Great Artesian Basin. Over \$2 million is currently being spent on upgrading, surveying and equipping the monitoring network across the Basin in Queensland.

CSG producers are also undertaking project-specific monitoring and modelling activities. This information will build on the data collected under the Great Artesian Basin monitoring network in Queensland.

Queensland Water Commission has commenced development of a regional groundwater model to support management of cumulative impacts of CSG extractions and to inform the underground Water Impact Report.

Additionally, Commonwealth has commenced a scientific study about the Great Artesian Basin, lead by CSIRO. The study includes assessment of the water resources in the Great Artesian Basin and is expected to be completed late 2012.

Modelling undertaken as part of the Environmental Impact Statements for the major CSG/LNG projects indicates that the potential for interconnectivity is low. Further information will be provided as the Queensland Water Commission undertakes its regional groundwater modelling. This will be adaptively reviewed based on monitoring as the industry progresses.

A \$5M CSG Water Feasibility Study is being undertaken to investigate the potential impacts of CSG extraction on groundwater resources, including the Great Artesian Basin. It is analysing the opportunities for, and the practicability of, using CSG water to assist in achieving the long-term goals of transitioning irrigation communities to lower water use and securing viability of ecological assets. A number of parts of this study have been completed and a Regional Stakeholder Update was held in Dalby in April 2011 to present these findings.

The *Water Act 2000* also establishes the independent role of the **Queensland Water Commission** (the Commission) to oversee the management of the cumulative impacts of CSG activities on underground water. The *Water Act 2000* allows for the establishment of Cumulative Management Areas in areas of intensive development where the impacts of water extraction by individual tenure holders overlap.

The Commission is responsible for preparing Underground Water Impact Reports covering all tenures for the area of the Cumulative Management Area. Within the Cumulative Management Area, the Commission is responsible for preparing the Underground Water Impact Report. The report for the Cumulative Management Area must be approved by the Department of Environment and Resource Management (DERM). The report assigns responsibilities to individual tenure holders in relation to matters such as 'make good' obligations for bores, management of impacts on springs and monitoring.

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Wednesday, 2 November 2011 5:58 PM
To: Cox, Zoe
Subject: [REDACTED] s47C
Attachments: [REDACTED]

Security Classification: UNCLASSIFIED

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From: Taylor, Marie
Sent: Wednesday, 2 November 2011 5:56 PM
To: Tsirbas, Nektarios; Laduzko, Mark
Subject: [REDACTED] s47C [SEC=UNCLASSIFIED]
[REDACTED] s47C

Marie Taylor
Acting First Assistant Secretary
Industry, Infrastructure & Environment
Department of the Prime Minister & Cabinet
ph (02) 6271 5362

From: Sheldrick, Michael [<mailto:Michael.Sheldrick@ret.gov.au>]
Sent: Wednesday, 2 November 2011 5:08 PM
To: Taylor, Marie
Cc: Constable, Tania
Subject: [REDACTED] s47C [SEC=UNCLASSIFIED]

[REDACTED] s47C

From: Constable, Tania
Sent: Wednesday, 2 November 2011 1:22 PM
To: Sheldrick, Michael
Subject: [REDACTED] s47C [SEC=UNCLASSIFIED]

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Pages 4-71 exempt in full under section 47C of the FOI Act

Cox, Zoe

From: Sincock, Adam
Sent: Wednesday, 2 November 2011 2:52 PM
To: Tsirbas, Nektarios
Cc: Cox, Zoe; 'tim.mason@dret.gov.au'
Subject: NCGRT Background Information [SEC=UNCLASSIFIED]
Attachments: NCGRT-Intro AS Apr11.ppt

Security Classification: UNCLASSIFIED

Dear Nektarios,

As discussed, attached is a background presentation to the National Centre for Groundwater Research and Training (NCGRT).

In addition, there are several projects under the Commission's \$105m Groundwater Action Plan that may be of interest, including:

- CSG Position Statement
- Extent and management of co-produced water
- Mining Position Statement
- Groundwater Position Statement
- Baseline assessment of groundwater monitoring
- Great Artesian Basin Water Resource Assessment
- Integrating mining into water planning
- Potential local and cumulative impacts of mining on groundwater resources
- National Groundwater Dependent Ecosystem Atlas
- National Groundwater Information System
- Method for assessing source aquifers to significant springs in the GAB
- Groundwater resource assessment in the eastern Darling Downs
- Recharge/discharge estimation in data poor areas
- Significance of stock and domestic groundwater use
- Sustainable groundwater allocation in intake beds of the GAB in NSW

Please let me know if you would like any further information.

Kind regards,

Adam

Adam Sincock
 A/General Manager
 Sustainable Water Management Group
 National Water Commission
 95 Northbourne Avenue, CANBERRA ACT 2600
 T: 02 6102 6085
 M: 0448 723 865
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Ref: B11/2824
Urgent/High Complexity

DEPARTMENT OF THE PRIME MINISTER AND CABINET

PM&C
Secretary
Dr de Brouwer
Ms Cross
Mr Hazlehurst
Ms Taylor
Mr Laduzko
Mr Angus
Mr Pyne
Mr Yeaman

PMO
Mr Davidoff
Mr Bentley
Ms Penrose
Ms Gordon-
Smith

File

To: Acting Prime Minister (for decision)

OPTIONS FOR GREATER SCIENTIFIC UNDERSTANDING OF THE IMPACTS OF COAL SEAM GAS ON GROUNDWATER RESOURCES AND IMPROVING REGULATION OF THE SECTOR

s47C

Purpose: To respond to your request for advice on options to address concerns around the management of CSG developments.

Key Points:

1.

s47C

2.

s47C

3.

4.

5.

6. Namoi Catchment Study: The Government committed \$1.5 million to the Namoi Catchment Water Study to examine risks associated with mining and coal development in the Namoi catchment. The work will develop models to support assessment of risks

associated with coal mining and CSG development on water resources within the catchment.

s47B

s47B

7.

s47C

8.

Marie Taylor

Marie Taylor
A/g First Assistant Secretary
Industry, Infrastructure and
Environment

3 November 2011

David Hazlehurst

David Hazlehurst
A/g Deputy Secretary
Economic

Policy Officer: Nektarios Tsirbas
Phone no: 6271 5486
Consultation: Fiscal, Govt, CabSec

ATTACHMENTS

ATTACHMENT A Additional resourcing to support scientific research and assessment

ATTACHMENT B  s47C

ATTACHMENT C Background on current CSG activities

Pages 5-9 exempt in full under section 47B and 47C of the FOI Act

CURRENT COAL SEAM GAS RESEARCH

- The Great Artesian Basin Water Resources Assessment (GABWRA) – A \$6.25 million study over two years that aims to reconceptualise the hydrogeology of the Great Artesian Basin and assess the potential impacts of future development including CSG. The project is scheduled for completion by December 2012.
- Healthy Headwaters - One of the main areas of investigation under the \$5 million Coal Seam Gas Water Feasibility Study is a re-conceptualisation of the area to look at potential locations for re-injection and the potential impacts of that re-injection. This has involved review of the hydrogeology, isotopic analysis and soon to be conducted re-injection field trials in association with Arrow Energy.
- Namoi Water Study - The study involves establishment of numerical models addressing surface water and groundwater within the Namoi Catchment. This model will be used to support assessment of risks associated with coal mining and CSG development on water resources within the catchment. The Commonwealth is contributing up to \$1.5 million to this study.
- The Queensland Water Commission is supporting work on the Queensland CSG approvals. This work includes the development of a groundwater flow model (which will be updated every three years) using baseline public and CSG company data and a springs survey to identify which springs, including those EPBC Act listed, that may be impacted by the CSG developments. The Queensland Government is also initiating a regional modelling framework to model regional groundwater impacts in terms of magnitude, extent and timeframe.
- The work being undertaken by the EPBC Act CSG expert panel. This includes assessment of the information provided by the CSG companies for Water Monitoring and Management Plans e.g. modelling results, water production, use and disposal and brine management.
- The National Centre for Groundwater Research and Training (which currently has funding until June 2014) was funded in 2008 with \$30 million of Commonwealth funds.

Cox, Zoe

From: Taylor, Marie
Sent: Thursday, 3 November 2011 10:26 AM
To: Gordon-Smith, Nicola
Cc: Laduzko, Mark; Tsirbas, Nektarios; Cox, Zoe
Subject: [REDACTED] s47C
Attachments: [REDACTED]

Security Classification:

~~PROTECTED~~

[REDACTED] s47C

Marie Taylor
 Acting First Assistant Secretary
 Industry, Infrastructure & Environment
 Department of the Prime Minister & Cabinet
 ph (02) 6271 5362

From: Taylor, Marie
Sent: Thursday, 3 November 2011 6:51 AM
To: Hazlehurst, David
Subject: [REDACTED] s47C [SEC=PROTECTED]

 IMPORTANT: This message, and any attachments to it, contains information that is confidential and may also be the subject of legal professional or other privilege. If you are not the intended recipient of this message, you must not review, copy, disseminate or disclose its contents to any other party or take action in reliance of any material contained within it. If you have received this message in error, please notify the sender immediately by return email informing them of the mistake and delete all copies of the message from your computer system.

This message has been sent from a mobile device.

From: Hoffman, Martin <Martin.Hoffman@ret.gov.au>
To: martin hoffman; Taylor, Marie; Tsirbas, Nektarios; Laduzko, Mark
Cc: Drew Clarke; Sheldrick, Michael <Michael.Sheldrick@ret.gov.au>; Constable, Tania <Tania.Constable@ret.gov.au>; Mason, Tim <Tim.Mason@ret.gov.au>; Ellison, Cherie <Cherie.Ellison@ret.gov.au>; Pigram, Chris <Chris.Pigram@ga.gov.au>
Sent: Wed Nov 02 17:59:31 2011
Subject: [REDACTED] s47C [SEC=PROTECTED]

[REDACTED] s47C

From: Hoffman, Martin
Sent: Wednesday, 2 November 2011 5:55 PM
To: Taylor, Marie; Tsirbas, Nektarios; 'mark.luduzko@pmc.gov.au'
Cc: Clarke, Drew; Sheldrick, Michael; Constable, Tania; Mason, Tim; Ellison, Cherie; Pigram, Chris

Subject: [REDACTED] s47C [SEC=PROTECTED:CABINET-IN-CONFIDENCE]
Importance: High

Marie and colleagues

[REDACTED] s47C

Martin Hoffman
Deputy Secretary

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Pages 3 - 5 exempt in full under section 47C of the FOI Act

Standing Council on Energy and Resources Update on Coal Seam Gas Initiatives

The following outlines the existing work on coal seam gas (CSG) which is being progressed under the auspices of the Standing Council of Energy and Resources (SCER).

On 16 August 2011, the SCER Senior Committee of Officials (SCO) agreed to progress CSG issues through the established Land Access Working Group (LAWG). The LAWG was established to provide more consistent and predictable guidance to all land users and reduce scope for conflict between the mining and agriculture industries and to develop an agreed position for the Council of Australian Governments on multiple land use. CSG issues similarly involve a large component which is land access related.

SCO members agreed that a workshop including technical, communication and policy officers should be held to apply the broader land access agenda to issues specific to CSG. The CSG Forum was hosted by the South Australian Government and held on 14 September 2011 in Adelaide.

The Forum attracted strong government representation and resulted in agreement from all jurisdictions to work cooperatively to develop a national harmonised framework on CSG issues. The framework will be developed under four key themes; co-existence; best practice standards; land access; and water management. It was agreed that the initial work program should comprise:

- development of a national regulatory and best practice framework focusing on well integrity; and
- water management and monitoring (including fracking and chemical use).

The issues within the initial work program were selected on the basis that they represent the areas of greatest community concern.

Attendees agreed that the Commonwealth will develop a draft communications strategy to ensure the consistency of messaging across all jurisdictions for SCO consideration. Attendees agreed that CSG related concerns from communities were often very region-specific and that a communications strategy would need to accept these differences. Attendees debated the merits of achieving harmonised arrangements, including:

- standards;
- leading practice guidelines; and
- protocols.

The choice of approach to be determined on the basis of maximising effectiveness, while achieving the necessary flexibility to meet location specific circumstances with the preference at this stage the adoption of leading practice guidelines.

Working groups on well integrity and water management and monitoring under the SCO has been established. A further meeting is scheduled for 10 November 2011, at which officials, including relevant water and environment agencies (SEWPAC) will be requested to endorse a propose work program to be submitted to the SCER for endorsement at its meeting on 9 December 2011.

Pages 7-19 exempt under section 47C of the FOI Act

ATTACHMENT A

CURRENT COAL SEAM GAS RESEARCH

- The Great Artesian Basin Water Resources Assessment (GABWRA) – a \$6.25 million study over two years that aims to reconceptualise the hydrogeology of the Great Artesian Basin and assess the potential impacts of future development including CSG. The project is scheduled for completion by December 2012.
- Healthy Headwaters - One of the main areas of investigation under the \$5 million Coal Seam Gas Water Feasibility Study is a re-conceptualisation of the area to look at potential locations for re-injection and the potential impacts of that re-injection. This has involved review of the hydrogeology, isotopic analysis and soon to be conducted re-injection field trials in association with Arrow Energy.
- Namoi Water Study - The study involves establishment of numerical models addressing surface water and groundwater within the Namoi Catchment. This model will be used to support assessment of risks associated with coal mining and CSG development on water resources within the catchment. The Commonwealth is contributing up to \$1.5 million to this study.
- The Queensland Water Commission (QWC) work being done in support of the Queensland CSG approvals. This work includes the development of a groundwater flow model (which will be updated every three years) using baseline public and CSG company data and a springs survey to identify which springs, including those EPBC Act listed, that may be impacted by the CSG developments. The Queensland Government is also initiating a regional modelling framework to model regional groundwater impacts in terms of magnitude, extent and timeframe.
- The work being undertaken by the EPBC Act CSG expert panel. This includes assessment of the information provided by the CSG companies for Water Monitoring and Management Plans e.g. modelling results, water production, use and disposal and brine management.
- The work being undertaken by proponents to support developments and to comply with both Commonwealth and State government conditions of approval. Information will be available to the Commonwealth and the States.
- The National Centre for Groundwater Research and Training (which currently has funding until June 2014) was funded in 2008 with \$30million of Commonwealth funds.

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Thursday, 3 November 2011 2:30 PM
To: Taylor, Marie; Laduzko, Mark; Cox, Zoe
Cc: Watson, Selina
Subject: FW: Agencies meeting on coal seam gas, 4 November, 1.30 - 2.30, 33 Allara St City
~~[SEC=IN-CONFIDENCE]~~
Attachments: Agenda CSG issues.docx; CSG minutes 28 Sept 2011.docx
Follow Up Flag: Follow up
Flag Status: Flagged
Security Classification: ~~IN-CONFIDENCE~~

Dear all

Below is the only invitation I have seen for a meeting of the cross-agency Group meeting on CSG. Was hastily put together for 1:30-2:30 tomorrow in Civic. Suggest that Zoe definitely attend along with executive rep(s).

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 Fax: 61 2 6271 5177

From: Barker, James [<mailto:James.Barker@environment.gov.au>]
Sent: Wednesday, 2 November 2011 12:51 PM
To: martin.hoffman; Goesch, Melissa; ian.thompson@daff.gov.au; kim.ritman@abares.gov.au; james.flintoff@daff.gov.au; shereena.matthew@finance.gov.au; Mason, Tim; Ellison, Cherie; Taylor, Marie; Jane.Coram@ga.gov.au; Chris.Stamford@ret.gov.au; neil.williams@infrastructure.gov.au; simon.atkinson@regional.gov.au; Tony.Hussin@infrastructure.gov.au; catriona.murray@facsla.gov.au; angela.mckinnon@nicnas.gov.au; marion.healy@nicnas.gov.au
Cc: Johnson, Belinda; Cvijanovic, Tanja; Tsirbas, Nektarios; Jill.grant@ret.gov.au; Peter.Ottesen@daff.gov.au; Adia.Bouhafs@ret.gov.au; Richard.Webb@daff.gov.au; Berlinda.Crowther@infrastructure.gov.au; Adrian.White@health.gov.au; Karunarathna, Jeewantha; Grove, Lachlan; Guyes, Helen; Oliver, Steven; bruce.taloni; Gerry.smith@regional.gov.au; Nathan.Barker@innovation.gov.au; Dripps, Kimberley; Colreavy, Mary
Subject: Agencies meeting on coal seam gas, 4 November, 1.30 - 2.30, 33 Allara St City [SEC=UNCLASSIFIED]

Folks

At the last meeting of agencies on 28 September, it was agreed that a further meeting would be held in around a month's time. I had been about to send an invite for next week, however more recent developments make an earlier meeting preferable. As such, I've arranged a meeting for this Friday, 1.30 – 2.30 at 33 Allara Street (the same venue as last time), and I apologise for the short notice. The meeting will be Chaired by Kimberley Dripps, Deputy Secretary, SEWPAC.

I've enclosed a proposed agenda, with some additional information as attachments. If you would like to add anything to the agenda, or if you have any other questions, please let me know.

I look forward to seeing you on Friday.

Regards

James

James Barker
Assistant Secretary
Compliance and Enforcement Branch
Environment Assessment and Compliance Division
Department of Sustainability, Environment, Water, Population and Communities

Ph. 02 6274 2760

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Commonwealth Agency Meeting on Coal Seam Gas

AGENDA

Meeting 3 of 4 November 2011

Venue: Lincoln Room, Level 2 - 33 Allara Street, City

Time: 1.30 – 2.30pm

1. Introduction: Chair: Kimberley Dripps (SEWPAC)
 - 1.1. Welcome and introductions (SEWPAC)
 - 1.2. Minutes of previous meeting on 28 September 2011 (SEWPAC)
2. Update on response to Windsor proposal relating to Commonwealth oversight (SEWPAC)
3. Update on coal seam gas projects under EPBC Act (SEWPAC)
 - 2.1. Current projects under EPBC Act assessment. See Attachment A.
 - 2.2. Coal seam gas expert panel.
 - 2.3. Outline of EPBC Act water-related conditions. See Attachment B.
3. Q&As on coal seam gas. (to be provided - SEWPAC)
4. Update on water studies relating to coal seam gas activity (SEWPAC)
 - 4.1. Namoi Water Study
 - 4.2. Great Artesian Basin Water Resource Assessment
 - 4.3. Likely further work by Geoscience Australia
5. Update on nationally harmonised framework for coal seam gas (RET)
6. Opportunities and risks (SEWPAC)
7. Other Business
8. Next meeting

ATTACHMENT A

Current coal seam gas proposals: completed and ongoing assessments under *Environment Protection and Biodiversity Conservation Act 1999*

(current at 2 November 2011)

Current Projects – Queensland:

- **Ironbark Project (Origin Energy)** – A gas field (approximately 800 wells) in the Surat Basin has been referred by Origin Energy including a short 28km pipeline that will feed into existing infrastructure. The proposal was determined to be a 'controlled action' under the EPBC Act on 7 October 2011, to be assessed under the bilateral agreement with Queensland. Queensland is currently developing terms of reference for the assessment.
- **Arrow Surat Gas Project (Arrow Energy)** – A gas field (approximately 1500 wells) in the Surat Basin is proposed by Arrow Energy with associated pipelines and LNG facility on Curtis Island, north of Gladstone. This proposal is being assessed by the Queensland Government under bilateral agreement with the Commonwealth. The proponent is currently preparing an environmental impact statement.
- **Bow Energy Ltd** – Three referrals for coal seam gas fields and pipelines in Central Queensland were received on 8 July 2011, and determined to be controlled actions on 12 August 2011. The project was determined to be a controlled action on 12 August 2011. Queensland is yet to provide advice on the assessment approach by the State.

Current Projects – New South Wales:

- **Gloucester Coal Seam Methane Gas (AGL)** – A gas field (approximately 110 wells) in the Upper Hunter Valley is proposed along with a 90km pipeline from the Gloucester Valley to Newcastle. The deadline for the final decision was extended until 29 March 2012 to seek expert advice on hydrogeological matters.
- **Eastern Star Gas** – On 12 May 2011, a gas field and two pipelines were determined controlled actions. On 2 June 2011, a related liquefied natural gas export facility on Kooragang Island near Newcastle was determined a controlled action. Final guidelines for an environmental impact statement for the gas fields and two pipelines were provided to the proponent on 26 August 2011. Separate guidelines were provided for the liquefied natural gas facility. The proponent is currently preparing its environmental impact statement.
- **Illawarra coal seam gas exploration and monitoring (Apex Ltd)** – An exploration gas field (approximately 16 wells) in the southern Sydney Basin around the Darks Forest area is proposed. A referral decision is pending further information in the form of state approvals and associated management plans.

Approved Queensland Projects:

- Proposals by **Queensland Gas Company** and **Santos** to extract coal seam gas from Queensland's Surat Basin and pipe the gas to Curtis Island for conversion to liquefied natural gas for export were approved under the EPBC Act on 22 October 2010. A proposal from **Australia Pacific LNG** for similar activities in Queensland was approved on 21 February 2011.
- The Santos and British Gas/QGC projects were the first coal seam gas projects to be approved in Australia under the EPBC Act. In taking a precautionary approach, more than 300 detailed conditions have been imposed on each of the Santos and British Gas coal seam gas projects and 270 conditions on the APLNG proposal.
- An expert scientific panel will assess the plans and provide advice to the minister. The expert panel is currently reviewing initial plans which have been submitted by three companies. Stage 1 Water Management and Monitoring Plans were submitted by QGC and Santos at end of April 2011, and by APLNG at end of August 2011.
- On 10 December 2010, under the *Water Act 2007*, an independent expert report on the impacts of coal seam gas operations in south-east Queensland on surface water and groundwater was released.

Other recent decisions

- On 25 August 2011, a delegate of the minister determined that the George's Island Pilot Wells development near Gunnedah, New South Wales, is not a controlled action provided that it is undertaken in a particular manner – principally, that clearing of an EPBC-listed grassland does not exceed .6 of a hectare. The pilot development is proposed by Santos. The proposed development consists of three pilot wells and impacts only a small area (2 ha) of mixed native and agricultural land. Santos has not yet referred a larger gas field proposal in this area, for a decision under the EPBC Act.

ATTACHMENT B

Summary of the water management framework and related EPBC conditions

The following is a summary of the water-related conditions of approval for the QGC gas fields (EPBC 2008/4398), the Santos gas fields (EPBC 2008/4059), and the APLNG gas fields (EPBC 2009/4974). These conditions were attached to the approvals of these projects under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

A copy the water related conditions for the QGC gas field project is set out further below, after the description of the framework (the conditions for Santos and APLNG are relevantly similar). The framework recommended by SEWPAC, and approved by the minister in corresponding conditions of approval, incorporated comments provided by proponents prior to approval of the projects (where the comments were considered reasonable by the department) as well as comments by Geoscience Australia.

Under the conditions, thresholds apply for each aquifer relevant to gas field development. Plans can be adaptively revised when needed, for example; based on better data, subsequent stages of gas field development, and the need for continuous improvement.

The conditions include two 'pathways'. The first pathway relates to demonstrating whether there is hydraulic connectivity between relevant aquifers. The second pathway relates to CSG Water Management and Monitoring Plans (WMMP) addressing groundwater and surface management of extracted groundwater. The Minister's consideration of both pathways will be informed by advice from an expert panel.

The overall objectives of the WMMP in respect to groundwater is for the maintenance or restoration of pre-development aquifer pressure as affected by CSG production, to avoid risks of impacts on matters of national environmental significance.

First pathway

The first pathway allows the proponent to demonstrate, to the satisfaction of the Minister on the advice of the scientific expert panel, that an aquifer is not hydraulically connected.

If the proponent can demonstrate this, then groundwater threshold values and response measures would not apply for that aquifer. However, ongoing monitoring of connectivity and drawdown for such an aquifer is still required.

If new evidence subsequently showed a material change in hydraulic connectivity, for an aquifer previously assessed as being hydraulically not connected, the Minister may require the proponent to follow the second pathway for that aquifer.

Second pathway

Stage 1

Conservative default thresholds apply pending approval of the Stage 1 WMMP. These thresholds are specified under conditions of approval based on information from proponents on the minimum estimates of drawdown in the proponent's modelling.

Six months after the Minister's approval of the projects, the proponents submitted 'Stage 1' WMMPs. The Stage 1 WMMP must:

- relate to both groundwater and surface water management.
- contain groundwater drawdown thresholds that the proponent may not exceed. These thresholds were set having regard to the proponent's best modelling available at the time, as assessed by experts engaged by the Commonwealth.
- set out a program, including timing for a groundwater connectivity study and monitoring of relevant aquifers, having regard to the proponent's gas field development plans.
- set out a program for field piloting of reinjection of extracted CSG water.

While an approved Stage 1 WMMP remains in effect, the threshold levels may not be exceeded. The thresholds apply until the approval of the Stage 2 WMMP.

Any proponent proposed thresholds in the Stage 1 plan cannot be worse in relation to risks of relevant environmental impacts and would need to be justified by proponents with relevant evidence. During Stage 1 proponents must work to progress development of the Stage 2 WMMP.

Stage 2:

Within 18 months after the Minister's Approval of the project, the proponents must submit 'Stage 2' WMMPs for approval. The Stage 2 WMMP is required to be implemented an approved Stage 2 WMMP no later than 24 months after the Minister's approval of the project.

The Stage 2 WMMP generally has the same scope as the Stage 1 WMMP and is based on the framework of the Stage 1 WMMP, and covers, for example:

- updated trigger levels based on an agreed/approved regional groundwater model developed by the Queensland Water Commission with the cooperation CSG proponents operating in the Surat Basin, and the Commonwealth. The default obligation is for each proponent to provide necessary modelling based on its own data, and other data was available to the proponent.
- contain an exceedence response plan relating to the updated trigger levels. This will include detailed measures for immediate implementation of aquifer repressurisation options including reinjection or other methods should trigger levels be exceeded.
- contain an updated monitoring strategy, to inform reporting with respect to trigger levels.
- provide for reporting.

Example water conditions (QGC 2008/4398)

CSG Water Management

43. The proponent must:

- a. take all reasonable measures to ensure that CSG water, including extracted groundwater, treated or amended CSG water, and any associated waste water, brine crystals and/or solids generated as a result of treating or amending water have no significant impact on any MNES during or beyond the life of the project; and
- b. if any such impacts arise apply measures identified in the Coal Seam Gas Water Monitoring and Management Plan, or other requirements under these conditions, to mitigate or make good such impacts to the satisfaction of the Minister.

Coal Seam Gas Water Monitoring and Management Plan

Hydraulic connection

44. If the proponent demonstrates to the satisfaction of the Minister, on the advice of the expert panel, that an aquifer has negligible hydraulic connectivity to other aquifers, then groundwater drawdown limits and threshold values (for groundwater drawdown and quality) for response measures in these conditions do not apply to that aquifer.
45. To avoid doubt, monitoring and risk management requirements in the Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Stage 1 CSG WMMP) and the Stage 2 Coal Seam Gas Water Monitoring and Management Plan (Stage 2 CSG WMMP) (outlined below) will continue to apply to any aquifer which the proponent has demonstrated to the satisfaction of the Minister, on the advice of the expert panel, has negligible hydraulic connectivity to other aquifers.
46. If the Minister, acting on advice of an expert panel, is satisfied that new evidence indicates a material change in hydraulic connectivity of an aquifer to which condition 44 applies, the Minister may notify the proponent, in writing, that condition 44 does not apply to that aquifer.

Default drawdown

47. Within 20 business days from the date of the project approval, or such longer period specified by the Minister in writing, the proponent must submit to the satisfaction of the Minister, modelled groundwater drawdown contour data and contour plots for each targeted aquifer.
48. The Minister, having regard to the minimum drawdown prediction from the proponent's Environmental Impact Statement and the information supplied under condition 47, will specify to the proponent, in writing, the default groundwater drawdown limit for each aquifer that will apply until the Minister's approval of the Stage 1 CSG WMMP. The proponent must not exceed the groundwater drawdown limits specified by the Minister.

Stage 1 CSG Water Monitoring and Management Plan

49. Within 6 months from the date of the project approval, the proponent must submit for the approval of the Minister a Stage 1 Coal Seam Gas Water Monitoring and Management Plan (Stage 1 CSG WMMP) which includes at least:

Groundwater monitoring and management

- a. groundwater drawdown limits for each targeted aquifer;
- b. a program and schedule for aquifer connectivity studies and monitoring of relevant aquifers to determine hydraulic connectivity;
- c. a program and schedule for field piloting of aquifer reinjection of treated CSG water and other groundwater repressurisation techniques;
- d. early warning indicators where drawdown thresholds are being approached.

Hydraulic fracturing

- e. the estimated number and the spatial distribution of boreholes where hydraulic fracturing may be necessary, an annual review of the estimate, and recording of actual use;
- f. details of constituent components of any hydraulic fracturing agents and any other reinjected fluid(s), and their toxicity as individual substances and as total effluent toxicity and ecotoxicity, based on methods outlined in the National Water Quality Management Strategy;

Surface water monitoring and management

- g. an ongoing water quality and quantity surface water monitoring plan that includes at least:
 - i. identification of the surface and aquatic systems to be monitored and their environmental values, water quality, and environmental characteristics, and the rationale for selection;
 - ii. the number and locations of monitoring sites upstream and downstream of proposed discharge of CSG water (whether treated water, amended water or raw water), including test and reference sites upstream and downstream and before and after any proposed impacts;
 - iii. the frequency of the monitoring and rationale for the frequency;
 - iv. baseline data for each monitoring site for comparison of monitoring results over the life of the project;
 - v. the approach to be taken to analyse the results including the methods to determine trends to indicate potential impacts;
 - vi. threshold values that protect relevant MNES (such as reporting or control line values for additional investigation, more intensive management action, make good, and cease operations) at which management actions will be initiated to respond to escalating levels of risk and designed to protect water quality and the associated environmental values of surface and aquatic systems;
 - vii. water treatment and amendment methods and standards;

- viii. water storage locations and volumes including any storage and volumes required to pilot or implement reinjection or other groundwater repressurisation techniques;
- ix. water use or disposal options and methods (whether for beneficial use or not) including frequency, volumes, quality and environmental values documented for each receiving environment;
- x. brine storage locations and volumes, and brine crystal waste management;
- xi. emergency water discharges, their volumes and quality;
- xii. references to standards and relevant policies and guidelines;

Response actions

- h. mechanisms to avoid, minimise and manage risk of adverse impacts and response actions and timeframes that can be taken by the proponent if:
 - i. threshold values for surface water quality and water environmental values specified in the CSG WMMP are exceeded;
 - ii. there are any unforeseen emergency discharges; and

Reporting

- i. performance measures, annual reporting to the Department, and publication of reports on the internet.

Note: A key objective of the CSG WMMP groundwater components is to maintain or restore aquifer pressure, as affected by CSG production, to levels that avoid risk of adverse impact on MNES.

- 50. The proponent must implement the Stage 1 CSG WMMP approved in writing by the Minister, on the advice of an expert panel. The proponent must not exceed the groundwater drawdown limits for each aquifer specified in the Stage 1 CSG WMMP. The Stage 1 CSG WMMP will apply until the commencement of the approved Stage 2 CSG WMMP.

Stage 2 CSG Water Monitoring and Management Plan

- 51. Within 18 months from the date of the approval of the action the proponent must submit for the approval of the Minister, a Stage 2 Coal Seam Gas Water Monitoring and Management Plan (Stage 2 CSG WMMP). The proponent must allow a further 3 months for the Minister's consideration of approval of the Stage 2 CSG WMMP including seeking advice from an expert panel.

- 52. In addition to the matters in the Stage 1 CSG WMMP, the Stage 2 CSG WMMP must also include:

Groundwater monitoring and management

- a. an ongoing CSG water treatment program to ensure that any water to be used for re-injection, or used for other groundwater repressurisation options, is treated at least equal to the water quality of the receiving groundwater system or environment;

- b. the method, data and the evidentiary standards necessary to support a conclusion that an aquifer from which CSG water is being extracted is not hydraulically connected to other aquifers;
- c. a groundwater quality and quantity monitoring plan to monitor the aquifers underlying the project area using a statistically and hydrogeologically valid, best practice bore monitoring network across the project area, and at least;
 - i. the aquifers to be monitored and the rationale for selection;
 - ii. the number and locations of monitoring bores and their flow, pressure, head, and water quality characteristics;
 - iii. the frequency of the monitoring and rationale for the frequency;
 - iv. baseline data for each monitoring site for comparison of monitoring results over the life of the project;
 - v. the approach to be taken to analyse the results including the methods to determine trends to indicate potential impacts;
 - vi. groundwater drawdown threshold values and groundwater quality threshold values for each aquifer (based on regional groundwater modelling endorsed by the Minister) at which management actions (such as reporting or control line values for additional investigation, more intensive management action, make good, and cease operations) will be initiated to respond to escalating levels of risk, including increasing levels of drawdown, contamination of groundwater, or subsidence;
 - vii. references to standards and relevant policies and guidelines;
 - viii. mechanisms to monitor, avoid, minimise, manage, and respond to risks; and
 - ix. performance measures, annual reporting to the Department, and publication of reports on the internet;

Note 1: Threshold values will be identified in the plan and during the life of the approval and related conditions may be varied by the Minister on advice from an expert panel to reflect the best available data and scientific information.

Note 2: For clarity, the monitoring required under this condition may be undertaken jointly with others.

Response actions

- d. an exceedence response plan that includes:
 - i. mechanisms to avoid, minimise and manage risk of adverse impacts and response actions and timeframes that can be taken by the proponent if:
 - I. threshold values for surface water quality and water environmental values specified in the CSG WMMP are exceeded;
 - II. threshold values specified in the CSG WMMP for aquifer drawdown or groundwater contamination are exceeded;
 - III. subsidence or surface deformation occurs which impacts on surface or groundwater hydrology;
 - IV. there are any unforeseen emergency discharges; and
 - ii. a program and timetable for repressurisation using re-injection of CSG water from hydraulically connected aquifers back into appropriate

permeable aquifers and for other groundwater repressurisation options to re-establish pressure levels and water qualities to the satisfaction of the Minister on the advice of an expert panel, in conjunction with appropriate measures to forecast and proactively manage any short-term impacts.

Note: The design of these groundwater repressurisation activities must be informed by a regional-scale groundwater model and a hydrochemical model approved by the Minister.

Implementation of Stage 1 and Stage 2 CSG WMMP

53. The proponent must implement the approved Stage 2 CSG WMMP, no later than 24 months from the date of the project approval.

54. Three months before commencement of each subsequent major stage of the proponent's gas field development the proponent must submit a revised Stage 2 CSG WMMP for the consideration of approval of the Minister including seeking the advice of an expert panel.

55. The Coal Seam Gas Water Monitoring and Management Plan should be based on the proponent's planned staged development within the project area over the total life of the project consistent with approvals granted by the Queensland Government.

Note: Condition 88 requires notification of commencement of major stages of gas field development.

56. The proponent may only have, own, hold, take, or otherwise utilise sufficient CSG water as is required to undertake the approved activities within the approved project area.

57. The Stage 1 and Stage 2 CSG WMMP as approved by the Minister in writing acting on advice of an expert panel and in accordance with the timing requirements under these conditions must be implemented.

Note: The Queensland Coordinator-General also requires surface water and groundwater monitoring and management. The proponent may incorporate requirements into plans that meet both Queensland and Commonwealth requirements.

Revisions of Stage 1 and Stage 2 CSG WMMP

58. Consistent with an adaptive management approach the Stage 2 CSG WMMP must be reviewed and updated for each new stage of gas field development: to take into account of major updates to the Regional Groundwater Model; and to address findings of Cumulative Impact Assessment Reports required by the Queensland Government and these conditions of this approval.

59. A reviewed and updated Stage 2 CSG WMMP must be submitted to the Minister for written approval. Commencement of each new stage of gas field development must not occur without approval. The proponent may undertake activities that are critical to commencement that are associated with mobilisation of plant and

equipment, materials, machinery and personnel prior to the start of development only if such activities will have no adverse impact on MNES, and only if the proponent has notified the Department in writing before the activity is undertaken. The approved CSG WMMP must be implemented for the relevant gas field area.

60. The Minister may, through a request in writing, require that the Stage 1 or Stage 2 CSG WMMP be revised or amended, which may include requirements for amendments to address independent expert advice. Any such request must be acted on within the timeframe specified.

Note: The Minister may throughout the project life seek advice from experts, or an expert panel. As a consequence specific matters identified through such advice may need to be addressed in the Plan. Where such advice is sought the proponent would be provided with opportunity to submit information and respond to the specific matters identified, in order to ensure the Plan is based on the best available information. Review requirements will facilitate adaptive management, alignment with Queensland Government approval requirements, and account for potential cumulative impacts as new scientific information becomes available over the life of the project.



COAL SEAM GAS - COMMONWEALTH AGENCIES MEETING

Meeting 2

Date 28 September 2011

1. Introduction

1.1 Attendance

SEWPAC: Kimberley Dripps, Mary Colreavy, James Barker, Tanja Cvijanovic
DRET: Martin Hoffman, Chris Stamford, Tim Mason, Cherie Ellison
DIT: Neil Williams, Tony Hussin
FACSIA: Catriona Murray
DOFD: Shereena Matthew
NICNAS: Marion Healy, Angela McKinnon
DORA: Simon Atkinson
DAFF: James Flintoft, Ian Thompson
PM&C: Marie Taylor, Melissa Goesch
ABARES: Kim Ritman
Geoscience Australia: Jane Coram

1.2 Previous meeting

A previous meeting of commonwealth agencies was held on 24 August 2011.

2 Agencies' interests

2.1 RET: Is involved in coal seam gas issues through interest in the industry generally; Ministerial Council on Mineral and Petroleum Resources; interest to ensure common standards. COAG also has a work program in relation to common standards, including in relation to well integrity and water management and monitoring. Further water studies are being agreed between SEWPAC and RET/Geoscience Australia.

2.2 SEWPAC: Is involved in relation to EPBC Act assessment and approvals; Water Act responsibilities in relation to the MDB. SEWPAC is also responsible for responding to proposals for legislative reform, including the 'Windsor Bill' (the Environment Protection and Biodiversity Conservation Amendment (Mining, Petroleum and Water Resources) Bill 2011). That Bill has been referred to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry on 15 September 2011. SEWPAC is also providing advice on CSG related environmental issues to other portfolios.

2.3 DAFF: Is interested in the use of agricultural land and coexistence of the CSG industry; water issues and the GAB (including issues of water quality and groundwater pressures).

2.4 NICNAS: Has a particular interest in fracking chemicals. NICNAS is doing some preliminary work to compile a list of the chemicals which are used in fracking. NICNAS can also provide advice in relation to chemicals, including advice to the States. NICNAS is liaising with Qld and NSW directly.

2.5 FACSIA: Is interested in land use agreements, social impacts and business opportunities relating to the industry.

2.5 DIT: Will administer the Regional Infrastructure Fund (subject to the passage of the Minerals Resources Rent Tax). Some projects related to the CSG industry might receive funding

2.6 Geoscience Australia: There are high expectations that GA will provide advice on CSG issues. Issues relate to potential cumulative regional impacts. Jane Coram sits on the Commonwealth CSG expert panel (providing advice to Minister Burke on water management and monitoring plans required under EPBC conditions of approval). Water risks included issues of contamination, which GA has assessed as a low risk (groundwater will move towards areas of lower pressure); and issues of use/disposal of CSG water on the surface.

2.7 ABARES: Is interested in issues around salt management, waste disposal, and longer term impacts on land use, and make good provisions.

2.8 PM&C: Is coordinating strategic approaches to CSG issues. The PM is looking to formalise tasking of further work between Ministers Burke and Ferguson.

2.9 The basic Commonwealth position is that the industry should be supported as long as it is safe for people and the environment. States have primary responsibility for CSG issues, however the issues cross state boundaries.

3. SEWPAC update

3.1 SEWPAC provided an outline of current CSG-related assessments and approvals (by reference to the overview at Attachment A of the agenda). SEWPAC is providing secretariat support to a Coal Seam Gas expert panel. The Panel will provide advice to Minister Burke on water management and monitoring plans which companies must provide under EPBC conditions of approval. Those plans must include details of salt disposal and management. The Queensland Water Commission is developing a regional groundwater model with data provided by the CSG proponents.

3.2 There has been a study of CSG development under s.255AA of the Cth Water Act. SEWPAC is also funding the Namoi Water Study being undertaken by NSW; commissioned CSIRO to undertake a study of the GAB; and is funding a study by Qld on uses of co-produced (CSG) water. SEWPAC is working with RET/GA on a study to cover further areas of prospectivity, including in the Gallilee and Cooper Basins. SEWPAC is also responsible for the national water quality strategy; Ministerial forum on the Lake Eyre Basin.

4. Other Business

3.1 It was agreed that this IDC would meet monthly for the rest of the year.

Actions:

- SEWPAC will circulate an agenda for the next meeting, with minutes of this meeting;
- SEWPAC will coordinate some Q&As / key messages.

5. Next Meeting

TBA.

The meeting finished at 10.30am.

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Friday, 4 November 2011 9:16 AM
To: Lai, Judy; Jagla, Adam; Cox, Zoe
Subject: [REDACTED] s47C
Attachments: [REDACTED]

Security Classification:~~IN-CONFIDENCE~~

[REDACTED] s47C

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 fax: 61 2 6271 5177

From: Parker, David [<mailto:David.Parker@environment.gov.au>]

Sent: Thursday, 3 November 2011 6:33 PM

To: Laduzko, Mark

Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe; Hazlehurst, David; Grimes, Paul; martin hoffman; Drew Clarke; Sheldrick, Michael; Constable, Tania; Dripps, Kimberley; Middleton, Vicki; Patricia Kelly; Byrne, Anne; luise mcculloch; scott.rogers@treasury.gov.au

Subject: [REDACTED] s47C ~~SEC-IN-CONFIDENCE:GOVERNMENT~~

[REDACTED] s47C

Regards
 David

From: Laduzko, Mark [<mailto:Mark.Laduzko@pmc.gov.au>]

Sent: Thursday, 3 November 2011 1:25 PM

To: Grimes, Paul; martin hoffman; Drew Clarke; Sheldrick, Michael; Constable, Tania; Dripps, Kimberley; Parker, David; Middleton, Vicki; Patricia Kelly; Byrne, Anne; luise mcculloch; 'scott.rogers@treasury.gov.au'

Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe; Hazlehurst, David

Subject: [REDACTED] s47C

[REDACTED] s47C

Regards
 Mark

Mark Laduzko
 Assistant Secretary
 Agriculture Customs and Environment
 Dept of Prime Minister and Cabinet
 Ph) 02 6271 5462

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Pages 3-7 exempt in full under section 47C of the FOI Act

COMMONWEALTH REGULATION OF CSG UNDER THE EPBC ACT

The Commonwealth has established, through conditions imposed on approvals under the EPBC Act, environmental regulation on three large coal seam gas proposals in Queensland. Those projects have been given Commonwealth environmental approval under the EPBC Act, following environmental impact assessment, including assessments of potential hydrogeological impacts on affected aquifers and related water resources. These approvals have been informed by considered expert advice, including from Geoscience Australia and are subject to ongoing development guided by the advice of an Expert Panel to provide the Minister with advice on water management and monitoring matters for major coal seam gas projects.

The three approved CSG projects are subject to extensive precautionary conditions. Under those conditions, strict groundwater drawdown limits have been imposed on the expert advice of Geoscience Australia. The conditions also require the companies to provide, for the minister's further approval, detailed management and monitoring plans for surface water and groundwater. Among other things, the plans must include:

- strict monitoring requirements and requirements for responses to any early warnings of potential adverse consequences. This includes requirements for the repressurisation of aquifers if trigger thresholds are reached, by reinjection or other means.
- Programs for aquifer connectivity studies and monitoring of relevant aquifers to determine connectivity;
- Programs for field piloting of aquifer reinjection and other groundwater repressurisation techniques;
- Estimates of the number and distribution of boreholes where hydraulic fracturing may be necessary and annual reviews of those estimates;
- Ongoing water quality and quantity surface water monitoring and management arrangements, including water use and disposal options and methods; and brine storage locations and volumes.

The Commonwealth has no special regulatory powers in relation to coal seam gas. As with all project proposals, the Australian Government's environmental assessment and approval role arose because the three Queensland projects were likely to have significant impacts on matters protected by the EPBC Act. Such matters included listed threatened species and ecological communities, migratory species, and wetlands of international importance. The groundwater-related conditions were imposed for the protection of a particular listed ecological community dependent on discharge from the Great Artesian Basin. These measures were imposed to ensure the integrity of aquifers that are part of the Great Artesian Basin and avoid consequent risks of impacts on groundwater dependent species protected under the EPBC Act.

Currently, coal seam gas proposals which are not likely to have a significant impact on federally protected matters are subject to the exclusive environmental regulation of the states or territories. Further, conditions of approval under the EPBC can only relate to particular matter to be protected (e.g. a particular species). If that matter is not potentially affected by groundwater or surface water, conditions cannot be imposed in relation to groundwater or surface water.

CURRENT COAL SEAM GAS RESEARCH

- The Great Artesian Basin Water Resources Assessment (GABWRA) – a \$6.25 million study over two years that aims to reconceptualise the hydrogeology of the Great Artesian Basin and assess the potential impacts of future development including CSG. The project is scheduled for completion by December 2012.
- Healthy Headwaters - One of the main areas of investigation under the \$5 million Coal Seam Gas Water Feasibility Study is a re-conceptualisation of the area to look at potential locations for re-injection and the potential impacts of that re-injection. This has involved review of the hydrogeology, isotopic analysis and soon to be conducted re-injection field trials in association with Arrow Energy.
- Namoi Water Study - The study involves establishment of numerical models addressing surface water and groundwater within the Namoi Catchment. This model will be used to support assessment of risks associated with coal mining and CSG development on water resources within the catchment. The Commonwealth is contributing up to \$1.5 million to this study.
- The Queensland Water Commission (QWC) work being done in support of the Queensland CSG approvals. This work includes the development of a groundwater flow model (which will be updated every three years) using baseline public and CSG company data and a springs survey to identify which springs, including those EPBC Act listed, that may be impacted by the CSG developments. The Queensland Government is also initiating a regional modelling framework to model regional groundwater impacts in terms of magnitude, extent and timeframe.
- The work being undertaken by the EPBC Act CSG expert panel. This includes assessment of the information provided by the CSG companies for Water Monitoring and Management Plans e.g. modelling results, water production, use and disposal and brine management.
- The work being undertaken by proponents to support developments and to comply with both Commonwealth and State government conditions of approval. Information will be available to the Commonwealth and the States.
- The National Centre for Groundwater Research and Training (which currently has funding until June 2014) was funded in 2008 with \$30million of Commonwealth funds.

Cox, Zoe

From: Tsirbas, Nektarios
Sent: Friday, 4 November 2011 9:36 AM
To: Lai, Judy; Cox, Zoe; Jagla, Adam
Subject: [REDACTED] s47C [SEC=UNCLASSIFIED]

Follow Up Flag: Follow up
Flag Status: Flagged

Security Classification: UNCLASSIFIED

Nektarios Tsirbas
 Senior Adviser
 Environment and Water
 Industry, Infrastructure and Environment Division
 Department of the Prime Minister and Cabinet
 Ph: +61 2 6271 5486
 Fax: 61 2 6271 5177

From: Grimes, Paul [mailto:Paul.Grimes@environment.gov.au]
Sent: Friday, 4 November 2011 8:31 AM
To: Taylor, Marie
Cc: Parker, David; Laduzko, Mark; Tsirbas, Nektarios; Hazlehurst, David; Dripps, Kimberley
Subject: [REDACTED] s47C [SEC=IN-CONFIDENCE:GOVERNMENT] [SEC=UNCLASSIFIED]

~~IN-CONFIDENCE~~

s47C

Paul

On 04/11/2011, at 8:02 AM, "Dripps, Kimberley" <Kimberley.Dripps@environment.gov.au> wrote:

Classification=UNCLASSIFIED

s47C

Cheers
 Kimberley
 Kimberley Dripps
 Deputy Secretary

Ph: 02 6274 1500
 Mobile: 0408 113 026

From: Taylor, Marie [mailto:Marie.Taylor@pmc.gov.au]
Sent: Friday, November 04, 2011 06:49 AM
To: Parker, David
Cc: Dripps, Kimberley; Grimes, Paul; Laduzko, Mark <Mark.Laduzko@pmc.gov.au>; Tsirbas, Nektarios <Nektarios.Tsirbas@pmc.gov.au>; Hazlehurst, David <David.Hazlehurst@pmc.gov.au>
Subject: s47C [SEC=IN-CONFIDENCE:GOVERNMENT]

David,

s47C

Marie

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This message has been sent from a mobile device.

From: Parker, David <David.Parker@environment.gov.au>
To: Laduzko, Mark
Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe; Hazlehurst, David; Grimes, Paul <Paul.Grimes@environment.gov.au>; martin hoffman; Drew Clarke; Sheldrick, Michael <Michael.Sheldrick@ret.gov.au>; Constable, Tania <Tania.Constable@ret.gov.au>; Dripps, Kimberley <Kimberley.Dripps@environment.gov.au>; Middleton, Vicki <Vicki.Middleton@environment.gov.au>; Patricia Kelly; Byrne, Anne <Anne.Byrne@innovation.gov.au>; luisse mcculloch; scott.rogers@treasury.gov.au <scott.rogers@treasury.gov.au>
Sent: Thu Nov 03 18:32:39 2011
Subject: s47C [SEC=IN-CONFIDENCE:GOVERNMENT]

s47C

Regards

David

From: Laduzko, Mark [mailto:Mark.Laduzko@pmc.gov.au]

Sent: Thursday, 3 November 2011 1:25 PM

To: Grimes, Paul; martin hoffman; Drew Clarke; Sheldrick, Michael; Constable, Tania; Dripps, Kimberley; Parker, David; Middleton, Vicki; Patricia Kelly; Byrne, Anne; luise mcculloch; 'scott.rogers@treasury.gov.au'

Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe; Hazlehurst, David

Subject: s47C

s47C

Regards

Mark

Mark Laduzko
Assistant Secretary
Agriculture Customs and Environment
Dept of Prime Minister and Cabinet
Ph) 02 6271 5462

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Cox, Zoe

From: Hazlehurst, David
Sent: Friday, 4 November 2011 9:08 AM
To: Laduzko, Mark
Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe
Subject: RE: [REDACTED] s47C [SEC=UNCLASSIFIED]

Security Classification: UNCLASSIFIED

OK. Thanks Mark.

From: Laduzko, Mark
Sent: Thursday, 3 November 2011 9:09 PM
To: Hazlehurst, David
Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe
Subject: Re: [REDACTED] s47C [SEC=UNCLASSIFIED]

Thanks David

s47C

The office has also asked for briefing by Monday on issues raised by Oakeshott on integrating water, soil and food policy. I'll forward the relevant letter separately.

Mark

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This message has been sent from a mobile device.

From: Hazlehurst, David
To: Laduzko, Mark
Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe
Sent: Thu Nov 03 17:31:13 2011
Subject: RE: [REDACTED] s47C [SEC=UNCLASSIFIED]

Hi Mark and team

Thanks for the awesome job in pulling this together in such an outrageous timeframe.

Fingers crossed for a good result.

Cheers

David

From: Laduzko, Mark

Sent: Thursday, 3 November 2011 1:25 PM

To: Grimes, Paul; martin hoffman; Drew Clarke; Sheldrick, Michael; Constable, Tania; Dripps, Kimberley; Parker, David; 'Middleton, Vicki'; Patricia Kelly; Byrne, Anne; lulse mcculloch; 'scott.rogers@treasury.gov.au'

Cc: Taylor, Marie; Tsirbas, Nektarios; Cox, Zoe; Hazlehurst, David

Subject: [REDACTED] s47C

For info. Attached is an options table that we prepared for the DPM for his discussions with Mr Windsor today on CSG issues.

Thanks all for your input last night. I understand there were discussions with Mr Oakeshott this morning and there will be further discussions with Mr Windsor this afternoon.

Regards

Mark

Mark Laduzko

Assistant Secretary

Agriculture Customs and Environment

Dept of Prime Minister and Cabinet

Ph) 02 6271 5462

~~CABINET-IN-CONFIDENCE~~Ref: B11/2372
Urgent/High Complexity

DEPARTMENT OF THE PRIME MINISTER AND CABINET

PM&C
Secretary
Dr de Brouwer
Ms Cross
Dr Schreier
Ms Taylor
Mr Beresford
Mr Tsirbas
Mr Pyne

To: Prime Minister (for decision by 28 October)

COMMONWEALTH HANDLING OF THE COAL SEAM GAS ISSUE

s47C

PMO
Mr Bentley
Mr Hubbard
Mr Davidoff
Ms Gordon-Smith

File

Purpose: To formalise the outcomes of your meeting with Ministers Crean, Burke and Ferguson on coal seam gas (CSG) issues.

Key Points:

1. You met with Ministers Crean, Burke and Ferguson on 29 August 2011 to discuss Commonwealth handling of CSG issues. s47C

s47C

a.

b.

2. Ministers also noted that Geoscience Australia (GA) and the Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) are developing a proposal for further scientific work to better understand the groundwater issues associated with CSG and other forms of mining. An outline of current work in this area is provided at Attachment B. Approval of funding for this project is being sought at Ministerial level.
3. As CSG activities involve the injection of a broad range of chemicals into the ground to assist in the extraction of gas (also called hydraulic fracturing or 'fracking'), concerns have been raised about the potential for contamination of water resources used for human consumption. s47C

s47C

- a. The Commonwealth's involvement on relevant health matters lies mainly in the assessment of chemicals by the national industrial chemicals regulator, the

~~CABINET-IN-CONFIDENCE~~

~~CABINET-IN-CONFIDENCE~~

National Industrial Chemicals Notification and Assessment Scheme (NICNAS) under the Health and Ageing portfolio. NICNAS provides a national notification and assessment scheme to protect the health of the public, workers and the environment from the harmful effect of industrial chemicals. It assesses the environmental and human health impacts of all new and some existing (on a priority basis) chemicals in response to concerns about their safety on human health and environmental grounds.

- b. NICNAS advises that, of around 60-100 chemicals used in the 'fracking' process, none have been assessed by NICNAS for use in the CSG process. ^{s47C}

s47C

- c. The Commonwealth's National Health and Medical Research Council (NHMRC) also sets the 'Australian Drinking Water Guidelines'. While there is no formal or legislative requirement for states and territories to apply the guidelines, jurisdictions do refer to them in establishing the formal drinking water requirements under their responsibility. NICNAS also refers to these guidelines in assessing the potential impacts of chemicals on drinking water supplies.

s47C

4.

5.

Background

There are two Private Member's Bills related to CSG issues which have been tabled in Parliament. Inquiries are also underway in the Parliaments of Australia and NSW (further detail at Attachment C). A summary of coal seam gas proposals currently being assessed under the EPBC Act is provided at Attachment D.

Mark Laduzko

Mark Laduzko
Assistant Secretary
Agriculture, Customs and
Environment

25 October 2011

Gordon de Brouwer

Gordon de Brouwer
25 Associate Secretary
OK

Policy Officer: Adam Jagla
Phone no: 6271 5167
Consultation: DRET, SEWPAC,
DHA (NICNAS, NHMRC),
PM&C (CC, Energy & Industry)

~~CABINET-IN-CONFIDENCE~~

ATTACHMENTS

ATTACHMENT A

s47C

ATTACHMENT B Commonwealth activities in relation to CSG matters

ATTACHMENT C CSG-related Private Members' Bill and Parliamentary Inquiries

ATTACHMENT D Summary of CSG proposals being assessed under the EPBC Act

~~CABINET-IN-CONFIDENCE~~

Pges 4-8 exempt in full under section 47C of the FOI Act

ATTACHMENT B

Overview of Current Commonwealth Coal Seam Gas-related Activities

COAG - Standing Council on Energy and Resources

- A Land Access Working Group (LAWG) has been established under the newly formed Standing Council on Energy and Resources chaired by Minister Ferguson. The LAWG held a Coal Seam Gas Forum in Adelaide on 14 September and agreed to work cooperatively to develop a nationally harmonised framework for Coal Seam Gas. The framework will be developed under four key themes:
 - a. co-existence;
 - b. best practice standards;
 - c. land access; and
 - d. water management.
- The initial areas of focus of the work program (chosen on the basis that they represent the areas of greatest community sensitivity) will be to develop a national regulatory and best practice framework to cover:
 - a. well integrity (including fracking and chemical use); and
 - b. groundwater management and monitoring.
- Consideration will be given to the most appropriate means of achieving harmonised arrangements, including:
 - a. legislation (prescriptive or objective based);
 - b. regulation;
 - c. standards;
 - d. leading practice guidelines; and
 - e. protocols.
- The work plan and draft proposals on well integrity and groundwater management and monitoring will be submitted to the Standing Council on Energy and Resources at its next meeting scheduled for 9 December 2011.
- The LAWG also agreed to develop a communications strategy to ensure consistency of messaging across all jurisdictions.

Geoscience Australia (GA) – understanding the resource base

- In 2010 GA undertook an assessment of Australia's energy resources, including unconventional gas (CSG, shale gas, tight gas) and oil. The work has been published in the Australian Energy Resource Assessment.
- GA is continuing to lead an assessment of Australia's CSG, shale gas/oil and tight gas resources. To that end it held a workshop on 12 August 2011 which was attended by experts from the states and territories. There is agreement to collaborate on a high-level national assessment based on existing data. Future work will apply the research into the occurrence and distribution of prospective basin formations in onshore Australia.

Geoscience Australia - groundwater

- GA has recently established a groundwater group to better understand the link between groundwater systems and CSG developments. The group aims to provide an improved evidence base for making decisions about the impacts of CSG developments on groundwater resources, whilst building a strong technical advisory function to support ongoing Commonwealth regulatory responsibilities.
 - a. To date, GA has provided expert advice to SEWPAC to inform its assessment under the EPBC Act of the proposed CSG operations in Queensland by Santos, QGC Pty Ltd and Australia Pacific LNG (an overview of current assessments is provided at Attachment D).
 - GA's advice recommended a precautionary approach to characterise and quantify the potential impacts of CSG developments on Great Artesian Basin water flows.
 - Minister Burke approved the projects, subject to over 300 conditions to help protect groundwater dependent species and minimise environmental impacts.

Great Artesian Basin (GAB) Water Resource Assessment

- SEWPAC has engaged CSIRO and GA to undertake a two-year study to conceptualise the hydrogeology of the GAB and assess the potential impacts of future development, including CSG. The project is scheduled for completion by the end of 2012.

SEWPAC Expert Panel

- SEWPAC has established an Expert Panel to assess information provided by Santos, QGC Pty Ltd and Australia Pacific LNG under their Water Monitoring and Assessment Plans. GA is a member of the Expert Panel and has provided advice in areas including:
 - a. minimum allowable groundwater draw-downs;
 - b. methods to survey springs;
 - c. modelling;
 - d. water production use and disposal;

- e. brine management; and
- f. the adequacy of the Stage 1 Water Monitoring and Management Plans for the 3 CSG projects.

Namoi Catchment Water Study

- The study to examine risks associated with mining and coal development on water resources was established following discussion between farmer and petroleum representatives. SEWPAC is a member of the oversight committee. The Australian Government has contributed \$1.5 million to the \$4.5 million study. DRET has sought and received advice from GA on the Phase 2 Namoi Catchment Water Study that included data collation, data analysis and model conceptualisation for the Namoi catchment.

ATTACHMENT C

1. There are two Private Member's Bills linked to the CSG issue which have been tabled in Parliament. These include the:
 - Landholders' Right to Refuse (Coal Seam Gas) Bill 2011 – introduced on 24 August 2011 by Senator Waters (Australian Greens). We have previously briefed you on this matter (Brief B11/2323 refers); and
 - Environment Protection and Biodiversity Conservation Amendment (Mining, Petroleum and Water Resources) Bill 2011 – introduced on 12 September 2011 by Mr Tony Windsor MP. The Bill was referred to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry for inquiry on 15 September 2011. We have previously briefed you on this matter (see Brief B11/1923).
2. In addition, two inquiries have been initiated on CSG in the Parliaments of Australia and New South Wales, including the:
 - 'Inquiry into management of the Murray Darling Basin – impact of mining coal seam gas' by the Senate Standing Committee on Rural Affairs and Transport References (Parliament of Australia). The inquiry will examine the economic, social and environmental impacts of mining coal seam gas on water resources, property rights, use of prime agricultural land, and other matters such as human health impacts. The Committee's report is due to be tabled by 30 November 2011; and
 - 'Coal seam gas inquiry' by the NSW Legislative Council (Parliament of NSW). This inquiry will report on the environmental, health, economic and social impacts of coal seam gas activities. The role of coal seam gas in meeting the future energy needs of NSW will also be examined. A final report is due for completion on 6 April 2012.

**Current coal seam gas proposals: completed and ongoing assessments under the
Environment Protection and Biodiversity Conservation Act 1999**

Current Projects – Queensland

- Ironbark Project (Origin Energy) – A gas field (approximately 800 wells) in the Surat Basin has been referred by Origin Energy including a short 28km pipeline that will feed into existing infrastructure. The initial assessment 'clock' is stopped pending further information from the proponent.
- Arrow Surat Gas Project (Arrow Energy) – A gas field (approximately 1500 wells) in the Surat Basin is proposed by Arrow Energy with associated pipelines and LNG facility on Curtis Island, north of Gladstone. This proposal is being assessed by the Queensland Government under bilateral agreement with the Commonwealth.
- Bow Energy Ltd – three referrals for coal seam gas fields and pipelines in Central Queensland were received on 8 July 2011, and determined to be controlled actions on 12 August 2011. An assessment approach has not yet been decided, pending further information on the state assessment process.

Current Projects – New South Wales

- Gloucester Coal Seam Methane Gas (AGL) – A gas field (approximately 110 wells) in the Upper Hunter Valley is proposed along with a 90km pipeline from the Gloucester Valley to Newcastle. The deadline for the final decision was extended to seek expert advice on hydrogeological matters.
- Eastern Star Gas – On 12 May 2011, a gas field and two pipelines were determined controlled actions. On 2 June 2011, a related liquefied natural gas export facility on Kooragang Island near Newcastle was determined a controlled action. Final guidelines for an environmental impact statement for the gas fields and two pipelines were provided to the proponent on 26 August 2011. Separate guidelines were provided for the liquefied natural gas facility.
- Illawarra coal seam gas exploration and monitoring (Apex Ltd) – An exploration gas field (approximately 16 wells) in the southern Sydney Basin around the Darks Forest area is proposed. A referral decision is pending further information in the form of state approvals and associated management plans.

Approved Queensland Projects

- Proposals by Queensland Gas Company and Santos to extract coal seam gas from Queensland's Surat Basin and pipe the gas to Curtis Island for conversion to liquefied natural gas for export were approved under the EPBC Act on 22 October 2010. A proposal from Australia Pacific LNG for similar activities in Queensland was approved on 21 February 2011.
- The Santos and British Gas/QGC projects were the first coal seam gas projects to be approved in Australia under the EPBC Act. In taking a precautionary approach, more than 300 detailed conditions have been imposed on each of the Santos and British Gas coal seam gas projects and 270 conditions on the APLNG proposal.

- An expert scientific panel will assess the plans and provide advice to Minister Burke. The expert panel is currently reviewing initial plans which have been submitted by three companies. Stage 1 Water Management and Monitoring Plans were submitted by QGC and Santos at end of April 2011, and by APLNG at end of August 2011.
- On 10 December 2010, under the Water Act 2007, an independent expert report on the impacts of coal seam gas operations in south-east Queensland on surface water and groundwater was released.

Other recent decisions

- On 25 August 2011, a delegate of Minister Burke determined that the George's Island Pilot Wells development near Gunnedah, New South Wales, is not a controlled action provided that it is undertaken in a particular manner. The proposed development consists of three pilot wells and impacts only a small area of mixed native and agricultural land.

Pages 15-18 exempt in full under s47C of the FOI Act



COAL SEAM GAS - COMMONWEALTH AGENCIES MEETING

Meeting 2**Date** 28 September 2011**1. Introduction****1.1 Attendance**

SEWPAC: Kimberley Dripps, Mary Colreavy, James Barker, Tanja Cvijanovic

DRET: Martin Hoffman, Chris Stamford, Tim Mason, Cherie Ellison *Tanya?*

DIT: Neil Williams, Tony Hussin

FACSA: Catriona Murray

DOFD: Shereena Matthew

NICNAS: Marion Healy, Angela McKinnon

DORA: Simon Atkinson

DAFF: James Flintoft, Ian Thompson

PM&C: Marie Taylor, Melissa Goesch

ABARES: Kim Ritman

Geoscience Australia: Jane Coram

1.2 Previous meeting

A previous meeting of commonwealth agencies was held on 24 August 2011.

2 Agencies' interests

2.1 RET: Is involved in coal seam gas issues through interest in the industry generally; Ministerial Council on Mineral and Petroleum Resources; interest to ensure common standards. COAG also has a work program in relation to common standards, including in relation to well integrity and water management and monitoring. Further water studies are being agreed between SEWPAC and RET/Geoscience Australia.

2.2 SEWPAC: Is involved in relation to EPBC Act assessment and approvals; Water Act responsibilities in relation to the MDB. SEWPAC is also responsible for responding to proposals for legislative reform, including the 'Windsor Bill' (the Environment Protection and Biodiversity Conservation Amendment (Mining, Petroleum and Water Resources) Bill 2011). That Bill has been referred to the House Standing Committee on Agriculture, Resources, Fisheries and Forestry on 15 September 2011. SEWPAC is also providing advice on CSG related environmental issues to other portfolios.

2.3 DAFF: Is interested in the use of agricultural land and coexistence of the CSG industry; water issues and the GAB (including issues of water quality and groundwater pressures).

2.4 NICNAS: Has a particular interest in fracking chemicals. NICNAS is doing some preliminary work to compile a list of the chemicals which are used in fracking. NICNAS can also provide advice in relation to chemicals, including advice to the States. NICNAS is liaising with Qld and NSW directly.

2.5 FACSA: Is interested in land use agreements, social impacts and business opportunities relating to the industry.

2.5 DIT: Will administer the Regional Infrastructure Fund (subject to the passage of the Minerals Resources Rent Tax). Some projects related to the CSG industry might receive funding

2.6 Geoscience Australia: There are high expectations that GA will provide advice on CSG issues. Issues relate to potential cumulative regional impacts. Jane Coram sits on the Commonwealth CSG expert panel (providing advice to Minister Burke on water management and monitoring plans required under EPBC conditions of approval). Water risks included issues of contamination, which GA has assessed as a low risk (groundwater will move towards areas of lower pressure); and issues of use/disposal of CSG water on the surface.

2.7 ABARES: Is interested in issues around salt management, waste disposal, and longer term impacts on land use, and make good provisions.

2.8 PM&C: Is coordinating strategic approaches to CSG issues. The PM is looking to formalise tasking of further work between Ministers Burke and Ferguson.

2.9 The basic Commonwealth position is that the industry should be supported as long as it is safe for people and the environment. States have primary responsibility for CSG issues, however the issues cross state boundaries.

3. SEWPAC update

3.1 SEWPAC provided an outline of current CSG-related assessments and approvals (by reference to the overview at Attachment A of the agenda). SEWPAC is providing secretariat support to a Coal Seam Gas expert panel. The Panel will provide advice to Minister Burke on water management and monitoring plans which companies must provide under EPBC conditions of approval. Those plans must include details of salt disposal and management. The Queensland Water Commission is developing a regional groundwater model with data provided by the CSG proponents.

3.2 There has been a study of CSG development under s.255AA of the Cth Water Act. SEWPAC is also funding the Namoi Water Study being undertaken by NSW; commissioned CSIRO to undertake a study of the GAB; and is funding a study by Qld on uses of co-produced (CSG) water. SEWPAC is working with RET/GA on a study to cover further areas of prospectivity, including in the Gallilee and Cooper Basins. SEWPAC is also responsible for the national water quality strategy; Ministerial forum on the Lake Eyre Basin.

4. Other Business

3.1 It was agreed that this IDC would meet monthly for the rest of the year.

Actions:

- SEWPAC will circulate an agenda for the next meeting, with minutes of this meeting;
- SEWPAC will coordinate some Q&As / key messages.

5. Next Meeting

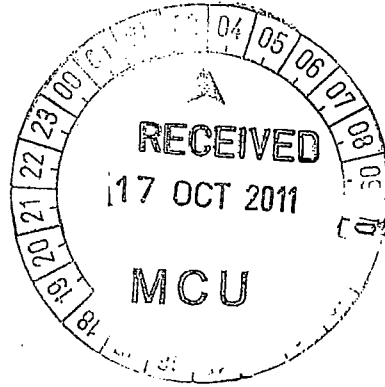
TBA.

The meeting finished at 10.30am.

*Andrew
Nelson***National Farmers'**
FEDERATION

13 October 2011

The Hon Julia Gillard MP
Prime Minister of Australia
Parliament House
Canberra ACT 2600



Dear Prime Minister,

RE: NFF Mining and Coal Seam Gas Policy

Earlier this year, the National Farmers' Federation (NFF) established a Taskforce to address the issues raised by our membership regarding mining and coal seam gas activities on agricultural land, which has culminated with Members' Council endorsing the attached policy. Please note that the attached policy will guide NFF advocacy on this issue.

The NFF is concerned about the long-term sustainability of not just the interests of today's farmers but also of tomorrow's farmers. Sustainability has many facets including the environmental, economic and social sustainability of farmers and their communities as well as the broader agricultural sector. The policies have been developed cognisant of the role of NFF and its members in this important policy debate with the primary aims of protecting the capacity of our water and soils to meet increased food demand.

I look forward to discussing this matter with you in the near future, but if you have any queries or require any additional information, please don't hesitate to contact me.

Yours sincerely

DUNCAN FRASER
Vice President
Chair NFF Mining and Coal Seam Gas Taskforce



National Farmers'
FEDERATION

MINING AND PETROLEUM RESOURCES POLICY

Preamble

The acceleration of mining and coal seam gas development in Australia and how these industries interact with Australian Agriculture has been the cause of much debate and consternation over recent years. This public policy debate has resulted in calls for the protection of waters sources, the preservation of prime agricultural land, veto rights, or better defined property rights for farmers. However, most of the regulation, which is the source of much frustration, is state based.

At an Australian Government level, there is clearly a role for the EPBC Act in the protection of matters of national environmental significance listed under the Act – this includes any of the activities undertaken by the agricultural and resources sectors. While the Water Act is focussed on better management of the Murray-Darling Basin, it specifically prohibits management of the Great Artesian Basin that underlies much of the MDB. There is also clearly a role for the Australian Government in the approval for use of chemicals that might be used by the mining and coal seam gas industries.

The National Farmers' Federation has a role to play in any relevant Government policies at an Australian Government level, while its members (the state farming organisations, national commodity councils and other value chain organisations) have a role in amending or seeking implementation of relevant policies at a State and Territory level.

The National Farmers' Federation is concerned about the long-term sustainability of not just the interests of today's farmers but also of tomorrow's farmers. Sustainability has many facets including the environmental, economic and social sustainability of farmers and their communities as well as the broader agricultural sector. The following policies have been developed cognisant of the role of NFF and its members in this important policy debate with the primary aims of protecting the agricultural capacity of our water sources and soils to meet increased food demand.

The profitability and sustainability of food and fibre production must not be compromised. Australia's mineral and petroleum industries must recognise and avoid any perverse and unintended impacts across the landscape. This includes direct and indirect as well as current and future impacts arising from exploration, mining and production activities, beyond the confines of the licence area and the life of the licence.

Australia's reputation for safe, clean quality food must not be compromised. Australian agriculture plays a crucial role in supplying fresh quality food to Australia and the world and to global food security. The safety of Australia's food must not be jeopardised by the mineral and petroleum industries.

There should be no net decline in water quality or water quantity. Many farmers are concerned about the potential for contamination of surface and groundwater as well as impacts on water volume of aquifers. NFF recommends that mineral and petroleum industries are required to show no net decline in water quality and no net loss in water quantity for third parties (stock & domestic, irrigation, town water supplies) against benchmark conditions.

Water management must be National Water Initiative consistent. As the blueprint for Australia's water reform, all water use or interception by the mineral and petroleum industries must be consistent with the National Water Initiative provisions, including NWI consistent water planning and management.

Social, economic and environmental outcomes must not be compromised. The nature of mineral and petroleum industries means that they may have both positive and negative economic, environment

and social effects. The mineral and petroleum industries must take all reasonable steps to minimise the adverse effects on communities, landholders and the environment.

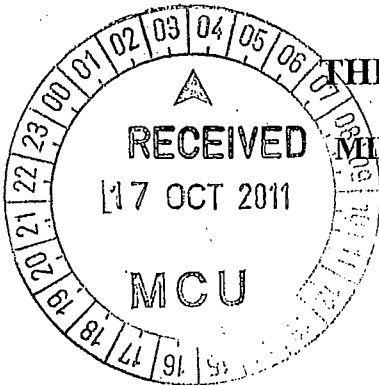
The key to productive relationships between agriculture and mineral and petroleum industries is relationships built on genuine trust and goodwill and appropriate community engagement. Agriculture and the mineral and petroleum industries underpin the social and economic fabric of rural and regional communities. The social licence of mineral and petroleum industries is dependent on constructive, transparent and quality engagement and participatory decision-making processes over time. Moreover, best practice engagement should include essential elements such as:

- Transparency and full disclosure;
- Collaboration;
- Inclusiveness;
- Ethical and responsible business practice;
- Integrity and appropriate behaviour;
- Capacity building; and
- Listening and responding to community concerns.

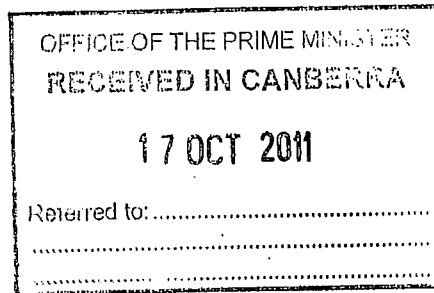
Landholder rights impacted by mineral and petroleum licences must be protected by strong regulatory frameworks. NFF recognises that the mineral and petroleum industries have a right under State and Territory legislation to explore and mine across the landscape. However, NFF notes that further work is required to ensure there are strong regulatory frameworks with clearly specified legal rights, protections and obligations consistent across all jurisdictions.

Land access agreements should recognise landholder and occupier property rights, and the negotiations must be respectful of farmers. NFF recognises that land access agreements may be the only time where landholders can actually seek to positively influence the process, and receive some protections and assurances from the mineral and petroleum industries. However, it is worthwhile noting that farmers may be overwhelmed, confused and under stress and therefore should seek legal advice. The companies must undertake best practice during and in finalising land access negotiations, and that such agreements must include among others:

- Appropriate recompense for the full range of costs;
- Clear agreements with landholders regarding the disposal and acquisition of any exploration/extraction licence;
- Mining practices including complying with drilling legislation, and the use of chemicals;
- Biosecurity arrangements;
- OH&S requirements;
- Rehabilitation of land;
- Appropriate insurance and bond arrangements;
- Arrangements for normal agricultural operations; and
- Any and all conduct whilst operating within the landscape.



THE HON MARTIN FERGUSON AM MP
MINISTER FOR RESOURCES AND ENERGY
MINISTER FOR TOURISM



PO BOX 6022
PARLIAMENT HOUSE
CANBERRA ACT 2600

B11/1848

14 OCT 2011

The Hon Julia Gillard MP
Prime Minister
PO Box 6022
Parliament House
CANBERRA ACT 2600

Dear Prime Minister

I am writing to seek your endorsement of a transfer of funds from the Department of Sustainability, Environment, Water, Population and Communities to Geoscience Australia for the purposes described in detail below. The Minister for Sustainability, Environment, Water, Population and Communities, the Hon Tony Burke MP, has agreed to this arrangement.

In anticipation of the wide scale development of the coal seam gas (CSG) industry in Queensland and New South Wales (and of closely related activities such as shale gas and tight gas in South Australia and elsewhere) the most accurate information will be need to inform Commonwealth and state regulatory decisions on the impact of CSG extraction on water resources.

The proposed funding transfer is required to establish the *Coal Seam Gas Hydrogeology Program*. The objective of this major strategic initiative, to be undertaken by Geoscience Australia, is to provide an improved evidence base for making decisions about the impacts of CSG developments on groundwater resources, whilst building a strong technical advisory function to support ongoing Commonwealth regulatory responsibilities.

The program would develop the fundamental geoscientific framework needed to enable a rigorous understanding of aquifers across jurisdictions and across water basins, their connectivity, how groundwater pressures in connected aquifers are likely to be affected by the cumulative impacts of CSG production and how this is likely to impact on users and environmental values of groundwater resources. The knowledge gained will support regulators in better understanding the capability of groundwater flow models to appropriately simulate these factors. While the focus of this program is proposed to be New South Wales and Queensland, similar CSG operations are emerging in other jurisdictions and the approach could be applied to other regions of Australia. This program will focus initially on expected areas of CSG prospectivity where a better understanding of groundwater impacts will be of most benefit.

The management of the *Coal Seam Gas Hydrogeology Program* will fall under the *Integrated Framework for Assessments of Coal Seam Gas Mining Impacts on Groundwater* (the Integrated Framework). The Integrated Framework is a joint initiative of the Departments of Resources, Energy and Tourism and Sustainability, Environment, Water, Population and Communities and brings together the management of Commonwealth funded research into water systems that may be affected by coal seam gas (CSG) activity. This will ensure that these activities can be effectively targeted and coordinated and that duplication of effort is avoided. The projects that will be brought under this umbrella include the Great Artesian Basin Water Resources Assessment, the Namoi Water Study and Health Headwaters, among others.

Projects under the Integrated Framework will be reviewed by a Joint Oversight Committee comprising officials from my Department, the Department of Sustainability, Environment, Water, Population and Communities, Geoscience Australia and CSIRO. The inclusion of CSIRO will ensure that there is a close connection with its *Gas Industry Social and Environmental Research Alliance* which was recently established to undertake research into the cumulative and regional impacts of gas developments.

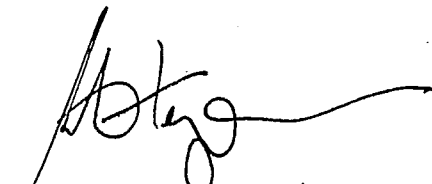
Other relevant agencies such as the Department of Agriculture, Fisheries and Forestry, the Department of Regional Australia, Regional Development and Local Government, the National Water Commission, and the Murray Darling Basin Authority may be invited to attend meetings as observers.

The cooperation of the states and territories will be required in the provision of data and modelling inputs for this work. For this purpose, relevant state water and resource agencies will be invited to be directly involved in the governance of individual studies under the Integrated Framework.

To help meet the cost of the of the *Coal Seam Gas Hydrogeology Program*, Minister Burke is agreeable to the transfer of \$1.8m from the National Urban Water and Desalination Plan, a component of the Water for the Future, to Geoscience Australia to fund the departmental expenses that would be incurred in carrying out this work. The expenditure profile is \$0.424m in 2011-12, \$0.892m in 2012-13 and \$0.473m in 2013-14. The program is estimated to cost a total of \$6.2m over three years, with the remaining expenses being funded out of the existing work program of Geoscience Australia.

I have provided a copy of this letter to the Treasurer, the Minister for Finance and Deregulation and the Minister for Sustainability, Environment, Water, Population and Communities.

Yours sincerely



Martin Ferguson