

Senate Standing Committee on Environment and Communications
Legislation Committee
Inquiry into Landholders' Right and Refuse (Gas and Coal) Bill 2015
Answers to questions on notice
Public Hearing – Tuesday 28 July 2015

Question No: 1

Hansard Page: 3

Senator Waters asked:

Of the 86 [Independent Expert Scientific Committee] advices, how many of those recommendations have ended up in federal conditions?

Answer:

The Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) is not a regulatory or decision making body. Rather it is an advisory body providing independent, scientific advice to the Commonwealth and state governments (in response to requests from them) on the potential impacts of coal seam gas and coal mining development on water resources.

The IESC's advice may be sought at different stages of the environmental assessment process. Issues raised in the IESC advice may therefore be addressed in a number of different ways including by the project proponent in a supplementary Environmental Impact Statements, by state government agencies in their responses, in state government approval conditions, in Commonwealth approval conditions, or in water management plans. There are also a number of circumstances where the IESC has provided advice but where decisions have not yet been made.

The Department of the Environment has considered all 86 IESC advices, and included conditions to address the advice where appropriate.

The IESC publishes its advice on its website, with final approval decisions also published by the relevant regulator. This information can be found for each project that has IESC advice, and for each project referred under the water trigger on the 'Coal, Coal Seam gas and Water' website: <http://www.environment.gov.au/water/coal-and-coal-seam-gas>.

Question No: 2

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Senator Waters asked:

Can you provide for me, on notice because time is reasonably tight: who was on that panel [the Expert Panel for Major Coal Seam Gas Projects] and how it was constituted; how were they selected; what was their expertise; and whether they have been used since or superseded effectively by IESC's role?

Answer:

The 'Expert Panel for Major Coal Seam Gas projects' was established specifically to provide advice to the Federal Environment Minister on the Santos, Queensland Gas Company (QGC) and Australia Pacific LNG (APLNG) coal seam gas developments in south-west Queensland. The panel was established in March 2011 to ensure that the conditioned requirements of water monitoring and management plans were appropriately framed and addressed by approval holders and to provide advice on risk relating to water related impacts on matters of national environmental significance.

The panel provided advice to the Commonwealth on seven water monitoring and management plans for the three coal seam gas developments, as well as facilitating the development of a joint industry plan for an early warning system for the monitoring and protection of the

community of native species dependent on natural discharge of groundwater from the Great Artesian Basin and an industry approach to ecotoxicology testing.

Membership of the Coal Seam Gas Expert Panel was selected based on candidates' qualifications and experience, and consisted of:

Member name	Position held (at the time of the appointment of the panel)	Expertise
Paul Greenfield (chair)	Vice Chancellor and Professor of Chemical Engineering, University of Queensland	Chemical engineering
Professor Chris Moran	Director, Sustainable Minerals Institute, University of Queensland	Hydrogeology/hydrology
Associate Professor Heather Chapman	Program Leader, Health and Environment, Smart Water Research Centre, Griffith University	Ecology/ecotoxicology
Dr Jane Coram	Group Leader, Groundwater, Geoscience Australia	Hydrogeology/hydrology
Dr Richard Cresswell	Principal Research Scientist, CSIRO	Hydrogeology/hydrology

The panel has not met since Q1 2014, when they provided advice on the latest water monitoring and management plan required by the approval conditions.

The Minister is also able to seek advice from the IESC on the impact that coal seam gas and large coal mining development may have on Australia's water resources, including on monitoring and management plans.

Question No: 3

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Senator Waters asked:

Did the Minister for Agriculture, or the Department of Agriculture make any comment or formal submission on the Shenhua Watermark referral at any stage of the process?

Answer:

Neither the Minister for Agriculture nor his Department provided any formal submission during the process.

Question No: 4

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Senator Waters asked:

Does anyone assess the bushfire risks of venting [of gas pipelines], and if so, who would that be?

Outside of your Department [the Department of the Environment] is there anyone else federally that tracks that sort of incident [bushfire risk associated with venting of gas pipelines] and factors that into planning or risk management, or do they just totally leave it up to the states?

Answer:

Bushfire and bushfire risks are matters that are managed by State governments. The Commonwealth Government does not assess bushfire risks from venting of gas pipelines. Hazards and risks associated with particular projects are outlined in Environmental Impact Statements for those projects and may include risks associated with the venting of gas pipelines. The Environmental Impact Statements are then assessed by relevant state departments as part of the project approval process.

Question No: 5

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Senator Waters asked:

I am interested, if there was a reinjection condition [in the 2010 Santos and QGC approvals] — and I think there was but I cannot remember—have you subsequently checked to see whether the reinjection did indeed achieve the purpose of maintaining that hydrostatic pressure?

Supplementary question on notice provided following the hearing (Senator Waters):

1. For the Santos and QGC CSG projects: have we specified 'reinjection' and 'make good' provisions in our conditioning; did reinjection work to achieve the outcomes and what process has the department undertaken to assess whether the reinjection (trials) were successful?
2. Please provide a summary including references of the Queensland or Federal evaluations of reinjection of produced water into aquifers in relation to Queensland CSG projects.

Answer:

Under the Australian Government approval conditions for the gas fields component of the Santos, Queensland Gas Company and Australia Pacific LNG projects, approval holders are required to submit water monitoring and management plans for the Minister's approval. The water plans must include a program for reinjection trials, to investigate make good options for the protection of matters of National Environmental Significance. Make good obligations for landholder access to water are not included in the Australian Government approval conditions, as the primary responsibility for regulating environmental impacts associated with the resource sector rests with state and territory governments.

The approval holders are required to update these water plans every three to five years to allow for adaptive management and the incorporation of updated modelling and research findings from the Queensland Government's Surat Underground Water Impact Report. As the updated Queensland Surat Underground Water Impact Report is expected to be released in late 2015 / early 2016, the results of the reinjection trials will be evaluated as part of the next water monitoring and management plan assessment process.

The current (as of 18 August 2015) water monitoring and management plans in place for the three projects in question in the Surat Basin are as follows:

- Stage 2 Water Monitoring and Management Plan for the Santos Gladstone LNG Coal Seam Gas Project (EPBC 2008/4059) - approved by the Minister for the Environment on 29 November 2013
- Stage 3 Water Monitoring and Management Plan for the Queensland Gas Company Curtis LNG Coal Seam Gas Project (EPBC 2008/4398) - approved by the Minister for the Environment on 19 December 2013
- Stage 2 Water Monitoring and Management Plan for the Australia Pacific LNG Coal Seam Gas Project (EPBC 2009/4974) – approved by the Minister for the Environment on 27 March 2014

Question No: 6

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Senator Waters asked:

Discussion between Senator Waters and Mr Gaddes regarding a page on the Department of the Environment website detailing regulatory arrangements for coal, coal seam gas and water.

Answer:

The 'coal, coal seam gas and water' webpage can be found at:

<http://www.environment.gov.au/water/coal-and-coal-seam-gas>.

Question No: 7

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Senator Sinodinos asked:

For the purposes of Commonwealth law, Shenhua itself would be regarded as a constitutional corporation?

Answer:

Publicly available information indicates that Shenhua Watermark Coal Pty Ltd is an Australian Private Company, registered in October 2008. The company is a subsidiary of Shenhua Overseas Development and Investment Company Ltd.

SUPPLEMENTARY QUESTIONS ON NOTICE PROVIDED FOLLOWING THE HEARING

Senator Waters asked:

How many FTE staff does the Department current have devoted to shale and tight gas issues?

How many members does that part or division have?

Is there any discrete part or division of the Department which investigates or otherwise works on those issues?

Answer:

Responsibility to better understand and manage (with respect to Matters of National Environmental Significance) the potential impacts of shale and tight gas development on the

environment is shared across the Department, including the Environment Standards Division, the Science Division, through the Office of Water Science, the Water Division, and the Climate Change and Renewable Energy Division.

The Office of Water Science leads on the Department of the Environment's implementation of the Domestic Gas Strategy, working with other Australian Government Agencies. This includes working towards the responsible development of coal seam, shale and tight gas resources. Consistent with the actions identified in the Domestic Gas Strategy, the Department is undertaking actions to improve knowledge of the environmental impacts of shale and tight gas development.

The Environment Standards Division leads on assessment of projects proposed for approval under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). While shale and tight gas are not in of themselves Matters of National Environmental Significance (MNES) under the EPBC Act, where MNES are likely to be impacted by a proposed shale or tight gas project, these will be assessed under the Act.

Senator Waters asked:

Does the Department have any resources (staff or funding) directed towards establishing the GHG fugitive emissions profile of shale and tight gas as distinct from CSG?

Answer:

The National Inventory team in the Climate Change and Renewable Energy Division is engaged in supporting a CSIRO study into the emissions profile of unconventional gas wells in Australia. As the existence of shale and tight gas wells in Australia is a relatively new phenomena, and not readily incorporated into the CSIRO research as it is currently framed, the Department is also participating in a program of work being undertaken by the Intergovernmental Panel on Climate Change (IPCC) to assess the global evidence on the estimation of GHG fugitive emissions from unconventional oil and gas production, including shale and tight gas.

It is anticipated that the IPCC assessment will supplement information obtained from Australian studies and enable the Department to characterise shale and tight gas emissions in Australia, or determine whether further analysis is required.

Senator Waters asked:

Does the Department have any funding budgeted for further work on unconventional gas fugitive emissions?

Answer:

The Department is budgeting \$36,000 this financial year for the completion of work being undertaken by CSIRO to collect Australian-specific field data measurements from well completions activities.