

Roundtable Question - CSG water use, extraction, storage

BR

BURGESS-DEAN Rachel <Rachel.Burgess-Dean@ehp.qld.gov.au>



Reply

Thu 19/02/2015, 8:42 AM

You;

darlingdownsenvironmentcouncil@gmail.com

Dear Mr Mason

Thank you for your recent enquiry on the CSG industry in Queensland, with specific regard to:

- relevant government requirements for water use, extraction and disposal; and
- management practices for storage and disposal of brine.

I have been asked to provide you with a response on these matters.

Queensland's management of the CSG industry has evolved to include various legislation, policies and guidelines to provide a comprehensive framework to address the issues arising from CSG activities.

A: RELEVANT GOVERNMENT REQUIREMENTS

I have provided a brief summary of the legislative framework below, as it relates to the activities of the Department of Environment and Heritage Protection (EHP). A broader coverage of relevant legislation is also available at <http://www.ehp.qld.gov.au/management/non-mining/environmental-legislation.html>.

1. Environmental Impact Statements

Larger scale proposals are subject to a comprehensive environmental evaluation via the requirement for an environmental impact statement (EIS). For CSG proposals, an EIS may be required under the *Environmental Protection Act 1994* (EP Act) or, where a project is declared to be one of 'State Significance', the *State Development and Public Works Organisation Act 1971*.

The EIS provides information on the environmental values of the area, potential impacts from the proposal and the operator's commitments to limit impacts. This process also provides the opportunity for public involvement in the assessment of impacts through the requirement for public notification of the proposal and consideration of associated public submissions.

Depending on the results of these investigations an EIS may include the power to impose environmental requirements or recommend against the project proceeding. (Refer to: <http://www.dip.qld.gov.au/coordinator-general/>)

2. Legislation - Environmental Protection Act 1994 (EP Act)

Environmental Authorities

Prior to commencing operations, all CSG operators undergo a rigorous environmental assessment process, and are legally required to hold an environmental authority under the EP Act. Conditions and controls are imposed on all environmental authorities, and the government monitors the implementation and effectiveness of these conditions on an ongoing basis.

The conditions and controls around environmental values are generally focussed on:

- air quality and noise levels;
- rehabilitation and obligations;
- hydraulic fracturing;
- water quality, usage and management;
- water and brine disposal;
- remnant vegetation management;
- chemical usage;
- environmental values of flora and fauna.

CSG operators can apply for three different types of environmental authorities:

- *Standard applications* – where the proposal satisfies certain eligibility criteria set by EHP and the applicant can meet a range of standard conditions (e.g. for some petroleum exploration)
- *Variation applications* – as above, but where more detailed assessment is needed as a result of making changes to standard conditions to achieve the required environmental protection
- *Site specific applications* – where the applicant cannot meet the eligibility criteria or no eligibility criteria exist (e.g. for CSG production). This application would require a more comprehensive assessment by EHP and may involve the preparation of a full EIS.

For more information on the environmental authority framework please see <http://www.ehp.qld.gov.au/management/non-mining/environmental-authority.html>

The EP Act also provides high levels of transparency and, in this case, petroleum and gas environmental authorities are available online at: <http://environment.ehp.qld.gov.au/env-authorities/>

Financial Assurance

EHP may require an environmental authority holder to pay financial assurance (FA). FA is a type of financial security provided to the Queensland Government to cover any costs or expenses incurred in taking action to prevent or minimise environmental harm or rehabilitate or restore the environment, should the holder fail to meet their environmental obligations. Subject to successful rehabilitation and the environmental authority holder meeting their closure conditions, FA is returned at the end of the project. (See <http://www.ehp.qld.gov.au/licences-permits/business-industry/index.html>).

3. Legislation – Water Act 2000

Petroleum (and CSG) operators have the right to take ‘associated water’ (groundwater) under the *Petroleum and Gas (Production and Safety) Act 2004* as a necessary activity in the process of extracting gas. However with this right comes the obligation to comply with the underground water management framework under Chapter 3 of the *Water Act 2000*.

EHP is responsible for administering this framework which obliges petroleum (including CSG) tenure holders to:

- Prepare baseline assessments to provide information about potentially affected bores
- Prepare Underground Water Impact Reports to model, make predictions and manage the impacts of extraction of underground water. (Note that if a cumulative management area (CMA) has been declared, the independent Office of Groundwater Impact Assessment (OGIA) prepares the Underground Water Impact Report))
- Undertake Bore Assessments to establish whether a bore is, or is likely to be, impacted (impaired capacity) by the extraction of groundwater
- Negotiate "make good" agreements with water bore owners (NB: if the bore's authorised use or purpose is impaired, the agreement must include make good measures such as enhancing the bore or constructing a new bore).

For further information on the points above, including additional links, please see <http://www.ehp.qld.gov.au/management/non-mining/groundwater.html>.

4. CSG Water Management Policy

Water management and use: The CSG Water Management Policy (<http://www.ehp.qld.gov.au/management/non-mining/documents/csg-water-management-policy.pdf>) guides CSG operators in managing CSG water under their environmental authority. The objective of the policy is to encourage the beneficial use of CSG water in a way that protects the environment and maximises its productive use as a valuable resource. Under the EP Act, tenure holders are required to submit an annual report describing how they are complying with the policy.

Management of brine and salt: Where CSG water is not of sufficient quality for beneficial uses or stream discharges, the water will normally first be treated to remove brine and salt residues.

The CSG Water Management Policy also requires that any saline waste is managed in accordance with the following two priorities:

- *Priority 1*—Brine or salt residues are treated to create useable products wherever feasible.
- *Priority 2*—After assessing the feasibility of treating the brine or solid salt residues to create useable and saleable products, disposing of the brine and salt residues in accordance with strict standards that protect the environment.

In addressing Priority 2, there are several options for the disposal of brine. One option being actively investigated is to re-inject the brine underground, while ensuring that the salt does not directly or indirectly harm any environmental values. Alternatively the salt can be disposed to a regulated waste facility under strict conditions. In all but exceptional circumstances, evaporation dams have been banned for CSG water, and existing dams will be either converted to other uses or decommissioned.

5. Legislation - Waste Reduction and Recycling Act 2011

Beneficial Use Approvals

Beneficial Use Approvals may be issued under the Waste Reduction and Recycling Act. Beneficial Use Approvals can authorise the beneficial use of CSG related water (that would otherwise be considered waste under the EP Act) to a third party with no restrictions on whether it can be used on or off tenure. There are two types of Beneficial Use Approvals – general and specific. A general Beneficial Use Approval has clear standards which, if complied with, do not require individual assessment by the department. The department has developed two general beneficial use approvals for associated water (including CSG water):

- General Beneficial Use Approval—Irrigation of Associated Water (including coal seam gas water)
- General Beneficial Use Approval—Associated Water (including coal seam gas water)

If CSG water is not able to be disposed of beneficially due to its poorer quality, its management and disposal will be subject to the conditions in the relevant environmental authority for that project. For further information please see <http://www.ehp.qld.gov.au/management/non-mining/csg-water.html>.

6. Compliance

The Queensland Government takes compliance seriously and penalties exist for non-compliance. EHP actively responds to and investigates complaints. High-risk activities are closely monitored through proactive compliance activities and inspections undertaken by EHP.

See <http://www.ehp.qld.gov.au/management/planning-guidelines/enforcement.html>

I trust that this email provides you with the information you required. If you would like further information or clarification, please contact Jim Mollison on 3330 6070 or at jim.mollison@ehp.qld.gov.au

Kind regards
Rachel Burgess-Dean

Rachel Burgess-Dean
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And this is the attachment that came with this email:

540 Registers to be kept by administering authority

(1) The administering authority must, for its administration under this Act, keep a register of the following—

(a) for chapter 5, the following—

- (i) environmental authorities;
- (ii) surrendered environmental authorities;
- (iii) suspended or cancelled environmental authorities;
- (iv) submitted plans of operations;
- (v) annual returns required under section 308(3)(a) and any evaluation required under section 309;

(aa) application documents for an application for an environmental authority, including information requests and responses to information requests;

(b) for chapter 7, part 2—environmental evaluations and environmental reports;

(c) monitoring programs carried out under—

- (i) this Act; or
- (ii) a development condition of a development approval;

(d) the results of monitoring programs mentioned in paragraph (c);

(e) transitional environmental programs;

(ea) temporary emissions licences;

(eb) documents required to be given under—

- (i) a condition of an environmental authority; or
- (ii) a transitional environmental program or a condition of a transitional environmental program; or
- (iii) a condition of a temporary emissions licence;

(f) environmental protection orders;

(g) direction notices;

(h) clean-up notices;

(i) cost recovery notices;

(j) authorised persons;

(ja) accepted enforceable undertakings;

(k) other documents or information prescribed under regulation.

(2) A reference to a document in subsection (1) includes a reference to any amendment of the document made under this Act.

540A Registers to be kept by chief executive

(1) The chief executive must keep a register of the following—

(a) for chapter 3, the following—

- (i) submitted draft terms of reference for EISs;

- (ii) written summaries of comments given to the chief executive about draft terms of reference for EISs;
 - (iii) final terms of reference published by the chief executive;
 - (iv) submitted EISs;
 - (v) EIS assessment reports;
- (b) for chapter 4A—
- (i) ERMP directions; and
 - (ii) accredited ERMPs;
- (c) for chapter 5A, the following—
- (i) eligibility criteria for environmentally relevant activities;
 - (ii) standard conditions;
 - (iii) codes of practice;
 - (iv) suitable operators;
 - (v) suspended or cancelled registrations;
- (d) for chapter 7, part 8—
- (i) an environmental management register; and
 - (ii) a contaminated land register;
- (e) for chapter 12, part 1—
- (i) guidelines made by the Minister; and
 - (ii) guidelines made by the chief executive;
- (f) for chapter 12, part 3A—auditors;
- (g) other documents or information prescribed under regulation.

(2) A reference to a document in subsection (1) includes a reference to any amendment of the document made under this Act.

541 Keeping of registers

(1) This section applies if the chief executive or administering authority (the **relevant entity**) is required to keep a register under section 540 or 540A.

(2) If the relevant entity considers it impracticable to include a document in a register, it may include details of the document in the register instead of the document.

(3) However, if the register only includes details of a document—

(a) the relevant entity must keep the document open for public inspection in the way required of a register under section 542; and

(b) section 542 applies to the document as if it were included in a register.

(4) If particulars of any land are recorded in the environmental management register or contaminated land register, they must include the real property description of the land.

(5) Subject to subsections (2) to (4), the relevant entity may keep a register in the way it considers appropriate, including, for example, on a website.

542 Inspection of register

(1) The relevant entity must, for a register mentioned in section 540(1) or 540A(1), other than the environmental management register or contaminated land register—

(a) keep the register open for inspection by members of the public during office hours on business days at the entity's relevant office for the administration of this Act; and

(b) permit a person to take extracts from the register or, on payment of the appropriate fee by a person, give the person a copy of the register, or part of it.

(2) The fee for a copy of the register or part of it is the amount that—

(a) the relevant entity considers to be reasonable; and

(b) is not more than the reasonable cost of making the copy.

(3) The chief executive must, on payment of the fee prescribed under a regulation, permit members of the public to obtain extracts from the environmental management register or contaminated land register.

543 Appropriate fee for copies

(1) This section applies if, under this Act, the administering authority or other entity must, on payment of the appropriate fee to the entity, give a person a copy of a document, or a part of a document.

(2) The fee for the copy of the document or part of it is the amount that is the lesser of the following—

(a) for the chief executive—the amount the chief executive decides is reasonable;

(b) otherwise—the amount the administering authority decides is reasonable;

(c) the amount that is no more than the reasonable cost incurred by the authority or other entity in making the copy and giving it to the person.

(3) Despite subsection (2) or any other provision of this Act, the authority or other entity may give the document without the payment.

(4) In this section—

document does not include the following registers or an extract from the registers—

(a) the environmental management register;

(b) the contaminated land register.

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Linc Energy trial hears company did nothing to stop its alleged contamination continuing

By Louise Hingray Updated 30 Jan 2018, 2:43pm

Linc Energy was aware it was causing environmental damage to parts of Queensland's Western Downs, but allowed operations to continue, a District Court jury has heard.

The gas company has pleaded not guilty to five counts of causing serious environmental harm from its underground coal gasification operations between 2007 and 2013 in Chinchilla.

The corporation is not defending itself as it is in liquidation so in an unusual scene in the District Court trial with no-one in the dock or at the bar table representing the defence.

In his opening address, crown prosecutor Ralph Devlin QC told the court, experts will give evidence about how explosive and toxic gases were released into the environment something that now costs millions of dollars to manage and monitor.

Mr Devlin said there will be times during the trial when the prosecution acknowledges Linc took some steps in regards to the problems but whether they were enough and were timely will be matters for the jury to consider.

"Linc knew the fundamental science, Linc knew the site had suffered problems, Linc took some measures to try to address the problems," he said.

"Linc kept going knowing the measures weren't working.

"Linc did nothing to stop, mitigate or rehabilitate the state of affairs that Linc itself had caused."

The prosecutor said the court will hear about omissions by former managers and senior figures at Linc Energy warning about risks of environmental harm over the seven-year period.

"The alarm was raised with the board in March 2009," Mr Devlin said.

He told the jury it will hear evidence about five directors but they will not be called as witnesses.

Peter Bond was the CEO of Linc Energy whose statements, acts and omissions will be relevant to all counts, Mr Devlin told the jury.

The prosecution will allege Mr Bond was aware operations were contrary to safe environmental practices.

"Bond at times nevertheless failed to direct Linc's employees and contractors to correctly cease operations," Mr Devlin said.

He said at times, Mr Bond "prioritised Linc's commercial interests" over operating in an environmentally safe manner.

Mr Devlin said the jury will also hear evidence of people being made ill by the escaping gases as a result of the operations.

Employees are also expected to give evidence in the trial about how they saw bubbling around the gasifier as well as a distance away from it.

The trial continues.

Topics: courts-and-justice, law-crime-and-justice, environmental-impact, environment, environmental-policy, environmental-management, mining-environmental-issues, mining-industry, business-economics-and-finance, industry, chinchilla-4413, qld, burdaberg-4670, boomboom-4300, australia, brisbane-4000

First posted 30 Jan 2018, 2:33pm



PHOTO: Linc Energy is not defending itself because it is in liquidation. (Linc Energy)

RELATED STORY: 'Unusual' trial against Linc Energy over alleged contamination in Queensland



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4 January 2016

Jim Reeves
Acting Director General
Department of the Environment
and Heritage Protection

Via email: info@ehp.qld.gov.au

Copy to: environment@ministerial.qld.gov.au

**Requests for Reasons – Construction of the North East Gas Interconnector
Pipeline Tennant Creek, Northern Territory to Mt Isa, Queensland -
EPSX03332615**

Dear Jim,

On behalf of the Western Downs Alliance, being a person aggrieved under section 7 of the *Judicial Review Act 1991* [Qld], and being entitled under section 20 to make an application under that Act, I request in accord with section 32 of that same act a statement of reasons for your decision to grant the above environmental permit for Jemena Northern Gas Pipeline Pty Ltd to construct and operate a buried 622km high pressure gas pipeline. The decision is stated to take effect from the granting of tenure.

Western Downs Alliance is incorporated in Australia (*Associations Incorporations Act 1981* [Qld] - IA55226) and its' constitutional objectives are:

“to protect the natural, cultural and agricultural resources of Queensland from inappropriate mining; to educate and empower Queenslanders to demand sustainable solutions to food and energy production and to protect and enhance the health of the people of Queensland, its Aboriginal cultural heritage, water systems, agricultural land for food and fibre production, bushlands, wetlands and wildlife and the conservation of the environment”

As such we request the reasons for this decision and look forward to their receipt.

Yours sincerely



Paul King
Secretary
info@ddec.org.au
14 Adam St Toowoomba 4350
0455619454



Department of
**Environment and
Heritage Protection**

30 March 2016

Paul King
Secretary
Western Downs Alliance
14 Adam Street
TOOWOOMBA QLD 4350

Email: info@ddec.org.au

Dear Mr King,

I refer to your letter dated 5 March 2016 requesting a statement of reasons under section 32 of the *Judicial Review Act 1991* (JRA) in relation to the issuing of environmental authority (EA) EPPG03497815 to Jemena Queensland Gas Pipeline (1) Pty Ltd.

The Department of Environment and Heritage Protection (EHP) has reviewed your request and has determined that the Western Downs Alliance (WDA) does not meet the requirements of an 'aggrieved person' under section 7 of the JRA and as such, is not entitled to a statement of reasons under Part 4 of the JRA in relation to the issuing of EA EPPG03497815.

The reasons for the decision pursuant to section 33(2) of the JRA are stated below:

- Your request has not identified any special or particular legal rights or interest over and above that of any other member of the community affected by the decision to issue EA EPPG03497815.
- Your request has not identified a matter about the decision to issue EA EPPG03497815 which is said to be unlawful or beyond jurisdiction.
- The WDA did not make a submission in response to the public notification of the application during the submission period between 23 October 2015 and 19 November 2015 which provided sufficient opportunity for submitters to raise concerns about the project in a fair and equitable manner.

To provide some background information, the Northern Territory Government held a competitive process in order to select a proponent to construct and operate the North East Gas Interconnector (NEGI) pipeline which is a 622km pipeline running from near Tennant Creek in the Northern Territory to Mount Isa in Queensland. The total length of the pipeline proposed in Queensland is 165km. EHP does not have legislative authority over the section of the pipeline proposed in the Northern Territory.

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On 25 September 2015, EHP received a site-specific application for a 165km pipeline from Jemena for Petroleum Pipeline Licence (PPL) 2015. On 12 October 2015, EHP decided that the EA application for PPL2015 was a properly made application. On 22 October 2015, the application was publicly notified in the Courier Mail under section 152 of the *Environmental Protection Act 1994* (EP Act). The submission period ended on 19 November 2015, however, no submissions were received under section 160 of the EP Act. The application documents were available on EHP's website until 11 January 2016.

Following assessment of the EA application for PPL2015 under the guideline *Triggers for environmental impact statements under the Environmental Protection Act 1994 for mining and petroleum activities*, EHP determined that an EIS was not required for the NEGI pipeline as the total disturbance proposed during the life of the project was less than 2000 hectares, the proposed pipeline was under 300km in length and the proposed project did not involve the construction of a liquefied natural gas plant. A copy of the guideline has been enclosed for your information.

The application was assessed under the regulatory requirements of the EP Act and the Environmental Protection Regulation 2008. The application was decided on 9 December 2015 and the EA provided to Jemena on 10 December 2015. The tenure for PPL2015 has not been granted by the Department of Natural Resource and Mines as yet and the EA will be made available on EHP's website (<https://environment.ehp.qld.gov.au/env-authorities/>) once the tenure has been granted. Although not publicly available at this time, a copy of the EA EPPG03497815 has been enclosed for your information.

Please note that APT Pipelines was amongst the companies which unsuccessfully tendered for the NEGI project. Prior to the outcome of the tender process, APT Pipelines had applied for an approval to prepare a voluntary EIS under section 69 of the EP Act. This application was approved and gazetted by the Coordinator-General on 4 August 2015. EHP would like to clarify that APT Pipelines' voluntary EIS application is not related to Jemena or Jemena's application for an EA for PPL2015 despite the fact that these two applications ran concurrently. As a result of the tender decision, APT Pipelines is likely to withdraw their voluntary EIS application. For more information regarding the APT Pipelines voluntary EIS application, please contact the Office of the Coordinator-General via sdainfo@coordinatorgeneral.qld.gov.au.

Furthermore, please note that Right to Information (RTI) Services is currently processing an application received in relation to EA EPPG03497815 under the *Right to Information Act 2009*. Details of all valid RTI applications and access to information which has been released in response to completed RTI access requests can be found on EHP's disclosure log at <https://www.ehp.qld.gov.au/about/rTI/disclosurelog/index.html>.

Should you have any further enquiries, please contact Ms Radhika Rao, Senior Environmental Officer (Assessment) of the department on telephone (07) 3330 6188 or email Radhika.Rao@ehp.qld.gov.au.

Yours sincerely,



Kylie Breaker
Manager (Assessment)



Secretary – Paul King
14 Adam St Toowoomba 4350
paul@mediationworks.com.au
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Date: 11.03.2016

**Committee Secretary
Select Committee on Unconventional Gas Mining,
PO Box 6100,
Parliament House,
Canberra ACT 2600**

Western Downs Alliance (WDA) welcomes the opportunity to make a submission to this important inquiry.

Western Downs Alliance is incorporated in Australia (*Associations Incorporations Act 1981* [Qld] - IA55226) and its' consitutional objectives are:

“to protect the natural, cultural and agricultural resources of Queensland from inappropriate mining; to educate and empower Queenslanders to demand sustainable solutions to food and energy production and to protect and enhance the health of the people of Queensland, its Aboriginal cultural heritage, water systems, agricultural land for food and fibre production, bushlands, wetlands and wildlife and the conservation of the environment”

WDA represents landholders in the Surat Basin who are affected by the impacts of coalmining and unconventional gas developments. Our members and supporters share a strong view that agricultural land, significant water resources, national landscapes and tourism icons, and residential dwellings must be excluded from unconventional gas exploration and mining activities.

Water and chemical use and wastewater production from unconventional gas mining places Australia’s vital water resources at risk from contamination and depletion.

The Great Artesian Basin.

Unconventional gas requires large scale de-pressurisation and de-watering of aquifers. Pressure is an extremely important attribute of groundwater in artesian areas of the Great Artesian Basin and hundreds of million of dollars have been spent on capping and piping free flowing bores to address the loss of pressure. This investment in sustaining one the world’s hydro-geological wonders is being squandered by allowing the CSG industry to de-pressure aquifers that are part of the GAB.

The Murray Darling Basin.

Vast amounts of salt have been stored safely deep underground for millions of years. Hundreds of millions of dollars have already been spent mitigating the effects of salinity in the Murray Darling Basin (MDB). Yet extracting saline groundwater in order to access CSG is mobilising millions of tonnes of salt that can and does impact on soils – rendering them



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useless for agriculture - and detrimentally affecting water quality. The last thing Australia needs is more salt in its landscapes generated through CSG activities.

Well integrity

The Australian Council of Learned Academics assessment *The Potential Geological Risks Associated with Shale Gas Production in Australia* states “[t]he primary cause of groundwater contamination from unconventional energy production is well failure through blowouts, annular leakage (along the well) or radial leakage (perpendicular to well)¹. There are many reports of landholders bore water levels declining and of contamination by methane and/or chemicals used in the industrial processes of CSG extraction. There have been more than 2,000 complaints of groundwater contamination lodged with the Pennsylvania Department of Environmental Protection. Resourcing issues have not allowed all to be investigated but approximately 10% have been investigated and found to have been contaminated by unconventional gas extraction processes.

It is the view of WDA that unconventional gas development in the Chinchilla area has lead directly to the release of gas through the bed of the Condamine river. It is hard to imagine a more disconcerting image of the impacts of the CSG industry than river water being set alight. See for example

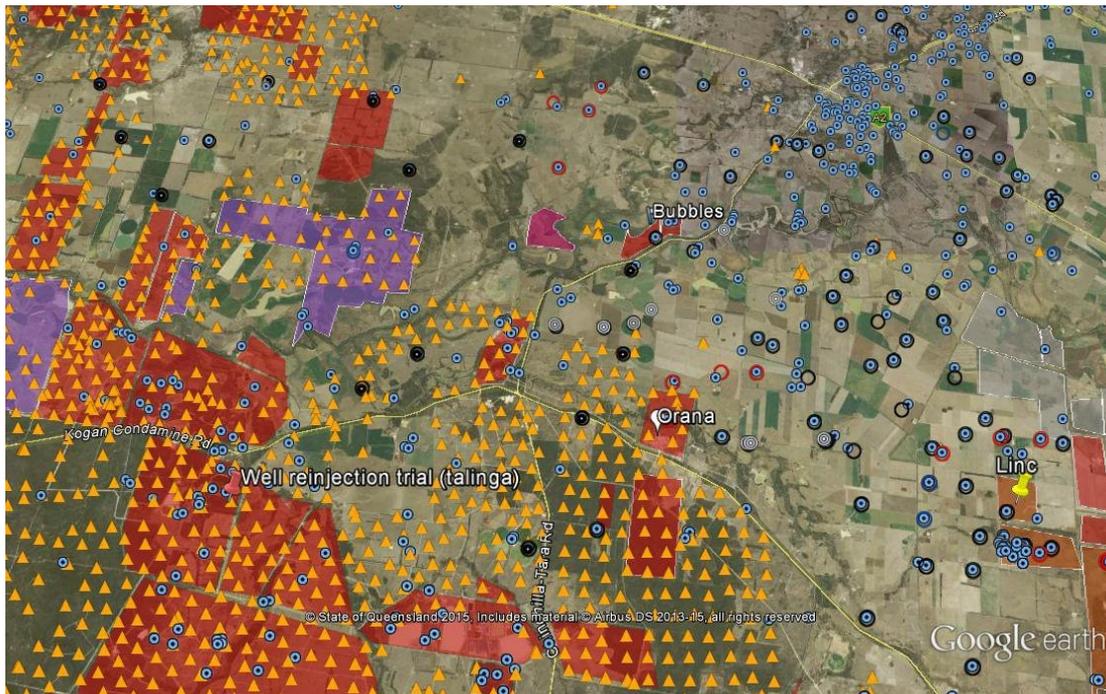
<http://www.dailymail.co.uk/news/article-3447153/Condamine-River-methane-bubbles-exploding-surface-smells-fish.html>

Health issues.

There is abundant evidence from around the world that people living in communities close to intensive and polluting industrial activities are less healthy than people in communities not exposed to high levels of pollution.

Google Earth image showing the intensity of gasfield infrastructure on the Western Downs where landholders have been forced to live and work in an industrial zone imposed on them without consultation. Blue dots represent landholders water bores in the area predicted to be affected by draw-down of groundwater levels.

¹ ACOLA *The Potential Geological Risks Associated with Shale Gas Production in Australia*. 2013. Downloaded from www.acola.org.au p5



WDA recommends that members of the Inquiry spend one week living and working in this area in order to gain some understanding of the impacts this has on the physical and mental well-being of local residents.

Communities living near gasfields in Queensland and Camden NSW have reported serious health effects following the commencement of unconventional gas operations. These conditions include respiratory ailments, nose throat and eye irritations, and neurological illnesses. Their symptoms are remarkably similar to those experienced by US residents in areas where unconventional gas extraction is a more mature industry and where studies into groundwater contamination and health impacts have been investigated and found to be directly linked to gas extraction.

WDA understands that residents in the Tara area exposed to the early stages of the CSG industry sought a health inquiry and scientific assessments of their air and water quality but that Queensland Health's efforts were grossly inadequate. Oral evidence was given to this committee in Dalby that people were at best patronised and at worst treated with contempt for trying to understand the causes of their sicknesses and wanting to protect their health and that of their children.

WDA understands that there are many letters to responsible Ministers seeking action and a large number of replies to complainants that clearly demonstrate buck-passing was and is the order of the day. We sincerely hope that some of these are tabled for consideration by this Inquiry.

WDA is of the view that there is no doubt that the Linc underground coal gasification project was an environmental and social disaster and the suicide of George Bender its most tragic consequence to date and a sobering example of the bullying attitude of the CSG industry determined to grind down opposition to its plans for access to private lands no matter what the cost. We regard this type of intimidating behaviour by a corporate citizen as a good reason why the industry doesn't have a social licence to operate in our communities. It is unconscionable and worthy of significant penalties.



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Water contamination associated with Cougar Energy's activities near Kingaroy is strong evidence backing our belief that underground coal gasification technology is too risky and the costs too high to allow it to be trialled elsewhere. WDA calls on governments to ban the use of this technique in Australia.

WDA is aware that flaring of CSG wells is causing enormous distress to local residents, particularly with regard to noxious air pollution but also due to the noise and light pollution that deprives people of restful sleep. We support the banning of flaring as has occurred in overseas jurisdictions and calls for the creation of a national Clean Air and Water Act that would set national standards on pollution from unconventional gas mining to protect human health.

The Right to say 'No'.

Landholders and Traditional Owners don't have the right to refuse access to mining companies in most Australian jurisdictions. This has created an unbalanced and socially destructive dynamic, causing lasting harm to individuals, businesses and communities.

WDA is not convinced that CSG companies are adequately protected by the insurance cover taken up by CSG companies. Our understanding from landholders in our region is that landholders are unable to obtain insurance to indemnify themselves from claims from neighbours should environmental damage spread beyond their own properties. The unconventional gas industry should be legally required to hold appropriate insurance cover including cover to indemnify the landholders on whose lands they are operating.

Social and economic impacts.

The rush to exploit CSG in Queensland and convert it to LNG has done lasting damage to the water resources and the social fabric of communities in the affected areas. It has had drastic negative economic consequences, rapidly driving up the price of gas for domestic consumers and industry and throwing regional economies into turmoil.

Research by The Australia Institute into the economic and social impacts of the unconventional gas industry has concluded that the industry has led to a reduction in community well-being and social cohesion; a deterioration in local skills and infrastructure; few additional local job opportunities; and limited economic benefit to the wider economy.² This backs up the experience and observations of local community members in the Surat Basin.

Across Australia large areas of highly productive farmland are under threat from unconventional gas mining. This activity has the potential to severely disrupt virtually every aspect of agricultural production and potentially even remove the land from production. Rabobank has listed the risks from Unconventional Gas mining to include reductions in farm productivity, efficiency, land values and credit availability and also made recommendations on the need to carefully re-examine insurance and liability issue regarding gas company operations on farming and grazing lands.³

² <http://tai.org.au/content/submission-inquiry-unconventional-gas-fracking>

³ [http://www.parliament.nsw.gov.au/Prod/parlament/committee.nsf/0/318a94f2301a0b2fca2579f1001419e5/\\$FILE/Report%2035%20-%20Coal%20seam%20gas.pdf](http://www.parliament.nsw.gov.au/Prod/parlament/committee.nsf/0/318a94f2301a0b2fca2579f1001419e5/$FILE/Report%2035%20-%20Coal%20seam%20gas.pdf)



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WDA is aware that the Standing Committee on Energy and Resources has developed a national framework to “harmonise” the CSG industry. In our opinion there is a long way to go.

We strongly supported the addition of a water trigger to the EPBC Act 1999 but note that, as unconventional gas companies begin to exploit the other unconventional gases – namely shale and tight gas – that there is no requirement or process for careful assessment of the impacts. We recommend that the EPBC Act be amended to extend the water trigger provisions to shale and tight gas activities as well.

We further recommend that Federal legislation be amended to ensure that the *cumulative impacts* from gas mining on nationally significant water resources, natural areas and cultural heritage sites are assessed, prevented and mitigated. We believe this is particularly important in Queensland where there is no upper house to scrutinise the decisions made by Cabinet and passed through the Parliament.

Greenhouse emissions.

WDA is far from convinced that unconventional gas is a more climate-friendly fuel than coal or oil although we acknowledge that as a fuel for *generating electricity* in a new generation combined cycle gas turbine it is less polluting than coal per kW/h of electricity produced. Thorough assessments of the full life cycle of unconventional gas are required as well as rigorous monitoring and reporting of greenhouse emissions.

WDA understands that the leakage of methane from every link in the production chain effectively cancels out any greenhouse advantage gained from the use of gas for generating electricity. A robust methodology is urgently required for assessing fugitive emissions from all links in the unconventional gas production process.

Chemical use.

It is not acceptable for substances that have not been assessed by NICNAS to be used in large quantities and in ways that can and do contaminate air and water supplies. Information we have obtained from the National Toxics Network has lead us to believe that full hazard assessments and compulsory disclosure of all chemicals used in unconventional gas mining are urgently required. However, given the serious impacts that have occurred in our region, we believe consideration must also be given to the total prohibition of the use or production of chemicals that are harmful to human health or the environment.

WDA holds a strong view that existing federal powers could, and indeed should be amended to create national legislation to give landholders, Traditional Owners and communities the right to say NO to unconventional gas operations.

WDA contends that the adaptive management adopted by Queensland is fundamentally flawed and allows deliberate and wilful damage to some of our most important natural resources; and facilitates the treatment of local residents with long standing in their communities and real commitments to the land they love, as little more than collateral



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damage The identification of best practice methods for baseline monitoring of health impacts, water resources, air quality, soil quality, and fugitive emissions should be an integral part of the adaptive management framework. However, these do not exist. In our opinion, CSG companies have a vested interest in not establishing baseline conditions as this then makes it extremely difficult if not impossible to determine whether negative impacts have occurred and how this has happened.

In WDA's opinion, a far more appropriate approach is a principles-based one with the Precautionary Principle fundamental to the health and well-being of local residents and the long term sustainability of our (non-renewable) soil resources and the water on which all social and economic activity ultimately depends.

WDA members and supporters' experience leads us to conclude that the unconventional gas industry has provided economic benefits to few Queenslanders and very few local residents. The royalties are small and not funding (eg) improved health or education services, particularly in the areas that have suffered the most. WDA also notes that the social and environmental costs of this industry are significant and will fall on a large number of taxpayers who will undoubtedly be called on to pay the costs of rehabilitation.

WDA lends its voice to the call for a moratorium on any new unconventional gas mining or exploration until further important research has been completed and proper baselines and legislation to protect health and key environmental assets are put in place.

We thank the Committee for the opportunity to make this submission and would welcome an opportunity for our representatives to make personal statements should this form part of the Committee's process.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Paul King', written in a cursive style.

Paul King

On Behalf of the Western Downs Alliance Inc.

Date: 31.03.2016

Research Director

Agriculture and Environment Committee

Parliament House

BRISBANE QLD 4000

The Darling Downs Environment Council inc (DDEC) is pleased to make a submission to this enquiry.

DDEC is an incorporated body and is a peak organisation for environmental groups in the Lockyer, Downs and Maranoa regions.

DDEC has members and affiliates who have been affected by the activities of mining and gas extraction including Hopeland Community Sustainability Group at Chinchilla and the Oakey Coal Action Alliance. These groups and others are impacted by mining activities and will eventually face the consequences of deficiencies in any rehabilitation programmes. In particular, abandonment due to the financial failure of operators is a present problem with ongoing consequences on the Southern Downs.

The voluntary administration of the companies behind the Twin Hills Heap Leach Silver Mine at Texas Queensland is an example where highly contaminated tailings dams abutting a sensitive waterway. These have been left unmanaged by the ostensible owners with no redress by the public who otherwise have been left with the costs of management and remediation along with any resultant environmental harm. It was noted by DEHP at the time that just 40mm of rainfall would result in an overflow and toxic spill into the Dumaresq river. The consequences of such a spill would be shared with NSW. It is not inconceivable that private and public interests in NSW would be harmed and potentially seek redress from the Queensland Government.

As a result of issues such as this it is vitally important for the final bill to reflect two principles;

- That bonds lodged are sufficient to cover the full costs of remediation
- That these bonds be redeemable through a chain of responsibility that links present owners with corporate parent entities by way of guarantee or otherwise through assignment or insurance.

In short, unless full and sufficient bonds to cover remediation are collected and held in trust at the commencement of a project they should be guaranteed by controlling corporate entities, not merely subsidiaries engaged in the mining who might have less financial capacity and are more likely to. The parent entity will generally have greater financial capacity to do so. If not, or if the operator is a small independent show, insurance against a failure to remediate should be required.

DDEC supports providing DEHP with the power to issue environmental protection orders (EPO) to a party that has some relevant relationship to the company that is in financial difficulty (for example a parent company or executive officer) as proposed by the bill. We support as a general concept statutory authority to lift the corporate veil and identify true interests, command and control.

We support enabling the amendment of an environmental authority (EA); for example where an EA is transferred to a new entity, to require the provision of financial assurance where none was previously required under the EA, or where an environmental protection order has been amended or withdrawn.

We strongly support the extension of DEHP officers power to include access sites no longer subject to an EA or where an EA is no longer being utilised. We note that the lack of this statutory authority has led to inefficiencies and anomalous barriers to assessment and investigation.

We support coercive powers associated with investigations into alleged environmental offences as proposed by the bill and support improved statutory disclosure by entities proposed by the bill. We support measures that make companies and directors take their environmental obligations seriously and not allowing these obligations to be avoided through selling or trading out of their activities.

We note that there are current and concerning circumstances regarding the obligations of unconventional gas explorers and miners. We note that all of the entities currently operating in unconventional gas in Queensland are subsidiaries of larger resource companies. There is a present and inherent danger that the failure of any of these companies would result in any remediation obligations that they may have had falling to the Queensland Government. This would be despite parent companies having had the benefit of the gas extracted. We support the proposed bill insofar as it seeks to address these problems. We support the bills objectives overall.

We once again thank you for this opportunity to input into the proposed bill and we look forward to its introduction into the Parliament.

Yours sincerely

Lee Mason

Secretary - Darling Downs Environment Council

Darling Downs Environment Council (DDEC) submission to M. Michel Forst, UN Special Rapporteur on the situation of Human Rights defenders

The Darling Downs Environment Council (DDEC) thanks you for meeting with us recently and we are grateful for the opportunity to make this submission to the UN Special Rapporteur on the situation of Human Rights defenders.

DDEC is a peak body of environmental organisations and associations centred on the City of Toowoomba on the Darling Downs, in a rich agricultural region approximately 130 km west of the Queensland State Capital, Brisbane.

DDEC is involved with landholders who have coal mining leases over their properties. About 90% of land in our region is so affected. We face significant barriers in protecting the rights of current holders of agricultural land and for the preservation of those lands for the benefit of all into the future.

Two major factors mitigate against the preservation of farm and ecologically significant land in Queensland.

The first is the primacy of the rights of mineral and gas companies over the rights of all others. This situation is enshrined in mining legislation and protections for strategic cropping land have actually diminished in Queensland over recent years.

Although ostensibly on an equal footing, in practice environmental regulation plays a subservient role in Queensland, with significant gaps in regulation, compliance and enforcement.

The second issue is that Mineral and gas companies are able to negotiate from a position of strength. The asymmetry of power between landholders and resource companies makes enforcement of any rights landholders do have rare and difficult. To this end, we would ask that the Special Rapporteur consider the value of making the following recommendations.

- That the right of future generations to food be protected through the exclusion of coal mining and gas extraction from prime agricultural lands

- That natural justice be supported when landholders, communities and resource companies negotiate by providing equal access to the law through specialised environmental legal services, supported and funded by Government

These recommendations do not remove all of the barriers that environmental defenders in Queensland face, but they are fundamental to inter-generational equity and the ability to continue fighting for it. Once again, thank you for the opportunity to make comment.

Paul King

Darling Downs Environment Council

17.10.2016



COMMONWEALTH OF AUSTRALIA

Proof Committee Hansard

SENATE

ENVIRONMENT AND COMMUNICATIONS LEGISLATION
COMMITTEE

Landholders' Right to Refuse (Gas and Coal) Bill 2013

(Public)

MONDAY, 27 JULY 2015

BRISBANE

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SENATE

ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE

Monday, 27 July 2015

Members in attendance: Senators Lazarus, Ruston, Urquhart, Waters.

Terms of Reference for the Inquiry:

To inquire into and report on:

Landholders' Right to Refuse (Gas and Coal) Bill 2013.

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MAHONEY, Ms Cara, Law Reform Solicitor, Environmental Defenders Office Queensland

WALMSLEY, Ms Rachel Louise, Director of Policy and Law Reform, Environmental Defenders Office New South Wales

Committee met at 08:58

Evidence from Dr Carmody and Ms Walmsley was taken via teleconference—

CHAIR (Senator Ruston): I declare open this public hearing of the Senate Environment and Communications Legislation Committee in relation to its inquiry into Landholders' Right to Refuse (Gas and Coal) Bill 2015 and I welcome everybody here today. This is a public hearing and a *Hansard* transcript of the proceedings is being made.

Before the committee starts taking evidence, can I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or to disadvantage a witness on account of evidence given to a committee and such action may be treated by the Senate as a contempt. It is also contempt to give false or misleading evidence to a committee. The committee prefers to take all evidence in public, but, under the Senate's resolutions, witnesses have the right to request to be heard in private session. It is important that witnesses give the committee notice if they intend to give evidence in camera. In addition, if the committee has reason to believe that the evidence about to be given may reflect adversely on a person, the committee may also direct that the evidence be heard in private session. If a witness objects to answering a question, the witness should state the grounds upon which the objection is taken and the committee will determine whether it will insist on an answer having regard to the grounds which are claimed. If the committee determines to insist on an answer, a witness may request that the answer be given in camera. Such a request may, of course, also be made at any other time.

On behalf of the committee, I would like to put on record our thanks to all those who have made submissions and sent representatives here today and for their cooperation with the inquiry and I now welcome representatives from EDO Queensland and EDO New South Wales. I welcome Dr Carmody and Ms Walmsley, who are appearing via the phone, and Ms Mahoney, who is here in person.

Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee has a submission from EDO representing all the EDOs of Australia. Would anyone like to make an opening statement before we proceed to questions?

Ms Walmsley: Thank you. EDOs of Australia, as you may know, is a network of independent, not-for-profit community legal centres that specialise in public interest environmental law. We have 30 years experience advising Australian communities on using the law to protect the environment, including advice, casework, education and law reform. These services are fundamental to providing access to justice across the spectrum of federal and state environmental and planning laws. EDOs of Australia welcome this opportunity to comment on the Landholders' Right to Refuse (Gas and Coal) Bill 2013.

The bill before the committee proposes to regulate two aspects of gas and coalmining: access to land and hydraulic fracturing, or fracking. These two issues have generated significant community concern across many Australian jurisdictions, in part due to the inadequacy of state and territory laws. As a result, EDOs across Australia continue to receive numerous requests from rural communities to conduct education workshops, explaining their rights and responsibilities under mining and petroleum legislation. Clients across all jurisdictions continue to seek detailed legal advice about various aspects of mining and petroleum law, in particular the extent to which these laws protect the environment and their land. For many of these people, the ODE is their only means of accessing objective specialist legal advice about issues which have a direct impact on their property, community and local environment.

EDOs of Australia also respond on an ongoing basis to regulatory processes dealing with these issues. Current regulatory inadequacies have been detailed in submissions and reports prepared by EDOs of Australia, EDO New South Wales, EDO Tasmania, EDO Northern Territory and EDO South Australia. All of these documents are available on our website. Landholder rights and fracking are, therefore, issues of national significance in urgent need of national regulation. We, therefore, support the intent of the bill—namely, to introduce national law which makes landholder consent a precondition to undertaking coal and unconventional gas mining activities on private land and to prohibit fracking.

Senator URQUHART: If the bill is passed in its current form, landholders would not be able to refuse access to land for other activities such as those relating to petroleum and geothermal energy. What is your view on the application of the bill to some resources but not others? I do not mind who answers that.

Ms Walmsley: One of the things that we have said both at a state and at a federal level is that mining laws, as they currently stand, are quite piecemeal and ad hoc, and in New South Wales very complex. There are certain rules that are set out in legislation but a lot are in policies, guidelines and so forth. One thing that we have consistently

said is the need for broadscale reform and review of mining laws in order to address issues such as what you are raising, Senator; that some activities are treated differently to other activities. We would support a broad-ranging review that actually looked at all activities and ensured that mining laws at all levels actually, first and foremost, were designed to implement ecologically sustainable development and, also, to more fairly and accurately consider impacts on landholders and consider impacts on water, environmental health, human health, and the range of factors that are not always considered under the current laws.

Senator URQUHART: If this bill is passed, landholders would not be able to prevent corporations that have already commenced mining or producing gas or coal on their land from continuing those activities. Do you have any insight into the number of landholders who would not be covered by the bill?

Ms Walmsley: We do not have those specific figures. We don't in New South Wales; I am not sure if Cara might for Queensland. Obviously, there would be issues about retrospectivity and existing use rights. But it is certainly an issue for us that we have identified where landholders are precluded from having any say in the matter where activities have commenced, even if the actual activities have not commenced and there is just a licence issued. It is also unclear if those activities are going to be expanded greatly in the future, then the landholder still does not have that opportunity. One thing that was identified by the New South Wales Chief Scientist is that once an exploration licensed is approved, it is almost a foregone conclusion that production will follow. If the landholder does not get that involvement or that say at the very beginning then there are very, very limited options for what they can do and how they can be involved in the ongoing process.

Senator URQUHART: But you do not have any idea of the number of landholders who would not be covered by this bill?

Ms Walmsley: We can take that on notice and try to find out for you.

Senator URQUHART: That would be useful because that would give us a picture of those who would be covered and those who would not be. What effect would the bill have on the relationship between landholders and petroleum companies? Do you think it would lead to a better or a more adversarial relationship?

Ms Walmsley: It would certainly play a role in redressing the current imbalance. There is quite a significant power imbalance at the moment, whereby the landholders really do not have any rights. It would actually address that and give people the option to have a say at the beginning.

Senator URQUHART: Do you think the relationship would be better or more adversarial?

Ms Walmsley: It is hard to say because I understand that some companies are far better at public consultation and landholder negotiations than other companies. So it may depend on the particular company, the particular activity and the particular community. But it could improve the situation if there is some honest and open discussion right at the beginning. Certainly, the bill does provide for remedies like injunctions and so forth down the line. But, at EDO, we have always promoted early intervention, early consultation and early engagement to try to avoid the need for those adversarial actions. We think having those rights in legislation is absolutely fundamental. Where the process has failed, there should be rights for landholders and interested persons to bring actions. But we believe there is a lot that can be done up-front in the process to try to prevent the problems that arise from adversarial land use conflicts, as you have identified, Senator.

Dr Carmody: I would just add that the bill does not preclude landholders from giving their consent to CSG or coalmining activities being undertaken on their land. So it is difficult to know whether the fact that they are able to consent will improve those relationships.

Senator URQUHART: I was interested to get your take on what you think the effect of the bill would be on the relationship between the landholders and petroleum companies.

Ms Mahoney: In Queensland, resort is to the Land Court if parties cannot reach agreement. From feedback that we have, because we do not represent private interest cases, there is an indication that when parties are feeling pressured or there is a power imbalance, parties are sometimes not wanting to negotiate, that they would prefer to rely on going to the Land Court. Maybe that is an avenue where it might lead to a better relationship perhaps rather than resorting to the Land Court.

CHAIR: There has been quite a lot of work done in this area, particularly through the COAG Energy Council. I am interested as to whether you see things like the multiple land use framework or the national harmonised framework for natural gas from coal seams as being a step in the right to some sort of harmonisation in this space?

Ms Walmsley: EDOs of Australia have done submissions on the harmonisation framework and multiple land use framework, and we have identified that they are a first step in trying to create harmonisation and to address some of the issues. But, as I said earlier, about introducing different policies at different scales, while they might have useful elements in them, again we think there should be a broader review of extractive industries legislation, basically, to make sure things are addressed consistently and you do actually achieve harmonisation. I think the goals and intents of the harmonisation policy need to flow through to legislation at the state level as well, to achieve its goals.

CHAIR: But, in saying that, you would have to acknowledge that, at the moment, with the way the Australian Constitution is written and the way our federated model operates, we have a situation where we need to bring the

states and the various jurisdictions along with us. I am just interested to know how you think that you are going to achieve that without changing the Constitution.

Ms Walmsley: You are absolutely right, and there are constitutional issues that must be dealt with first and foremost. With our submission, we attached a report we did a couple of years ago now, *Coal and gas mining in Australia: opportunities for national law reform*, and up-front we identified that there are constitutional issues that need to be addressed, but we also identified the relevant sections that could be drawn upon for national leadership.

Senator URQUHART: I want to take you to a quote from Professor Samantha Hepburn, who argued:

The public ownership of resources is grounded in the core assumption that the state is the appropriate owner of the resources because it has the capacity to ensure that those resources are properly utilized for the common benefit of all citizens.

As mineral resources are owned by the state for the common good, is it appropriate, do you think, to provide individual landholders with the ability to prevent those resources from being accessed?

Ms Walmsley: If you look at the other side of that, is it appropriate to make laws that allow private companies to make significant profits? As I mentioned before, there is a bit of a power imbalance, and we are concerned about getting fair and equitable legislation in place that is based on ecologically sustainable development. In terms of being able to defend a public resource, that is a difficult question, but we are interested in that power imbalance. At the moment, the private extractive industries seem to have far more benefits and rights in legislation than landholders. There is also a public interest in having healthy water and having productive agricultural land being used for food production as well. There are a range of considerations that should be weighed equally and in a balanced manner.

Dr Carmody: I would add that, yes, it is true that those models are vested in the state and are ultimately to be used in the public interest, but it is arguably in the public interest to consider, for example, the greenhouse gas emissions which are associated with their exploitation.

Senator WATERS: My apologies for being a few minutes late. I did indeed have school drop-off. Thank you to the chair for flagging that. Thank you for being here in person and on the phone and thank you for your evidence so far. Could you firstly just run us through your views on whether this bill is constitutional. I obviously believe that it is or I would not have introduced it, but can you perhaps allay the concerns that any others might have about the basis on which this bill could be nationally implemented to give landholders the right to say no to coal seam gas and coal and to ban fracking?

Dr Carmody: In our opinion, it is entirely constitutionally valid. In fact, we would go so far as to say that there is legislative precedent at a Commonwealth level for using the corporations power to regulate the CSG and the coalmining industry. For example, the water trigger is underpinned by both the trade and commerce power and the corporations power. Our second point would be that ultimately it is for the High Court to decide whether or not the proposed bill is constitutionally valid.

Senator WATERS: Do you think there is a need for this bill? What are the legal rights of landholders in Queensland and across the country when it comes to saying yes or no to coal and coal seam gas extraction on their land?

Ms Mahoney: From a Queensland point of view, as is outlined in the submissions, there is consent required in a very restricted context with the restricted land. Other than that, there are no veto rights for landholders. The Land Access Code is required to be complied with in mandatory conditions in relation to petroleum authorities, exploration permits and mineral development licences under the Mineral Resources Act. But, as I said before, there is no consent required under that same access code.

Senator WATERS: And in New South Wales?

Dr Carmody: In New South Wales, generally speaking, exploration for CSG and coal is permitted without landholder consent, and the same applies to production activities. In relation to exploration, access agreements have to be signed before exploration can take place, but ultimately the landholder is compelled to enter into an access requirement. Really, the best they can do is make sure the terms of the agreement are as favourable as possible. There are some exceptions. For example, in relation to exploration activities consent is required within 200 metres of a dwelling house that is a principal place of residence. In relation to production activities, similarly consent is required for activities within 200 metres of a dwelling house. However, we would argue that, for a large open-cut coalmine, 200 metres is an insignificant distance. We can speak most authoritatively about New South Wales but, having conferred with our colleagues, in other states and territories the laws are similarly weighted in terms of mining and petroleum companies.

Senator WATERS: So if a coalmine or coal-seam gas extraction or mining—depending on what you would prefer to call it—is proposed 210 metres from someone's home, the law would not allow them to say no?

Dr Carmody: That is exactly correct, yes.

Ms Mahoney: Senator Waters, you asked about the acceptability. From the general comments that are coming to the office, there is an increasing awareness that rights are extremely restricted once a mine or CSG activity is approved. There seems to be a growing interest linked to that in how the community can become involved in the approval process, which seems to be an indication that the community is not finding that the current laws are acceptable.

Senator WATERS: So what can people do if they are farming a beautiful piece of land and do not want it turned into an open or pocked with coal-seam gas wells? What does the law allow them to do at the minute? Let's start with Queensland.

Ms Mahoney: There are limited rights as part of the approval process, and there has been a growing interest in that. Recognising the interest in this area the EDO Queensland has put together *Mining and Coal Seam Gas Law in Queensland*. This handbook does not deal with compensation and land access agreements, because the EDO does not advise on private interest matters. It is a guide for the community on how they can become involved in the approval process.

Dr Carmody: In New South Wales consent is required to conduct mining activities on agricultural land. However, the land has to meet one of the true definitions of agricultural land set out in schedule 2 of the Mining Act. Similarly, CSG activities can only occur with consent on what is called cultivated land under the Onshore Petroleum Act. Interestingly, there is no specific definition of cultivated land in that act. Moreover, the minister can override the act and decide that CSG production can take place on land thus defined.

Ms Walmsley: In terms of what the community can actually do, it is extremely limited. They do have merits rights for certain things, but with certain CSG activities, for example, if they do not reach a certain threshold, there are not those rights. Also, if something is referred to the Planning Assessment Commission in New South Wales for a public hearing then they no longer have those rights either. Often the only thing that people can actually do is call the EDO to get a summary of what their rights are. But there is certainly a lot of anxiety and a lot of confusion with a lot of our rural clients in terms of what they can do. Unfortunately the answer we give them is that, based on current laws, their rights are particularly limited, unless you are one of the very small category of cases where you may still have merits rights intact. But once the process is set in train the rights of landholders are extremely limited.

Senator WATERS: Thank you for that summary. My understanding is that in Queensland—where I used to practice, so I know that more than other jurisdictions—as you say, Ms Mahoney, landholders can really only quibble over the amount of compensation that they are entitled to receive, but they cannot say 'I don't want the money; I want to keep farming.'

Ms Mahoney: It would have to go to the Land Court.

Senator WATERS: Have there been many instances of that occurring?

Ms Mahoney: No. I do not have the details of that here. But, from what I am aware, it is very limited.

Senator WATERS: You said you have produced a handbook to help the community. What proportion of your inquiries are around land use and mining queries? Has it ramped up in the last few years?

Ms Mahoney: I do not have specific figures here, I am sorry. But I would say that there has definitely been a growing concern and growing interest in the number of inquiries relating to mining and coal seam gas.

Senator WATERS: Do any of the witnesses have any views on how the voluntary codes of conduct and other sorts of co-regulation initiatives are working?

Ms Walmsley: We do not have specific examples, I guess, in terms of how they are working. We do have some concerns about the use of voluntary codes in environmental legislation in New South Wales. For example, they are being tried out under our native vegetation laws and so forth. Our concern about them is the question of who is monitoring how they are being implemented and applied and whether they are achieving those outcomes. I am not sure that that empirical work is necessarily being done. We have not seen it. We obviously have anecdotal evidence from clients and callers who are worried about it and are concerned that mining companies are not toeing the line in terms of particular guidelines, but I am not sure whether there have been broader studies on how those codes are actually going in terms of equitable outcomes for landholders and environmental outcomes.

Ms Mahoney: From the Queensland perspective, a broader picture, looking at the legacy issues, there is significant concern around the legacy issues of mining and CSG. The concern is supported by the Queensland Audit Office report *Environmental regulation of the resources and waste industries* in 2014. It estimated 15,000 abandoned mines and up to \$1 billion estimated cost if all mines were to be rehabilitated. That is just an indicator that there are grounds for concern around these legacy issues and mine rehabilitation.

Senator WATERS: Given that a landholder does not have the right to say no in the vast majority of cases, if a coal seam gas company enters into agreement and there are make-good arrangements for if there is damage to aquifers that the company will supply the water while they are on the land, what happens once that tenement is finished, the coal seam gas company has left and the groundwater is still not there? Where do they find the water? Is there any sort of legal obligation on the company to continue to supply an alternative water resource once their tenement has finished?

Ms Mahoney: They could have conditions under their mining authority, but, as the audit report indicated, there are a huge number of mines that are not rehabilitated, and that is being passed onto the government to manage and fund.

Dr Carmody: In New South Wales, landholders are entitled to compensation if the surface of their land is 'injuriously affected' by CSG activity, but that obviously, in the first instance, does not concern aquifers because they are not on the surface of land. The second point is that it is difficult to demonstrate the cause of harm on the basis of limited data. We are not aware at this stage of anyone having claimed that CSG activity has depleted an aquifer to that extent, but that is simply because production activities have not really taken place in New South Wales yet. It is relatively nascent compared to the Queensland industry.

Senator WATERS: Certainly estimates of damage to groundwater tables were made in the environmental impact statements for many of the proposals, so certainly the companies foresee that there will be an impact. Of course, they contend that they can manage that impact by providing an alternative water source while they are there; hence my question: what happens when they are not there anymore? Where do you get the water from? It seems that the government could provide some money instead of water.

Ms Mahoney: Yes, but they obviously cannot make the water appear.

Senator WATERS: No, indeed. You address the second part of the purpose of this bill, which is to ban hydraulic fracturing—or fracking, as it is known colloquially. Can you tell us a little about the prevalence of fracking and the legal regulation of that so far.

Dr Carmody: We analysed existing data with a view to determining how prevalent fracking is across Australia, and there are different statistics linked to different projects. I would say that in summary it is difficult to know at this stage how prevalent it is; however, if you look at shale gas and tight gas resources across Australia, which are extensive and which both require fracking in almost all instances to be extracted, arguably it will become quite common into the future if it is not properly regulated or if a moratorium or, indeed, a ban is not put in place.

Senator WATERS: How is it currently regulated?

Dr Carmody: In New South Wales, as Ms Walmsley referred to, there are really a set of piecemeal laws and policies which regulate fracking. For example, we have a code of practice for fracture stimulation, which some people have argued is perhaps best practice in Australia. That may be true; however, it is not linked to any specific piece of legislation and, to that extent, its implementation is not mandatory, which we think is problematic. At a legislative level, most CSG production will be considered what is called the state significant development under the Environmental Planning and Assessment Act. For state significant development, the minister has broad discretion to determine how the likely environmental impacts of a project are assessed and then to determine whether or not the project will be approved. We consider that that is problematic because the legislation is not prescriptive enough or detailed enough, requiring the minister to take into account specific elements.

Senator WATERS: I am interested in whether there have been any refusals of either coal or coal seam gas proposals either under our federal environment laws or under either of the Queensland or New South Wales state laws.

Ms Walmsley: Not that I am aware of, but we can take that on notice and see what we can find out.

Senator WATERS: That was my understanding too, so thank you; I would appreciate confirmation that, with all of this ministerial discretion, it has never yet been exercised to actually say no.

You talk in your submission about knowledge gaps, in particular about our understanding of aquifers and water and interaction between aquifers and coal seams. Would you elaborate a little on that point and on how our legal system copes with that lack of knowledge?

Dr Carmody: We conducted a literature review with a view to determining where those gaps potentially work. Some of those, as we noted in our submission, included what are the medium- to long-term impacts upon aquifers and water supply where water is scarce. This is more of an issue in some states and territories than others, and this issue will be exacerbated in the long term due to climate change. Another issue is: what are the cumulative impacts on water resources at a local level and at a basin level. Another one is: can reliable modelling that predicts long-term

cumulative impacts of water extraction and use be developed, and what are the medium to longer term impacts on water resources of refracking? Interestingly enough, we found that refracking is not discussed in any Australian laws or policies, and that is concerning because its impact on water resources is arguably greater than the initial fracking process.

Senator WATERS: I want to come back to the refracking point. Thank you; it was the first time I had heard some consideration of that point. I just want to clarify this: you are saying that, based on the lit review, we do not actually know what the medium- to long-term impacts on aquifers are, we are not too sure what the cumulative impacts at either the local or the basin level are, and we do not know whether we have got reliable modelling that can predict the long-term cumulative impacts? What has happened to the precautionary principle that we are meant to have on our law books? With all of that uncertainty about potential impact, why have we not seen any refusal?

Ms Walmsley: I think the mining legislation in New South Wales does not actually have other principles of ESD in its objects clause, unlike many of our other acts. As I noted at the beginning, that is a missing element of extractive industries legislation—certainly in New South Wales. I think other states do, but we do not actually have the precautionary principles set out in relation to these activities in law.

Senator WATERS: Wow; okay. We do federally, but it seems that perhaps it has not been used. Ms Mahoney, I thought we had the precautionary principle in Queensland.

Ms Mahoney: I guess the links to the Environmental Protection Act would have some consideration of ESD in the precautionary principle, but my understanding is that the mining legislation itself does not have direct reference.

Senator WATERS: Right, so we do not have to be cautious when it comes to mining, even though we do not know the long-term impacts on water. That is rather an unsatisfactory position in my view. Is that usual? Is that the one industry where the precautionary principle does not apply?

Dr Carmody: In New South Wales, as you are probably aware, the development of mining and petroleum are assessed under the Environmental Planning and Assessment Act. The objects of that include a requirement to take into account ecologically sustainable development, but there is no requirement to actually implement ecologically sustainable development and there are not substantive clauses in the legislation, which require it to be operationalised. So what ends up happening is, and the courts have found, that the decision maker is perfectly entitled to take into account ESD, but that has to be weighed up against the objects clauses, which include, for example, economic factors. That piece of legislation, to fully answer your question, also applies to other forms of development and not just mining and petroleum, but because mining and petroleum development arguably have the most significant impacts on the environment of all forms of development, perhaps with some small exceptions, the fact that ESD is not implemented under that legislation is the most keenly felt in relation to mining and CSG development or, more broadly, mining development.

Senator WATERS: With all that said, it is it your view that the state regulatory systems adequately protect land and water from coal or coal seam gas mining?

Ms Mahoney: Our view would be that the precautionary principle should be applied in state legislation relating to mining, that Australia is committed to the precautionary principle and that actions should not be proceeding if there is uncertainty as to their scientific impacts.

Ms Walmsley: We agree, and, yes, it is an anomaly. There are more than 50 pieces of legislation in New South Wales that do refer to ESD, so it is an anomaly that the mining legislation does not. We would strongly agree that it should be, certainly, in the objects and operationalised through every decision made in the legislation.

Senator WATERS: Again, are our state laws adequate to regulate the coal seam gas and coalmining industries? Or do we need national intervention, as this bill proposes?

Ms Walmsley: Based on the work that EDO New South Wales has done, we would support national leadership on this issue. As identified in the two reports that we attached to our submissions, we have in New South Wales many policy laws, guides and codes, and so forth, but it is a complex arrangement. At the end of the day, it does not adequately protect landholders, the environment, water or human health. We have identified a range of jurisdictions that have put in place leading practice arrangements. So, at this stage, we think the state laws are not adequate. There is definitely a role for national leadership, as well as state law reform.

Dr Carmody: The proposal to ban fracking is hardly a radical one when you consider it at an international level. There is precedent. For example, there are moratoriums in place in France, Scotland and Germany. These countries have other leading practice environmental laws. So I do not think Australia would be going out on a limb if it decided at the national level to ban this practice.

Senator WATERS: In your submission, you talk about fracking chemicals. You refer to some incredibly alarming statistics, namely that 18,348 kilograms of chemicals were injected into each well in a study of the Bowen and Surat Basin operation by Santos. That was about 2,621 kilograms per coal seam. I often hear the industry say, 'You could just find these chemicals under your sink.' Could you reflect on and, perhaps, elaborate on the points you have made in your submission about the sheer quantity of those chemicals and, also, whether they have all been tested by our national chemical regulator, NICNAS.

Dr Carmody: We think it is concerning that that quantity of chemicals can be injected into a well. That would be our response to your first question. It seems like an inordinately large amount of chemicals. In response to your second question, we cannot quite understand why chemicals that have not been assessed under the NICNAS scheme are being used in fracking fluids. As a matter of urgency, we propose that that be remedied and that the chemicals all be tested for safety with that particular use.

Ms Walmsley: Our submission identifies that out of 23 chemicals known to be used in fracking fluids in Australia only two have been assessed by NICNAS.

CHAIR: Why is that? NICNAS is an extraordinarily regulatory space in terms of our industrial chemicals. One could, perhaps, extrapolate that with the additional chemicals—the 21 out of the 23—there is no need for them to be tested because they are completely benign.

Dr Carmody: I think that is putting an extraordinary level of faith in the regulator. From a public interest and transparency point of view, and given the level of public concern, it would be advisable to actually test them and make that data publicly known. The second point is: they are the 23 chemicals which are known to be used. There are others which we do not know of.

CHAIR: How do you know that you do not know?

Dr Carmody: We do not know whether they are being used or not because there is no public disclosure legislation in Australia at either a national, state or territory level.

CHAIR: Dr Carmody, if you do not know that they are being used because there is no evidence or information, how do you know that they are even being used?

Dr Carmody: Literature that we have assessed or analysed indicates that the 23 are the ones that have been declared and that, necessarily, there are others that have not been declared because they have been labelled by the company 'commercial in confidence'.

Ms Walmsley: I think another issue with NICNAS is that it does take time and resources to undertake reviews of chemicals. I understand that there is a backlog of assessments that are to be undertaken. We have done some work with them on assessing lead and that takes an extraordinary amount of time to analyse regulations, impacts and so forth. So what we are saying is that for these particular chemicals, if this is an expanding and burgeoning industry, if there is a way of prioritising the assessment of these fracking chemicals then that would be a good investment by that particular regulator.

CHAIR: I would just suggest that maybe you need to have a look at this from a different perspective. I think that jumping to the immediate conclusion that there are a whole heap of chemicals being used here that are potentially dangerous is a leap of faith that perhaps puts an unfair, or a disproportionately negative, spin into the community about what is going on here. You need to be very careful that if you make these statements you do not actually create a false understanding in the community that there is something going on that really is not.

Ms Walmsley: One thing that we identified in our shorter CSG report is that some other jurisdictions have managed to alleviate these fears by having a website—I think it is FracFocus—that actually gives the community more information about the chemicals that are used. You are right: that can be a way of dispelling some concerns. But in Australia we have found—given the way that the law has tried to catch-up with an industry which has been far ahead—that there have been gaps, and there has been a lot of confusion about what is being used. That has not been helped by companies who claim commercial-in-confidence on their CSG chemical recipes. There are things that could be put in place to actually get better information out there about what chemicals are actually used.

We do have evidence from groups—as I think we have identified—that after CSG operations have been in place certain chemicals have actually been found in local waterways and so forth. So we are doing this on an evidence-based approach. But there are certainly knowledge gaps and regulatory gaps, and I think that they are contributing to community concerns.

Dr Carmody: EDO NSW and EDOs in general do not generate concern; we respond to the concerns of our clients. A number of our clients have expressed a significant level of concern about the lack of transparency in respect of this issue.

CHAIR: I am interested in your views on the fact that in Queensland we have had over 4,000 voluntary land use agreements signed between landholders and gas companies. What is your view of the farmers who make the comments that this is a supplement to their income, who are saying that there is no evidence on their properties that there has been any detrimental impact? How do you respond to those 4,000 farmers who have got additional income because of the benefits that are derived from having entered into these land use agreements with gas companies?

Ms Mahoney: I think that from a Queensland perspective—although we do not act for any of those landholders—if there are farmers that are happy with the processes that they have gone through then the system has worked for them. The issue is with landholders and farmers for whom the system has not worked.

CHAIR: But part of this bill is proposing to ban a certain activity which many of these—

Ms Mahoney: One, yes—but in relation to the land access issues. Were you saying that those 4,000 voluntary land use agreements were in relation to fracking?

CHAIR: No, I am just asking what you say to them when you say that those agreements are unsatisfactory. Are you happy that they are all okay?

Ms Mahoney: No, of course not. If they have agreed, if they have felt that they have had adequate processes, and they have negotiated well with the mining companies, then for them the system has worked. The concern that we hear is just from those landholders that have felt a significant power imbalance and feel like they have been pressured into agreements or that the process is not adequate.

CHAIR: What is your view then, Ms Mahoney, in relation to the frameworks that are currently being put in place?

Ms Mahoney: In Queensland?

CHAIR: Yes.

Ms Mahoney: The Land Access Code has been an improvement from previous regulation, but from what we hear there is still community concern about the land access regulation.

CHAIR: But you acknowledge that there is a process that is currently underway that is improving the situation, and if it continues into the future it could see further improvement?

Ms Mahoney: Sorry, I am not in a position to answer that. But I would say that there has been improvement.

CHAIR: Thank you very much for making yourselves available this morning.

HUTTON, Mr Drew, President, Lock the Gate Alliance

[09:45]

CHAIR: Welcome. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. The committee has received a submission from Lock the Gate Alliance. Would you like to add anything or make any opening comments in support of your submission?

Mr Hutton: Yes, just a couple of comments. I would like to thank the committee for the invitation to present to you today and, in particular, I thank Senator Waters for tabling this bill. We support both elements of the bill. We support the right of an individual farmer to say no to mining on his or her land. We also support the ban on fracking. The current system with regard to mining and rural lands is based on two assumptions that we challenge. The first assumption is that there is some sort of equality in the negotiation that goes on between mining companies and farmers. In fact, as far as we are concerned, there is no equality. It is negotiation with a gun at the head of the landowner. They simply do not have the right to say no in the long run if they do not wish mining on their land. The second assumption is the theory of coexistence. It is regularly put up by governments and mining companies that mining is a land use that is compatible with most other rural land uses. That is nonsense, in our view. The more remote the land, obviously the more likely it is that coexistence can occur. In a great many areas in southern Queensland intensive agricultural pursuits are carried out. The more intensive those pursuits, the less that coexistence as possible. We have got coalmining and coal seam gas occurring in a lot of areas in the Darling Downs for example, where there is intensive cropping and other forms of intensive agriculture in fairly closely settled areas.

Ideally the states should be doing what this bill is attempting to do. But state governments, in our view, are far too reliant on settling the prospect, if not the reality, of royalties and therefore have a vested interest and in fact a conflict of interest when it comes to regulating these industries and do not do it effectively. Therefore, we are supportive of the federal government acting in these cases.

While we think that an individual landholder should have the right to say no, that is really only the start of what is needed in an effective regulatory system. Even from that point of view, we think it should be wider than just the individual landowners; the local community as a whole needs to have far greater input into just what sorts of land uses are occurring in their area and whether mining should go ahead. Whether that takes place as a plebiscite, referendum or whatever, there needs to be far greater input from the community. It is just ridiculous to say that the right to negotiate stops with the individual landowner, given the potential for a coalmine or a coal seam gas field to have impacts on neighbouring properties and the community as a whole.

With regard to fracking, the one thing that frustrates us to a large extent—and it came up in your question just before, Senator Ruston—is that we are often accused of making wild claims about the industry or unsubstantiated claims about the industry. That is very frustrating to us because the amount of information which quite often accompanies, for example, an application from one of these projects is minimal. If you look, for example, at the applications by Santos and BG and Origin here in Queensland for their projects, with the first two in particular, there is virtually no substantial evidence to back their claims about water. There is almost nothing on water modelling and nothing on how they will mitigate the impacts of their activities on underground water in particular.

What happens in Queensland is that you have the whole principle of adaptive management which then comes in to replace the precautionary principle. So we say that, rather than taking a precautionary approach to this industry, we will just suck it and see, we will go ahead, we will allow them to conduct their activities and, if we find that they are having a deleterious effect on, for example, underground water, then we will introduce new systems to cope with that, instead of saying right at the outset, 'We're not going to allow this to go ahead unless we have a pretty good idea what the impacts are likely to be.'

A lack of information often gets turned on its head by these companies, so that they say there is no evidence to justify these groups or these communities saying that, for example, there are health impacts. After the state government did a completely unsatisfactory health survey of the Tara estate, the survey said there was not enough information to know what these impacts are likely to be. That got turned on its head by the state government to say, 'Therefore, there are no impacts by coal seam gas on people's health,' and the media, uncritically, supported that view. Whereas what in fact is happening is that these companies and the governments are not doing sufficient scientific studies to say whether or not these impacts are occurring.

Certainly there are no baseline studies. Nowhere near enough baseline studies are done before any of these projects take place to then make any sort of realistic calculations of what those impacts are, whether it is on underground water or whether it is on health. As a result of this, we are finding governments and health departments and other regulatory agencies playing catch-up, and playing a desperate game of catch-up at that. For example, we

have got the New York State Department of Health which did a report in December last year, and I will quote from the final conclusion there which illustrates my point. It says:

While a guarantee of absolute safety is not possible, an assessment of the risk to public health must be supported by adequate scientific information to determine with confidence that the overall risk is sufficiently low to justify proceeding with HVHF—high-volume hydraulic fracturing—

in New York. The current scientific information is insufficient. Furthermore, it is clear from the existing literature and experience that HVHF activity has resulted in environmental impacts that are potentially adverse to public health. Until the science provides sufficient information to determine the level of risk to public health from HVHF and whether the risks can be adequately managed, HVHF should not proceed in New York State.

And, in fact, New York state has therefore banned fracking.

Senator WATERS: What does HVHF stand for?

Mr Hutton: High-volume hydraulic fracturing. That is important because it is very, very difficult to actually get information out of these companies. The state governments are completely dependent on the companies providing them with information about impacts. The state governments do no auditing—certainly no general auditing. Sometimes they audit as a result of a complaint that is made, but no auditing of any sizeable amount goes on by the state government. They are totally dependent upon the companies, and the companies are quite capable of presenting obstructions to any sort of government attempt to monitor what they are doing. The EPA in the United States, for example, has been trying to do an audit of water impacts of hydraulic fracturing in that country and has met all sorts of obstacles from the companies as a result. A report which was supposed to be out late last year is now likely to go until at least 2017 before they are able to submit any report. And that is from an industry which has been going to 15 for 20 years in the United States.

CHAIR: Mr Hutton, can I just ask you how much longer you intend to—

Mr Hutton: I will just finish there.

CHAIR: Okay, because I am sure many of the senators are eager to ask you questions. From what you have said to me, it strikes me that your concerns are largely around transparency of information and lack of information. Can I translate that into: if you were satisfied that the information was being made available, if you were satisfied that there was an appropriate process in place where you did not believe that, as you put it, farmers had a gun to their head, you would be satisfied that the current situation could be continued? So far I have not picked up anything that you have said that indicates you have actually got any real physical concerns about what is going on. You are more concerned about the fact that the farmers do not know and they do not have the information on which they can be making the decisions they need to make.

Mr Hutton: No, it would not be reasonable to assume that from what I said. In fact, there is plenty of evidence to suggest that some pretty bad things are going on out there.

CHAIR: 'Are going on' as opposed to 'have been going on'?

Mr Hutton: Are going on. At the present time, for example, in the Tara estate, between Chinchilla and Tara in the western Darling Downs, there are numerous cases where people are reporting children with bleeding noses, constant headaches and a whole range of symptoms that are certainly consistent with what has happened in the United States and other countries where people live in gas fields. So, yes, I have got great concerns. In Pennsylvania the government there has listed 243 cases where there has been contamination of aquifers by hydraulic fracturing, so there are plenty of cases that are going on at present.

CHAIR: I am more concerned about what is happening in Australia. Obviously neither the federal government nor Australian state governments have got any jurisdiction over what is happening in Pennsylvania.

Mr Hutton: But we need to learn from what is happening in other countries. The problem is: we have got no independent, or even government, monitoring of what is going on sufficiently here in Queensland.

CHAIR: The government would argue otherwise.

Mr Hutton: They might, but I happen to know most of the people who do the monitoring that goes on out there, and most of it is done on a complaints basis, not on a proactive basis. Largely because of the fuss that we have made, there is now some monitoring going on with regard to water and the impacts on water, but, because the time line on this goes for decades, not for a couple of years, it is very difficult to predict with any great certainty what is likely to happen in the years ahead and therefore what sorts of make-good agreements can be done that are going to be effective in the years ahead.

Senator LAZARUS: We have heard in the last couple of minutes about how there are a couple of thousand people that are happy that they have got CSG mining on their properties. Could you give us an idea of, if this bill

were to pass, how many people—I assume it would be thousands and thousands—would be happy that this would be able to be stopped and landowners would have the right to say no?

Mr Hutton: I have spoken to a lot of landowners—as I know you have, Senator—about this. I would put them into a number of different groups. There are those, and they tend to be on larger properties out west, who are happy enough with it and see the money they are getting as adequate for their needs and in fact a bit of a help. Most of them—at least half—would say that if they had had their way they would not have negotiated. Most of them are saying, 'We had no choice, because the law says we have to negotiate.' So they simply negotiate to get the best deal they can. Probably about a quarter have refused to negotiate at all. They have locked the gate and it is staying locked. And some of the people who have negotiated and feel happy about it are what I call poster boys. They have got a really good deal. They are very happy with what they have got. But the price of what they have got is that they go out in public and say what a good industry this is. There are two or three like that. They are opinion leaders in the rural community—they are quite successful farmers—and they say what a great industry it is. But only a very small minority do that. Most of them say, 'We have negotiated because we have had to.'

Senator LAZARUS: Do have some idea of how many people have had to sell their properties and move away from the place where they wanted to live and rear their children? Do you have any idea of how many people have been affected by this?

Mr Hutton: I personally would know a dozen who have done that. I know people who have walked off their properties. They cannot sell, because nobody wants to buy it, and they have simply walked off. They are losing tens of thousands, if not more, as a result.

Senator LAZARUS: If this bill were passed, would it strengthen or weaken the relationship between landholders and the mining companies?

Mr Hutton: What it does is to place this on the same footing as every other commercial transaction that takes place. It puts these transactions on the same footing as them. If I want to sell my house to somebody, I do it on the basis of equality. They want to buy; I want to sell. It is just a matter of what price I can get and what price they are prepared to pay. It is not the same case here. The government has said that people have to negotiate with the companies. They are forced to negotiate with a gun at their head and therefore they do not have the luxury of the same sort of leverage I or any other seller can use in those negotiations.

Senator LAZARUS: From your experience, do you know of incidents where the mining companies say that they are only going to put four wells on and in fact put up to a dozen?

Mr Hutton: That is usual. That is not the odd case; that is usual. Any number of times people have thought that they are going to get four wells and they have got 20 or 30. And in fact their fences get cut, they have people coming onto their property without any idea who they are, people do not do proper wash-downs—

CHAIR: Mr Hutton, are you okay with this being filmed?

Mr Hutton: Yes.

CHAIR: Thank you. Please proceed.

Mr Hutton: Companies do not do proper wash-downs of their vehicles, despite the fact that the agreements say they have to. These are usual things that happen out there; this is not unusual. And it all comes back to the fact that they had to negotiate in the first place with these companies to come on.

Senator LAZARUS: In this bill—I am assuming you have read it and you know all about it—

Mr Hutton: Yes.

Senator LAZARUS: Do you think it covers everything? From my understanding there are a couple of things like petroleum and geothermal that may not be covered in this bill. What are your thoughts on that?

Mr Hutton: This is only the start of what is required in a regulatory system that works. For a start the whole principle of coexistence needs to be challenged. There is no possible satisfactory coexistence of an open-cut coalmine or a coal seam gas field with any sort of intensive agriculture. It is just a laughable idea that that is the case. So we need to have no-go zones as part of a regulatory system out there. It is not just a matter where, as a senator suggested a moment ago, if we knew what was going on we would be happy. We know enough about these industries to know what their impacts are likely to be. We know how severe they are likely to be, and therefore there need to be some sorts of land uses which are sacrosanct in terms of mining in general.

Senator LAZARUS: If a landholder has an issue or a complaint, who can they go to?

Mr Hutton: The main one, with regard to coal seam gas, is the Coal Seam Gas Compliance Unit. It has about 20 employees. It tends to be responsive to complaints. I would not go to the GasFields Commission. The GasFields

Commission was set up from people who are completely in favour of the coal seam gas industry and tend to see landowners who complain as just obstructions to the system that need to be overruled as quickly as possible. The Coal Seam Gas Compliance Unit is the best one.

Senator LAZARUS: When they frack, there are a lot of tailings—a lot of water that has been used that they have to store somewhere. Do you think they are storing it adequately? What do you think is going to happen to all this poisoned water in the future?

Mr Hutton: Fortunately, we are not getting as much water up as we thought we might. Consequently, it is not as huge a problem as we originally thought. There still will be a major salt problem, and there still is a water storage problem and a water disposal problem. One of the things that really worries me is the amount of water which is actually used for dust suppression. This is salty water; it has other impurities in it as well, but the salt is the problem. For years, we worked under the assumption with Australian land use that salt was the major enemy of the Australian rural environment, and now we are sticking tonnes and tonnes of it on our rural roadways and it is getting washed into drains and washed down waterways. So we are salting up the Queensland landscape as a result of many of the practices which are being used.

Senator LAZARUS: I am not a farmer by any stretch of the imagination. A farmer relies on bore water mostly when they are not being exposed to town water—is that correct?

Mr Hutton: Yes.

Senator LAZARUS: What happens to the people living on that land and the value of that land when that bore is dried up through extraction by mining companies?

Mr Hutton: It is useless. Depending on the land, if you are an irrigation farmer you can go to dryland farming—that is assuming that you can meet your mortgage payments, which are based on the fact that you are an irrigation farmer. If you are a cocky, a grazier, and you cannot water your cattle, you walk off your property.

CHAIR: What happened to the market price of properties in Queensland, as to the difference between a property that has a coal seam gas second income and one that does not? Has the market responded to that in a positive way or a negative way in terms of the valuation and attractiveness?

Mr Hutton: I have been looking for this for some time actually, but I am not aware that there have been any surveys done—substantially. Anecdotally, yes—at least one third.

CHAIR: Sorry—'at least one third'? Improvement?

Mr Hutton: Do you mean rural properties?

CHAIR: Yes.

Mr Hutton: In Queensland?

CHAIR: Yes; improvement in property—

Mr Hutton: In areas where coal-seam gas is a major industry, yes.

Senator WATERS: To clarify: is that an improvement in value or a decrease?

Mr Hutton: Sorry—a decrease in value.

CHAIR: A decrease? So you got this from anecdotal—

Mr Hutton: Anecdotally, yes.

CHAIR: I was going to say: I recall reading, on a number of occasions, that the values have improved or that at least it has made the properties more attractive because of the second income. Are you talking about the properties that are adjacent to them, or are you talking about the actual properties that have—

Mr Hutton: Both. It is impossible to sell a property between Chinchilla and Tara; I can tell you that for a start.

CHAIR: Even if it has got—

Mr Hutton: If it has got them on the property or if it has got them nearby, it is impossible to sell the property in that area. I do not know of one property that has sold. And I know plenty that are on the market.

Senator URQUHART: I think Senator Lazarus asked about people moving away from their property and you indicated then that it was difficult to sell. Am I correct in thinking that that is anecdotal? Or have any surveys been conducted through real estates or property valuations or whatever around that sort of thing?

Mr Hutton: There have been no surveys that I am aware of. It is anecdotal in that I travel regularly out there and I talk to those people. And I have talked to plenty of people who have either walked off their properties or are in the process of doing so.

Senator URQUHART: I like to get to the sources of statements such as that and verify the purpose and the reason that properties are not selling or that people are walking off their land. There could be a whole range of factors rather than just that there is coal seam gas exploration.

Mr Hutton: In this case, I am the source.

Senator URQUHART: I am not doubting that. I am looking for an evidence base. It would be useful if there was some evidence and if you could point us to that. If there is not any then I understand.

Mr Hutton: There is very little being done by state governments. They do not want to know. They really do not want to know what the social impacts are. It would be nice to do some work on the economic impacts of the downturn in coal seam gas once the construction phase is over. People are going broke all over the place in western towns—motel owners, pub owners, people who have properties that they have been renting out for the last couple of years and now cannot sell, and people who cannot sell homes that they have. There are some major things happening in the economies of those towns and with properties in the rural areas. Nobody monitors this, nobody at all. And it is the same with health. The health study that I referred to before that took place with the health department in Queensland on the Tara estate was a 1300 number—'If you have got a problem, ring this number.' Those people out there do not do that; they do not go to hospitals to report. The only person who has ever done that work is here today, Dr Geryl McCarroll. She actually went on to the estate and interviewed people about this. That is not what the state government did. With all the resources that they have, they put up a 1300 number for people to ring.

Senator URQUHART: Just on the health issues, do you know if there has been a causal link between those health impacts and the issue of the extraction?

Mr Hutton: No, and that is the really frustrating thing.

Senator URQUHART: I have just been part of another inquiry that has similar sorts of issues where people are basing things on things that are happening in their community, but there is not that sound evidence. In some cases, people are not even contacting their GPs but just assuming that the cause is what the issue is right on their backdoor when it may in fact not be that. And, in some instances, people do not go and get medical evidence. That is of real concern to me because if someone is sick then they should be talking to their GP, not just assuming that it is what is happening down the road.

Mr Hutton: You always have an out in these things. You can always say it has nothing to do with coal seam gas because this is a low-socioeconomic area and everyone knows that people in low-socioeconomic areas have poorer health than other people. So you can always use that. The point is that these people are suffering health impacts which are consistent with living in a gas field, consistent with exposure to the sorts of contaminants which are floating around in the air, are in people's water tanks and are in the vent which is just outside their property—70 metres away and that their children could be exposed to. These things are happening. They are deserving of proper study. They are not getting those studies. In fact, the absence of the studies is being used by governments to say, 'Therefore, there are no impacts.'

Senator WATERS: Thanks, Mr Hutton, for your evidence today and for all the work that you and Lock the Gate have done to give these communities a voice. Sadly, you are one of the few outlets for that voice. Can you share with us some of the stories that landholders share with you about the real impacts of having coal seam gas on their land? What is it doing to our communities?

Mr Hutton: The saddest area is the one that I have referred to several times, which is the rural and residential estate that is between Tara and Chinchilla, where probably a couple of thousand people live. They are usually poorer people. An awful lot of them seem to be on disability pensions. They have been able to buy some very cheap land out there, because it is not good for farming. They are life's victims, many of them; not all of them, but many of them are. The last thing they want to do is talk to people about their plight. I spoke to one family who moved into the area just recently. They bought a property and had not even heard about coal seam gas. They do not read the newspapers and they do not listen to the radio. They moved in and all of a sudden they find that there is this white, plastic looking stuff floating through their water tanks and their kids are getting sick.

They are generally not people who are capable, as most people are, of advocating for themselves very well. Fortunately, there are now some people out there—like the local Uniting Church minister and so on—who are doing wonderful jobs of doing that. These people all of a sudden found that the world just descended upon them in 2009. With the expectation of only a couple of dozen of them, most of them did not know how to deal with that and just simply tried to hide from the whole thing, but you cannot hide from a gas field.

Senator WATERS: What would you say to the contention that those 4,000 or so Queenslanders have signed 'voluntary agreements'? Can you discuss the notion of whether it is voluntary when you do not have a right to say no? What would you say to the contention that some of those folk are perfectly happy?

Mr Hutton: I am spoken to very few who are perfectly happy. As I said before, at least 50 per cent would be saying that they did it with a gun at their head and they just simply tried to get the best deal they could as a result of that. It is just nonsense. There is no other form of commercial negotiation that takes place in our society quite like this, where one side is forced to negotiate with people who they do not particularly want to negotiate with.

Senator WATERS: Can you tell us in brief form what your concerns with the coal and coal seam gas industry are?

Mr Hutton: I am not antimining. I think obviously we need to have a profitable and productive mining industry. But I have spent the last 20 years of my life—over 20 years of my life—trying to make the regulation of the mining industry work. It simply does not. It is too big and it is too powerful. In this state, governments see themselves—whether that is a correct impression or not—as largely dependant on this industry to keep them afloat and therefore they never say no to a mining company. There has never been a coal mine, for example, in Queensland's history that has been rejected on environmental grounds—ever.

The regulatory system does not work. It is as simple as that. Anyone responsible for regulatory enforcement in this state knows that they are far more likely to lose their job by doing it properly than by not doing it at all. You go out and tell one of these big mining companies, 'Do this or I will close you down,' and you will lose your job. That has happened to regulators in this state. The only way that you can make the system work is to make the approvals system work. To do that, you have to have a regulatory system that says, 'These are the criteria that need to apply,' and if a public servant ticks off on a project application without properly addressing the criteria, than that public servant has committed official misconduct.

The approval system needs to be tightened far more to allow that sort of enforcement. There needs to be a much better system of public consultation and appeal rights, which means that the whole system of environmental impact assessment needs to be tightened up as well. We need to have no-go zones, which recognises the fact that coexistence simply does not work between mining and other land uses in many cases.

Senator WATERS: Can you just outline why? What are the environmental issues with the industry that has prompted your position? Just assume that people do not know much about the effects of coal seam gas. Can you tell us what they are in potted form?

Mr Hutton: The main one is water: there will be the depletion of our underground water systems. That is not Drew Hutton saying that; every regulatory authority says that. It is just a matter of how much that depletion occurs and how heavily impacted landowners will be. It is still very much an open book about just what those impacts are likely to be and how they can be mitigated. In my view, the make-good system—where companies have to make good with landowners if they lose their water—is deeply flawed, because it assumes that there will be water that can be provided to those landowners and that they can go into a deeper aquifer—for example, into the Great Artesian Basin—and get water from there. In many cases, those aquifers are already over allocated or allocated to their limit—or at least they soon will be. The more people who have to get make-good agreements by going into those, the more over allocated they will be.

There are long-term problems that are integral to the industry and then there are the unknown health issues. We must grapple with the whole notion that if you are going to live cheek by jowl with the coal seam gas industry, then you are going to have to face serious health issues.

CHAIR: Thank you very much, Mr Hutton, for your submission and for being here today. The committee will now suspend. We will resume with the Basin Sustainability Alliance.

Proceedings suspended from 10:22 to 10:36

CAMERON, Mr Neil Alexander Robin, Committee Member, Basin Sustainability Alliance

NICHOLSON, Miss Lynette, Chairperson, Basin Sustainability Alliance

CHAIR: The committee will now resume. I welcome the witnesses. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. Would you like to state anything about the capacity in which you appear?

Mr Cameron: I am a tax consultant to a large rural accounting firm in south-east Queensland and I also happen to be a farmer and grazier in the Millmerran district of south-east Queensland.

Miss Nicholson: I have a farm just north of Dalby in the Bell-Jimbour area and I have been a committee member on BSA for quite some years.

CHAIR: We have received a submission, which has been circulated to committee members but is yet to be published, from your organisation. Is there anything that you would like to add or would you like to make an opening statement before we go to questions?

Mr Cameron: Yes, I would like to make an opening statement. The Basin Sustainability Alliance is a group of landholders and community members concerned that coal seam, tight and shale gas either have been impacting or will continue to impact on vital land and water supplies in Queensland. On behalf of our members, we thank you for the opportunity to appear before this committee today. Members of BSA do not see themselves as political activists. We are a not-for-profit group consisting mainly of farmers and graziers who volunteer their time trying to get governments to see what impact their decision making is having on the livelihood, health and wellbeing of rural Queenslanders and to focus debate on the sustainability of the Greater Artesian Basin and its continuing ability to provide clean water for agriculture production and the sustenance of our rural communities. We have, on numerous occasions, pointed to the seriousness of the failure of successive Queensland governments to properly administer and regulate the coal seam gas industry and have pleaded the case for a federal judicial commission of inquiry in an effort to have the issues independently addressed to force a proper debate on these issues, rather than continually seeing the debate descend into a political farce.

Our full submission contains genuine issues for your consideration. Today, we will highlight a few main points. The conflict of interest of the state as a regulator and also the beneficiary of royalties, as referred to in the first two paragraphs of our submission, has been well traversed in previous submissions. An example of the complete lack of transparency of the industry and lack of oversight by government is apparent in the right to information application BSA made in 2013, which I will now elaborate on.

It is basically a background and time line of the difficulties that we had in getting this right to information. Basically on 18 May 2013 BSA was advised by a landholder that within days four wells would be fracked over a month in a particular gas tenure south of Dalby but the tenure holder would provide no other information. On 23 May 2013, to understand the fracking operations proposed for the tenure area, BSA approached QGC for a stimulation risk assessment, or SRA, for the fracks. This risk assessment is a document the tenure holder must prepare prior to undertaking well stimulation activities to ensure that the stimulation activities are managed to prevent environmental harm. On 24 May, concerned that they would not get the information until the fracks were completed, BSA lodged an RTI application for the document. On 6 June QGC advised BSA that the risk assessment contained confidential information of commercial importance to QGC and therefore QGC would not be providing it.

On 11 June BSA lodged a formal complaint with DEHP, the Department of Environment and Heritage Protection, concerned that QGC may have been in breach of their EA with their frack operations, based on documented past QGC fracking practices where they fracked intentionally in an aquifer. On 20 June BSA was advised in writing by Right to Information Services that its request for the risk assessment had failed because the government did not have the report and so could not provide it. So, whilst condition B24 compelled a tenure holder to prepare the report, they were not required to lodge it with government. This means that, in the event of an issue with fracking, the very document that is required in an investigation and that potentially provides a defence to the CSG company is not with government.

On 1 July 2013, knowing that the complaint lodged with DEHP in mid-June would have ensured that the government captured the relevant information from QGC, BSA lodged a second right-to-information application for the SRA. On 12 August BSA was advised that QGC had objected to the provision of information under the RTI application. This began a long process of internal and external reviews by QGC to block access to the document and by BSA to gain access. On 4 November BSA applied to DEHP under section 542 of the EPA for QGC's SRA for the frack operations. This application failed, because DEHP said that they were unable to provide QGC's SRA for the frack operations under the EPA because the SRA is not required to be submitted with the plan of operations—it is not a document that is required to be kept on the public register. Much further down the track, in mid-2014—

CHAIR: Mr Cameron, given the time frame, how much longer will you take? I know that senators will be very keen to ask you questions. Would you like to table it?

Mr Cameron: If this can be tabled, yes. I am conscious of the time. As you can see, those are the difficulties we have in getting—

CHAIR: If you are happy to table it, that would be great.

Mr Cameron: Sure.

CHAIR: Is there anything else you would like to state?

Mr Cameron: I would just like to speak briefly on my experience as a tax accountant in a regional accounting firm. I have reviewed a number of conduct and compensation agreements that have come across my desk and have had an opportunity to see first hand the impact of CSG on growing and grazing properties. I have actually gone out and inspected properties. One main thing that I have found is evidence of large variation in the amount of compensation that various landholders are receiving. I have seen some instances of landholders who are only receiving about \$250 per production well, with a very small initial up-front payment to go with it. In addition to that, when you read through the conduct provisions you see that they are very light on—probably no more than in just a standard agreement. On the other hand I have seen other CCAs where the amount of compensation has been reasonable and much larger, with good large up-front payments and reasonable annual payments thereafter.

It appears to me that some landholders have not been able to negotiate as effectively as others, and possibly have not sought legal advice despite the fact that reasonable legal expenses are supposed to be paid for by CSG companies. Maybe they have not got the most appropriate legal advice. Unfortunately, it appears that some landholders were understandably not prepared at all for a mining company suddenly turning up their homestead and telling them that they had no legal choice in whether the company gained access to their property and were told, 'Here's a document to sign', that offered compensation. Initially CCAs actually contained confidentiality agreements, so you could not really go and talk to your neighbour about what deal they were getting or to compare notes at all. I have seen some landholders who were just overwhelmed at the time. We have even had clients come to us and say, 'What do we do?' In our position, as business advisors, we had to say: 'You'll have to go seek the best legal advice that you can get. We're not lawyers; we accountants.'

There has also been the recent practice of providing upfront incentive payments, so it is an incentive payment to sign an agreement by a certain date, which to me just runs the risk of hasty decisions being made. Obviously, when you make a hasty decision, there are potentially some very negative consequences that come out of that and you may not get the protections in your CCA that you thought you had or that you wanted.

I have spoken to various landholders and they have said that even though they have received reasonable compensation, they no longer feel that their land is their own. They cannot sit on the veranda at the end of the day and enjoy the quiet of their property like they used to; they have strangers traipsing all over their property and there is usually a ute driving by with flashing light a few hundred metres down the paddock. Their property really is not their own anymore, even though they are getting some off-farm income. Basically, the right to say no would put landholders in a much improved position to negotiate with the very well-resourced mining companies and go some way to redressing the imbalance of power. That is basically all I have to say.

CHAIR: Would you like to add anything?

Miss Nicholson: Yes, thank you. I will refer, firstly, to the issue of the imbalance of power between the resource industry and landholders referred to in dot paragraph 3, which is a very real problem when landholders are trying to negotiate with resource companies. During negotiations, CSG companies are represented by legally trained employees to negotiate with the farmer; they present the company's conduct and compensation agreement to landholders as a fait accompli—very often accompanied by a threat to take the landholder to court if they do not sign the document without delay. In addition, agreements have no penalty clauses in them or 'three breaches and you are out' type clauses. They have no teeth and the farmer is left to head to the Supreme Court to try to get commitments by the gas industry fulfilled.

In this regard, I refer to the first document that I have handed up, which is the document on the GasFields Commission website by Richard Golden, who has been a grazier for a considerable amount of time and is well established. In particular, in that article he said:

Their—

being the gas company—

delay tactic included threatening to take us to the Land Court if we didn't sign straightaway.

He added:

You need to start—
negotiating—

as if you expect to end up in court - so our team of experts included a valuer, lawyer, land development specialist, animal behaviour specialist, agronomist, and even a specialist driller, and a noise, dust and light expert.

... ..

I understand not every landholder might have the desire or the capacity to pull together such a team ... and not everyone will have the stomach for it ...

Golden then goes on to explain that agreeing on the CCA is just the start, and he discusses the problems he had in making the companies comply with the agreement.

Personally, I am aware of somebody who has taken a company four times to the Supreme Court in trying to get compliance with the CCA. As you would all be aware, solicitor and own client costs are not recoverable from the other side. What the gas companies did on nearly every occasion was to take him to the door of court either the morning of court or the night before and offer them exactly what they wanted. So they strung it out in the hope that he would fold. With his solicitor and own client costs, you would not get any change out of \$200,000 in the Supreme Court. And, I am afraid, that sort of financial impost would be way out of the financial league of most landholders, including myself. So it is very rare that somebody has the resources to take somebody to court time and time again.

In dot paragraphs 4 and 5, we address the claims by industry and government that the 4,500 to 5,000 CCAs already signed by landholders and the fact that very few landholders have utilised courts were somehow evidence that landholders were happily coexisting with the resource companies. Nothing could be further from the truth. Landholders are compelled to sign the CCA. There is nothing voluntary about the process. Coexistence is a significant issue from landholders. Unfortunately, it is invariably treated as a party political issue running along party political lines rather than being seen as a genuine social debate. The meaning of coexistence denotes a mutually beneficial arrangement where parties are able to exist on equal terms. What we have currently in Queensland is more akin to enforced occupation. That is what our members prefer to call it, instead of coexistence. That came out of the meeting we had with landholders and members in Chinchilla.

Using the frequency of the courts as an indicator of landholder satisfaction with the CSG industry is absurd, especially given the position of the recent LNP government in Queensland. It was prepared to amend laws so as to remove community and almost all landholder rights of objection to resource projects. In addition, the LNP sought to remove the right of landholders to have a representative when negotiating CCAs. You had a situation where a lawyer from the resource company was facing a little old farmer in a room. The power—

Senator WATERS: Can you say that again for me. The companies sought to remove the right of landholders to have a representative with them in the negotiations?

Miss Nicholson: Yes. I attended a meeting in Toowoomba. The meeting was supposed to be about an act, with the politician describing what was in the act. He started off by telling us that it was absurd and insulting to farmers that they needed someone to talk on their behalf, and that his experience was that they were quite able to speak for themselves. Within about a month—and this happened over the Christmas-New Year break—there was a press release and, in small writing somewhere, I noticed they had amended the regulations so as to provide that you could not be represented at negotiations. With the Labor government coming in, whether they overturned that I am not sure. That was the sequence of events over December-January.

Senator WATERS: Thank you. I will follow that up.

Miss Nicholson: In dot paragraph 6, we address the argument advanced by government and resource companies that farmers have coexisted with mining for decades. The fact is: until recently, all CSG, and the majority of coalmining, was undertaken for Australia's domestic supply and was not comparable to the tsunami being rolled out across the country now to feed an export market. In fact, I do not even know—and I have been on the land for 40 or 50 years—where those original CSG wells were. I was a lawyer some time ago, and we never looked at the resource industry act. I do not even know where those CSG wells were. There were no problems because there were so few—similarly with coalmining.

In paragraph 7 of the dot points I refer to the final supplemental *Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program*—it is a real mouthful!—handed down by the New York State Department of Environmental Conservation. This was a study done over seven years. It included a host of government departments. The environmental department has a mission which is laid out to conserve, improve and protect the natural resources and environment, to prevent, abate and control land and air pollution in order to enhance health and the social welfare of people. We obviously do not have departments that have that sort of concern.

This report relates to high-volume hydraulic fracturing, which is more associated with shale and tight gas. It involves pumping huge amounts of water. In this report they talk about 2.4 to 7.8 million gallons down each well. Unlike CSG where they dewater the area to get the gas up, this involves shooting water and more potent chemicals, because you are going into hard rock, down to frack the rock. This submission looked at a host of environmental impacts relating to water withdrawals, stormwater run-off, flood plains, wetlands, accidental spills et cetera. There are a multitude of them. The department, in the end, recognised:

... that there is insufficient information, or too much uncertainty as to the effectiveness of the mitigation, to determine if the impacts could be adequately mitigated at all.

That leads on to something which has occurred in the last four to five days. There has been a massive release of gas from the Origin pipeline into Gladstone where a faulty pressure release valve had to be removed from the line for repair. There was only one pressure release valve in the gas pipeline, which seems to me to be a bit crazy. I have two taps on every tank I have so that I do not lose water if one fails. To remove the faulty gas valve, they had to vent all of the gas in a 100-kilometre pipeline into the air. The landholders within a five-kilometre radius were the only people told. A person I know who is eight kilometres from the pipeline said he felt like there were F111s coming into his bedroom. I had an F111 go over my place when I had weaners in the yard. The next morning I had to just about pull them off the yard rails. They had gone around and around. We are talking here about the farmer's business. If he has feedlots then they are going to be a week or two behind. It is the same in the paddocks. We are looking at the health of the farmers and at the problem with livestock with gas emissions and CO₂ being released. I am happy to take any questions.

Senator URQUHART: Thank you for your submission but also for your opening statement. That was helpful. I want to drill down a little bit more on some of the things you said. I just had a look at your website and you have a really comprehensive page on there that addresses landholders. It steps through for landholders what they should do, the process they should follow and some advice. I want to ask you a little bit more about your organisation. How broad are you? How many members do you have? How far is your reach to get this information out to landholders?

Miss Nicholson: We have approximately 100 members. When I say '100 members' that very often includes a pastoral company which includes a family which may have half a dozen members involved. So it is certainly a lot larger than 100 people. We have members up north—for instance, John Erbacher up in the Wandoan area. Dale Stiller was a committee member for a time. So we have a fair reach.

Senator URQUHART: I am Tasmanian, so when you say 'up north' I am not sure what you mean. Up north is Queensland for me, or Victoria or whatever. Can you just give us an idea about your organisation's coverage?

Miss Nicholson: Wandoan: if you followed where the gas started, which is Dalby, and you go north and then east into Gladstone—at the moment there are gas developments all along that. That is the major area. We also have people like John Erbacher, who was involved in a court action against one of the mines up there, the huge Carmichael mine. We have a reasonable smattering.

Farmers have never faced something like this before. Farmers have been able to stay behind their front gate and address their marketing problems and look after their cattle. They just do not know about the outside world, to a large degree. There are some of us that have been in the outside world and had jobs outside, but we are the exception by a long shot.

Senator URQUHART: You talked about things like compensation amounts, conduct provisions, negotiations, legal advice, legal costs, confidentiality agreements, incentive payments—all of those sorts of issues. From our point of view, what would you like to see if you were given an opportunity to say what sorts of things landowners and farmers should have when approached by a particular mining company to access their land? In a perfect world, how would you see that operating?

Miss Nicholson: I guess the ultimate would be to have the right to say no. That way you can say: 'You prove to me that I can work with you. You do not know my business. You never inquire and you just simply say that you are coming on.' If that is not possible then I guess that the next best thing would be, instead of having the situation where they come on and you have got so many days to negotiate and if you do not negotiate they commence Land Court proceedings—the Land Court only hears you on the amount of compensation and not all these other clauses that you need in to protect you against weeds and all that sort of thing—

Mr Cameron: The Land Court does not have the power to stop them from coming onto your property; all that they can do is debate about the amount of compensation that is being paid.

Miss Nicholson: As soon as they have set it down for Land Court—which may hear it yonks down the track—they can then come on and start doing what they like. That is not fair negotiation. If they had a situation where the company could not come on until this thing was negotiated then at least the landholder can say: 'Look, that does not

suit. I cannot have those wells in that cultivation. I cannot go around and around all of your signs.' I mean, with some of them it is like watching a slalom race down the alpine area. They have got signs dotted all through the cultivation: 'Do not smoke here' and, you know, it is unbelievable—let alone the gas wells themselves.

When this whole tsunami started in 2010 nobody, nobody, not even the lawyers, had any experience in what was going to happen and what the impacts were. Yet we are supposed to work out this agreement right at the start before we know what the impacts are. The lawyers are starting to catch-up with things now because we are starting to see the impacts. But Joe Bloggs on his farm is not seeing it and it has been a real problem.

Senator LAZARUS: How effective have the state government's regulations of the CSG industry been?

Miss Nicholson: Totally ineffective; in fact, I do not know that they have had any. In that RTI, at one stage, we were told that the department was going to put in a submission against our being able to get the document. The reason was that they did not want to compromise the fact that companies were giving honest frack risk agreements. Excuse me, but they are supposed to be there to regulate these things! They should have had the document in there. If they do not have the document, when something does go wrong how do we know it is the same document as before that incident occurred? Obviously if it is in their frack risk assessment they are covered liability wise.

Mr Cameron: I am going to quote from what DEP had actually said. They said: 'There is a possibility that the quality and transparency of future stimulation risk assessments submitted to DEP may be impacted.' They are wanting to block the information from being released.

Senator WATERS: That is outrageous.

Senator LAZARUS: The states have responsibility for mining regulation and land access issues. Do you consider that the state should be allowed to deal with this, or do you think the Commonwealth should intervene?

Miss Nicholson: I think the Commonwealth should intervene. That is my personal opinion. It has been made patently clear to us, even when it comes down to getting decent health reports done on areas, that any excuse not to look into these things will do. It is a matter of 'We don't want the evidence in our departments because we don't want to be liable'. At page 4 of this report they talk about the mission of the department of conservation in New York state, which actually takes control and is responsible for the decision that has to be made. On page 7 there is a list of the departments that are involved, and it is almost every department in the state legislature. Here, there was never anything done about what risks and impacts there were and whether it was in fact going to cost the state more. In this they refer to agriculture and tourism as being sacrosanct—because they are sustainable and will be there for ever and a day whereas mining will not—so any impact on those two things they really did not want to see at all. They looked at the cost of roads and everything—and this was before the oil price tumbled—and decided that the socioeconomic benefits just were not there unless there were absolute signs on the table that everything was totally safe.

Senator LAZARUS: Has BSA looked at Senator Waters' bill?

Miss Nicholson: Yes.

Senator LAZARUS: Does BSA support both aspects of the bill?

Miss Nicholson: Yes.

Mr Cameron: The banning of the fracking and the right to say no?

Senator LAZARUS: Yes. You do?

Miss Nicholson: Yes.

Senator LAZARUS: In your opinion, can CSG production and agriculture coexist?

Mr Cameron: In some cases it is very difficult, especially when it is intensive agriculture. Even at the grazing level, where you have got cell grazing it is just impossible because of the access tracks and the disruption that comes from so many wells being spotted across your property. In large areas, in broadacre grazing country, it is probably easier, but it is still not ideal.

Senator LAZARUS: Has BSA, through its members, heard of or experienced cases where workers from these mining companies do not respect the land that they are on, and is that a concern for your organisation?

Miss Nicholson: Yes. Indeed, that comes through to us all the time. You can have a look at this. It is there for you to see—and it is not just me talking about what I have been told second-hand. He said that stupid errors frustrated landholders:

For example, their surveyors welcomed my involvement highlighting things about our property to improve the placement of gas wells—

obviously for himself—

they listened and adjusted things—but they sent it to Brisbane and of course Brisbane just changed it.

And they went back to putting the wells where they wanted to put them again. So there is a huge divide, and it comes back to, I believe, the lack of power that you have in trying to handle these people.

Mr Cameron: The other thing on the workers is that—I think Richard Golden actually mentioned it—not only were gates that had been closed sometimes left open, you also had the other dangerous situation where a gate that had been deliberately left open so stock could access water for their survival was shut.

Senator LAZARUS: How accessible have the representatives of the mining companies been to BSA to voice your concerns?

Mr Cameron: We have had them at various stages at our meetings.

Senator LAZARUS: So you have had access to them.

Mr Cameron: We have had access, yes.

Miss Nicholson: Yes, I have been to quite a few meetings. I am on a meeting at Arrow just to listen in and I have attended there, which is where I heard that they just had their EIA changed to allow them to put drilling mud all over the site where they are drilling. That is another issue: the government says that they have got extremely good conditions around all these companies, and then you find out that Arrow has had them changed, and the others are in the process of having them changed, so that, instead of taking their drilling mud et cetera to a waste disposal place, they can now just spread it on the ground. It is all smoke and mirrors.

Mr Cameron: I think we would have a much better situation if the mining companies went to the various government departments, like DEHP, and said, 'We're going to do this, this, this and this,' and then the independent government department actually did its own environmental impact study. In that way, you avoid that situation where the mining company is actually doing the environmental impact study first and then presenting it and the study then is not getting the due consideration and due diligence that it should. Unfortunately it is possible that there have been rushed decisions in approving the EIAs.

Miss Nicholson: We think those departments should be here to oversight, not to sit back and watch the train roll out. They should be there doing a job and they are not. When you look at the difference between this and what they did to satisfy themselves whether or not something was okay, that took 260,000 submissions and seven years. Our department just let it roll in under some stupid adaptive management practice which has no teeth and has no ability to stop anything in case something goes wrong. That is the situation we find ourselves in.

Senator LAZARUS: Thank you.

Senator WATERS: Thank you, folks. In the two minutes that we unfortunately have left, I want to firstly thank you for coming here today and for sharing your views. It is certainly not the first time we have heard what an imbalance of power there is and how landholders are being ridden roughshod over. I hope that the more times we hear this the more chance there is that we might get some change in the regulatory system. So thank you for once again pointing out the multiple inefficiencies and inadequacies in the regulatory system. I agree with everything you have said and thank you for your support for the bill. I think ultimately we will succeed, but it might be a few years yet. Thank you for bearing up in the meantime. One question is all I have got time for. When you have got other jurisdictions—like you pointed out in New York—that have gone to great lengths to study this industry, to listen to what the communities want and that have then taken a strong decision to say, 'No, we don't want fracking,' why have we not done the same in Australia?

Miss Nicholson: I think it is like everything: it comes from the top. You have policy makers up the top that tell the departments what to do, which you must have to a degree. But these departments say that their job is to carry out the policies of the government. Fine. It seems to me that there is no independence at all of those departments, if you know what I mean. I am not a political being, so I do not know how you give the departments the sort of responsible attitude that obviously these departments have in New York State, but somehow there have to be departments that, while they carry out the policy of the government in power at the time, do not prostitute themselves—they have a job to do and they get on and do it and they do it honestly.

CHAIR: Thank you very much, Miss Nicholson and Mr Cameron, for making the time to be here today and also for your submission and additional document.

BENDER, Mr George, Spokesperson, Hopeland Community Sustainability Group

BENDER, Mrs Pam, Spokesperson, Hopeland Community Sustainability Group

DOUGALL, Mrs Shay Dianne, Spokesperson and Founder, Hopeland Community Sustainability Group

[11:15]

CHAIR: Welcome. Information on parliamentary privilege and the protection of witnesses has been provided to you. Would you like to make an opening statement before we move to questions? I would just point out that we have 40 minutes. If we could get a bit of time for questions, that would be great, so could you keep it as short as possible.

Mrs Dougall: Most definitely. I have prepared five minutes.

CHAIR: Beautiful.

Mrs Dougall: We encourage a heap of questions. I will open by saying, Chairperson, Senators and other distinguished members of the Senate inquiry committee, thank you for receiving us today. For clarification: the bill that Lyn was talking about before was the common provisions bill. It is still sitting in parliament, waiting, and the legislation that was turned around for people to say no just recently was part of that bill. As to state versus Commonwealth responsibility, of course the Commonwealth should have responsibility for this. We have seen what damage happened to the rail gauge when it was different across states. This is talking about something more severe than that.

However, my submission is: I draw your attention to the precautionary principle—and I have given this to you in writing so that you can see some of the pictures I have included. The precautionary principle is: an action should not be taken if the consequences are uncertain and potentially dangerous. The only benefit from CSG is for those against the bill and the industry itself. Every other consequence is damaging, harmful, permanent and, at the very least, uncertain.

I have read most of the arguments against the bill that you have received—notably, from only the government, industry and those directly connected to the industry, endorsing to you the positives and the reasons why CSG should continue and why they should continue to have unfettered access to my home and the homes of others in my area and the businesses of others in my area. The main reasons they have given for why this should continue is for the further financial success of the few and the foreign; further enhancing adaptive management practices, which is, in other words, letting them learn while they do; and ongoing support of an unsustainable industry. As gas wells deplete—along with our water, which is their waste product—they have to keep drilling and drilling and drilling and fracking, just to keep production up to the same pace.

So I can refer you to just as many arguments that indicate multiple and complex reasons why this should not be the case, and I am sure many other submissions have. I have also included some references for you to consult at the end of this document I have submitted.

However, one of the very important elements is missing from this argument. It is one that cannot be conveyed in black and white tomes and in spin. It is one on which I am grateful for the opportunity to share with you today, and that is the personal recounting of what it is like to live and be forced to live with this industry. But I fear that that, too, will be inadequate and I implore you to visit personally, to see with your own eyes, before you allow this industry and government to make any more decisions on our behalf and before you make any recommendations from this inquiry that will have repercussions for this generation and every generation after it. Please let me show you around the front line.

I am from Hopeland. We live in the middle of 150 Shenhuas, with about 6,000 scattered square kilometres now permanently removed, purchased by CSG companies and no longer available for agriculture or community members to live on. They are now owned by foreign CSG companies. We get to breathe every day what this industry produces, not to mention the everlasting damage to the very fabric of our community. You will see on the second page a picture that has a lot of yellow dots on it, red shading and blue rivers and creeks. At the top in the corner is Hopeland, where we are from. The red shading is the country that the CSG companies have removed from our community and are foreign owned, and the yellow dots are the gas wells. The blue lines are the creeks and rivers that, in all of the country that they have purchased, they have now taken up and own.

To what extent is the health of the Western Downs population, the food chain, the animals and the environment affected by this industry and its emissions? Where in the reports and the documents that you have received that support the CSG industry have those emissions and their effect appeared? Where are the baselines to compare these results to? In 2013-14, the people of the Western Downs were exposed to 43,000 tonnes of toxic emissions. Ninety six per cent of those 43,000 tonnes was emitted within 55 kilometres of Hopeland. That is roughly the same distance from where we sit here to Ipswich. There is a picture of that on the next page. A small selection of those emissions

are volatile organic compounds. Seven hundred and forty eight tonnes of those were emitted. VOCs, as they are otherwise known, cause cancer in humans and animals. They cause eye, nose and throat irritations, headaches, visual disorders, memory impairment, loss of coordination, nausea, and damage to the liver and kidneys and the central nervous system, and they can affect the water and soil when they are in a liquid form. I would like you to take particular note of what I have just said about VOCs, for we will refer back to that in a moment. Also, just last year 140 tonnes of formaldehyde was emitted within 55 kilometres of the Hopeland district, where we all live.

I spend every day and many nights fighting to maintain the line in the sand that this legislation is all about. It is all about what we have already done for ourselves. Hopeland has had a gas-free declaration, which was for our area to remain gas free. We stood up for our own rights. We said no. I want to support the financial, emotional and physical wellbeing of my family, my kids and my community, because the area will be unliveable and a disastrous financial loss to us because of this industry. Even if we did leave, where would we go? That is shown in the picture you can see below. If this legislation does not go through, no-one gets to say no to all of those petroleum leases. There is nowhere to go. This bill is life changing. After years of screaming into pillows, one simple act to uphold human rights by this government will at least level the playing field in this country. If the government will not protect us and help us protect our children, our food and our water security, at least give me and my community the right to protect them for you and the right to refuse gas and coal.

At the end of those documents are some pictures. I wandered around the gas field just a couple of days ago before coming here and took a couple of pictures for you. I would like to share these pictures with you so that you understand just what it is we would like to have the right to say no to. From my dicky little printer, these pictures do not look as spectacular as they should, but the first picture is of an oil leak from a wellhead in a gas well on a cattle farm. The next one is a vent inside that well which is bubbling gas and leaking water. It should not be leaking water like that. And there is bubbling gas through it. Those other three pictures are of dead frogs inside of a vessel. There is no reason why a frog should be dead inside of a vessel. It should be able to get out. Obviously they have gotten in there and fallen over dead. What is in that? This is on a man's property. That next one is a leaning high-point vent that certainly should not be on that angle and it certainly should not be leaking that massive quantity of water out of it. That is not water. That is process water. That is raw CSG water.

The next picture there is a riser which is completely subsided. That is so wet and soggy there that there is clearly a massive leak of raw CSG water into this man's farm. The next one is a bit of pipeline that really should have an identifiable sign on it. But it is so well looked after and maintained that you cannot even read the sign! That is a safety issue. The next picture is a filter that has been taken out of that piece of equipment and dropped on the ground and left to rust along with all of what was in it. And the next picture is a bunch of cattle camped just outside of a well. I have superimposed on top of that what I personally have measured from wells, which is 216 parts per million of VOCs. How do you like your steak! That, ladies and gentlemen, is my submission for the Hopeland group. George and Pam are here too to help answer any questions and give you their experience. Narelle Nothdurft is here as well.

CHAIR: Mr and Mrs Bender, would you like to add anything to Ms Dougall's comments before we go to questions?

Mr Bender: I just want to tell you about our experience with these companies. It actually started in 2005. We have got two properties. One is Arrow and the other one is Queensland Gas and Origin. In 2005, Origin said, 'We're going to come and put these wells on—\$265.' So you know what sort of language I would have told them! They said, 'We'll just go to the Land Court.' It was not Land Court then; it was the Land and Resources Tribunal. I said, 'We'll see you there next week.' I am still waiting. They have not come back. It was \$265. When they con you into these contracts, they say 'wells and associated petroleum infrastructure'. No-one knows what 'associated petroleum infrastructure' is. It could mean anything. To allow them on for \$265 was absolutely stupid. In recent times—you are probably aware, because there has been so much going on—they have dewatered the Walloon Coal Measures underground water. We have got two bores that Origin Energy have to make good on. That means they have got to find you another source of water supply. Negotiation went on for about 12 months. Anyhow, finally, we could not agree on it. They would not agree what we wanted, so we actually agreed what they wanted. So that was done.

I will just read you something about these bores that they have got to make good on. This is a letter we received from Origin a couple of months ago. This is how dangerous the bores are at the moment. It says here: 'We recommend you don't cover or enclose the bores in any way. You should check that there is no potential ignition source present in the immediate vicinity.' That is because of the methane that is escaping out of these bores. Now Origin have got to come onto our property and decommission these bores. Last November, they turned up at the front gate with their vehicles covered in mud and dust. We would not let them in because that is in the agreement—they cannot come in until the vehicles are clean. But they reckon they did not break any agreement. One word that

these companies can spell is 'apologise'. They can spell that real well. It is probably in here. They will write you letters and apologise and they will apologise four or five times in one sentence. A couple of weeks ago, we said, 'Righto, you can come on and have a look at what you've got to do.' We had all the access track marked out. And what did they do? They come in: 'Oh, we're not going to go on your access track; we'll take our own track.' And they apologised again and said they wished to move forward in good faith. I do not know what is going to happen about this last incident. I have actually told the land access agreement manager, or whatever he calls himself, what he can do—anyhow, we will see what happens. They have to come on and decommission these bores.

Mrs Dougall: We have measured George's bores at 36 per cent by volume of methane and they are saying they are unsafe.

Mr Bender: They are unsafe.

Mrs Dougall: That high-point vent you see with the terrible lean on it produces about the same amount. I have measured them. So why is his unsafe and has to be blocked up, and why aren't all the 350,000 high-point vents across our district that are emitting all these fabulous things also unsafe? There is no structure and there are no regulations. It is an example of 'go your own adventure'. Are there any questions you would like to ask us?

Mr Bender: I have lived in Hopeland all my life and am still living in the same house I grew up in. On my mother's side, the family has been in the Chinchilla district for seven generations.

Senator URQUHART: Thanks very much Mrs Dougall and Mr and Mrs Bender. Mr Bender, you said that they came on and conned you into the contracts.

Mr Bender: Queensland Gas.

Senator URQUHART: Yes. Can you take us through the process?

Mr Bender: They presented me with the agreement. When you say, 'No, we're not agreeing to that,' they say, 'We'll go to the Land Court'—the land and resources tribunal, as it was then.

Senator URQUHART: What has that meant for you?

Mr Bender: I will add something further to that. That was one contract. The next contract that came out—and they say they will pay your legal fees—we said, 'No, we don't want to sign that one either.' They then said, 'We won't pay any of your legal fees because you have not signed that agreement as it was presented to you.' If you wanted to change something in it, they said they would not pay your legal fees.

Mrs Dougall: The contract came back without George's edits and the guy said, 'No, I didn't read it.'

Mr Bender: That was that one. Then further down the track, we met with the Origin fellow when we were doing the make-good agreement and we agreed on what should be in it. When it came, it was not what we had agreed to at the meeting. The Origin fellow that signed it said: 'I didn't read it. I just signed it and sent it to you.'

Mrs Dougall: That is just on make-good.

Senator URQUHART: What is the make-good agreement? What does that mean for you?

Mr Bender: The underground water has been depleted. Because you have no underground water, they have to find you another source of water or whatever you want. We took money compensation. The next aquifer, which is the Hutton's, is overallocated at the moment.

Senator URQUHART: You were not able to find water and you took money compensation. What has that meant for your farm? First of all, what sort of farm do you run?

Mr Bender: There is cattle on that farm. What we have done is make all our dams a hell of a lot bigger in the hope that we do not run out of water.

Mrs Dougall: It rains once every 10 years and the rest of the time it is drought. There is no possible way that any make-good can ever actually make-good for seven generations to use that bore, which should be there for another seven generations. Not only do they unfettered access to the underground water; they have permanently changed the way that George and Pam run their business and will run their future business—their family that should be running there for another seven generations. At this point, it looks like: 'What are we to do? Is it even viable?'

Senator URQUHART: I want to ask you about the Hopeland Community Sustainability Group. How big is it? I could not find a website. Can you explain what led to the formation of your group? What businesses do your members operate? What are the aims of your organisation? Can you give us a little information about that.

Mrs Dougall: Our organisation is just a group; it is not incorporated or anything like that. It is a community group. We formed when Origin were going to come in to our area and put in over 100 wells across our homes. So we formed a group that would be a community group. We really started honestly wanting to engage with Origin and say: 'What you've got there and what you are suggesting to do'—which was like three words on a page—'means nothing

to us; we want information; we want detail.' We wrote seven pages of questions to them and submitted them to them to answer, and asked for a meeting with them. They did not ever answer the questions. They refused to come to a meeting. They were not interested in conversing with our group and giving us any information about where pipelines would go across our community, how they would manage the roads and the dust and the safety of our kids, how they would manage bus stops, where the ponds they would build would go and where the compressor stations would go—none of which they were willing to answer and engage with us on. So we went, 'Well, then, if we cannot get any information, and you want to pick us all off individually and put pressure on all of us as a community, then we will form a group and we will ask each of our members.' We actually have 60 members. We have a closed Facebook site and an email list, because we are aware of the fact that we would be attacked by trolls and what have you if it were not closed and private. So it is not open to the general public, for that reason. We asked ourselves what we wanted—whether we wanted a gas field or not. And we said no. So we took our declaration and said: 'We are going to be gas field free,' and we have taken that as far as Tony Abbott the other week. So that is what our group is for.

Our group is made up of farmers. There are exactly 40 farmers in our specific district, and we have talked to every single one of them and 35 of them do not want a gas field, and, out of the other five, two are elderly and felt so already under pressure from Origin consulting with them or negotiating with them that they felt they did not have a choice—that they were not able to say no; they actually said those words. The other two—well, everyone should have their own opinion. But the thing is that there is no magical barrier between that man's property and my property that is going to stop the noise and the VOCs and the dust so that they are not going to land on my roof and poison my children. So it is a community issue that should never be on the basis of the individual.

Mr Bender: Just getting back to Shay's point about all the properties that were purchased: a fortnight ago when this feller went on the wrong—this property here, where I am, they want to put 13 wells on it. We said: 'No, you are not. You are not putting 13 wells on it. You can have four or five if you really have to.' And they said, 'Righto; will purchase your property.' I said, 'Why?' He said, 'We'll feel safe coming on here and putting the wells on, and you'll be safe because you won't be here.'

Mrs Dougall: I said: 'That is a threat.'

Mr Bender: Yes. And I said, 'Why is that?' And he said, 'Oh, we are scared of you.' Scared of what? Look at Pam up there. And this feller is nearly as big as Glenn, and he is scared of her!

Senator LAZARUS: She doesn't eat as much as me!

Mrs Dougall: You see, this is the pressure that people have everyday.

Mr Bender: That is a threat. That is a definite threat.

Senator LAZARUS: Mrs Dougall, you mentioned that you personally test some of these wells and some of the high and low point vents. When there is a complaint and the government sends out someone to test with their own equipment, what are the results from those?

Mrs Dougall: There are no results because the government does not send anyone out to take any results. In fact, you will be happy to know that we have submitted a complaint recently because Narelle's family suffers terribly with health effects. We have put in a health complaint to the department of the environment and health to say, 'We are exposed to these emissions; please address it.' They wrote back a letter saying, 'Can you please go out and identify exactly where all of the high point vents and all the other vents that you claim are causing the effects are.' They did not come out. They did not do anything. They asked us to. So we said, 'Are you happy for us then to trespass on other people's land? Will you supply us with a gas mask and gas monitor to do your job?'

Anyway, in the end we decided, 'It's just another road block. We might as well get rid of that road block and do with it what they've asked, because perhaps something will come of it.' They have done no testing—none.

Senator LAZARUS: What impact have you seen on families that live around these wells, and in particular on the young children who live and play in and around the area?

Mrs Dougall: Narelle is here today because she wanted to support the submission. She is actually part of our Hopeland Community Sustainability Group, but I will speak on her behalf because there is no Hansard paperwork for her. If you see the volatile organic compounds list that I discussed earlier, you will see there what many of the people in my area suffer from. I know that the flare has been burning all night long when it is just a couple of kilometres down the road from me, because my eyes are crusty in the morning. Narelle's family have got documented problems with eyes, nose and throat. They have problems with chronic headaches and migraines. They have had nosebleeds in the past—not just a normal nosebleed either. These are things that are documented here, but the Queensland government apparently has no way of identifying that what we are complaining of is real.

Also, it is not just this thing that you can touch and feel and see when I give it to you but the state government cannot; it is also this emotional toll, this constant feeling of waiting for the other shoe to drop, constantly waiting and thinking: 'What shall I do? Shall I come or shall I go? Will we stay or will we leave?' A teacher asked me the other day if I was going to pass on Sam's prep uniform to my other son or did I want to sell it. She said, 'You'll probably want Harry to go to prep here too.' I said, 'I don't know if I'll be here at the end of this year, let alone in two years when my son goes to prep.' It is this constant fear of what you could be living with. Every day, it is a battle. When you look at that map of all the property they own, it is no surprise that, when I drive to town, the only vehicle I see has a beacon on it—and I cannot tell you what it takes for me not to indicate my displeasure.

Senator LAZARUS: I notice here you are suggesting that 23 per cent of people that live in and around this area are between nought and 14. That is obviously a lot of young children.

Mrs Dougall: That is right.

Senator LAZARUS: Emotionally and mentally, have you seen any changes or have you experienced any issues in that area?

Mrs Dougall: We recently did an art-for-therapy session in my home, through a psychotherapist who does art therapy. We had some of the kids come and do some artwork. My three-year-old drew a picture that showed he was trapped. Narelle's kids drew pictures of black things, saying, 'Stay away from my family.' It is extraordinary, the emotional toll. Sorry; did I answer your question?

Senator LAZARUS: Yes. You answered it very well. Thank you.

Senator WATERS: Thank you so much for coming all the way to be here today and share your personal experience. It is truly horrific. Again, I sit here incredulous at the multiple failures of the regulatory system to protect your community, your health, your families, your land, the environment, our water, the climate, the crops.

Mrs Bender: You do not know what is going to happen to your crops and your animals, and we are supposed to be clean and green for China. So where do we go?

Senator WATERS: This is exactly why we have brought this legislation, to try to level up that massive imbalance of power, to enable you to make a choice about what you do with your land—as you have done, Mr Bender, for seven generations. I have no explanation as to why it has been allowed to get this bad. I think it is totally unacceptable that it has gotten to this point. I want to thank you for bearing up under the immense pressure that you are under and apologise deeply that various levels of government have let this happen to your community and to so many others. It is an outrage.

CHAIR: Senator Waters, have you got a question?

Senator WATERS: I do have a question—thank you, Chair—on the VOCs, the volatile organic compounds. Ms Dougall, I am not a health expert. I know about environmental law and I have been paying attention to this issue for a few years, but I am not a health expert. I am looking forward to hearing some expertise from Dr McCarron later today, but how much above the normal level of VOCs in the air in say, Brisbane city, or anywhere else is that—so that we have an idea of the significance of it?

Mrs Dougall: I am no expert—I am a mother—but I can tell you, from the research I have done, that 216 parts per million of VOCs, as you may be able to see in that picture, is well and truly above the exposure limit. Being in close contact with that reading, I was exceeding my exposure limit. VOCs are benzene, toluene, ethylene, xylene and hexene. Benzene's exposure limit is one part per million, and they are trying to reduce that to even lower. Toluene's exposure limit is 200 parts per million. Whatever was coming out of that vent was 216 parts per million. We have asked EHP to do testing and do bag samples, but we have had no result with that. We have gone to the Department of Health, the Director-General of Health. That should be alarming. That right there is a smoking gun for the health issues that people are suffering out in our area. In the Tara report that the Queensland government did, they took the QGC results. They never actually came out and did it themselves. That was actually 55 kilometres from this point that I am talking about now. So, even that report that they have been hanging their hat on all this time is statistically irrelevant to the experience of what we are complaining about.

Senator WATERS: Can I just confirm that, in the process, there were no health studies done, before the approval was issued, to get any sense of baseline community health in order to check whether it got worse after the approval was issued?

Mrs Dougall: That is right. There is absolutely no baseline at all.

Mrs Bender: It was a rush.

Senator WATERS: There were no baseline water studies done either, were there?

Mrs Bender: No.

Senator WATERS: Mr Bender, you talked about the fact that Origin now need to come and decommission your bores. Is that because they are now 36 per cent methane?

Mr Bender: Yes, because they say they are dangerous.

Senator WATERS: So where are you going to get your water from?

Mr Bender: We have got the dams. We have made the dams—

Senator WATERS: That is why you have made the dams bigger. But the bores on which you have relied now have to be decommissioned because they are more than one-third methane?

Mr Bender: Yes. They say, 'Do not have an ignition source in the vicinity.' We drive past one every day, from here to you.

Mrs Dougall: And yet the high-point vents they have scattered all over the place have just as much, if not more, methane coming from them—but George's bores are unsafe.

Mrs Bender: Your bores are an asset to your farm, but they do not seem to care.

Mr Bender: When we were trying to negotiate this make-good agreement, we tried to tell them that it is devaluing the property. They said, 'Oh no, it's not. Carry on.'

Senator WATERS: A property without water is—

Mr Bender: Late last year, on 29 November, when we refused to let them in because their vehicles were not clean, we got a phone call from the real estate agents, to buy it. We found out later on that the offer was coming from a third party, from a party that was all for CSG. They wanted to get a third party to purchase the property so they could come and put a dozen wells on it. The third party said, 'Your farm has been devalued. This is all we're going to offer you.'

Senator WATERS: It is a shame the chair is not hearing the evidence about devaluation, because she was interested earlier today and I think was under the impression that CSG was increasing the value of land, which is certainly not the information that I have heard to date.

Mrs Dougall: The director-general of valuations has confirmed—and it is in writing—that there is devaluation, immediate devaluation.

Senator WATERS: Would you mind tabling that for us? If you can email us later, I think that will answer some of the questions that were posed earlier and be a very useful addition to the general level of understanding about the impacts of coal seam gas on land.

Mrs Dougall: Sure.

Senator WATERS: Thank you for that.

ACTING CHAIR (Senator Urquhart): Senator Waters, can I just butt in for a minute? In relation to this, Mr Bender, you said earlier that you received compensation and that you had to build some more dams for your water. Did the compensation that you receive cover you for the cost of building the dams?

Mr Bender: It did, yes.

ACTING CHAIR: Okay. In terms of that—

Mr Bender: We wanted more, but we just could not—it was there, and they were not going to budge.

Mrs Bender: They took some money off to put in with our wells.

Mr Bender: Another thing that they did—and I reckon it was illegal—was they said, 'We'll give you this X amount of dollars to make good. But, with the 12 wells, you sign a CCA agreement within six weeks and we'll give you a little bit more.' That is blackmail as far as I am concerned.

Senator WATERS: Bribery—how is that not bribery?

Mrs Dougall: That is an inducement—

Mrs Bender: But they could not do it because one agreement was water and the other would have been wells. So you cannot do it.

ACTING CHAIR: What I am trying to get to is: you did get some compensation for the dams. But then the issue is—and I am not a farmer and I do not understand a lot about farming: if you are able to get bore water, you have a pretty constant supply of water for your farm to irrigate your crops and all that sort of stuff, but, at the moment, because you cannot use the bores you use water out of dams that are reliant on rain. I think Mrs Dougall talked about how it does not rain very often. I bet they did not give you any guarantee of providing rain for you over that period

of time to fill your dams, did they? So you are reliant on the dams which do not give you the water security that you actually need. One would then assume that the value of your farm would actually be less.

Mrs Dougall: Exactly.

Mrs Bender: They were trying to tell me the other day that we should have gone down to the Hutton as we would have got good water and we could have—

ACTING CHAIR: Sorry. Down at what?

Mrs Bender: Way down to the Hutton—an aquifer. We could have irrigated our crops and so forth. But there is electricity. Farmers are only allowed X amount of water, so how much water could you get to irrigate? QGC are allowed as much water as they want. There are two different laws—one for farmers and one for QGC.

Mr Bender: Actually, these two bores that they have to decommission have been identified as losing water up to 100 metres.

ACTING CHAIR: Sorry, Senator Waters. I interrupted you.

Senator WATERS: That is fine. They were good questions.

Mr Bender: They go around and say, 'This bore here is going to be drawn down so much.' They call it an immediate affected area.

Mrs Dougall: There is a report developed by government in which they are listed.

Mr Bender: One was 96 and the other was 103, I think.

Senator WATERS: This is what amazes me. These days—and certainly not early on—often that sort of information did say, 'Yes, there will be an impact on the watertable.' And the government still approved it anyway.

Mrs Dougall: That is right. And then they force people like George. They did not consult with George when they said, 'We're going to rip all of your water off you.' Then they forced George to negotiate with Origin. He does not want to deal with them at all; he wants them to go away. But now the government is forcing him to negotiate with them to make good on that bore, which means that he has to accept their vehicles, their cars, their people—and goodness knows what—so they can do whatever they want down that hole. I do not want to be done for slander or anything, but I am not so sure that it would be just plugging and abandoning. And they would be there for three weeks on his place. The ground would be compressed. There would be new roads. There would be people on the place 24/7 for three weeks or more. The government has placed George in that position but is doing nothing to support him. It is extraordinary that government is okay with that.

Senator WATERS: You can only conclude that mining is worth more than people in the minds of those who are making these decisions, which I think is, fundamentally, appalling.

Mrs Dougall: Absolutely. This is a human rights issue; it is not an issue for party line politics. It is not a political issue but a human rights one. I am shocked, appalled and saddened that our government requires George and Pam—I do not know how many inquiries they have attended or how many letters they have written. We have driven to state parliament to see the minister for agriculture; we have written letters to the premier. I wrote a seven-page letter to the premier. I got three pages back and there was not one thing in those three pages that the previous government had not already spat out. It was not relevant, it did not answer the questions, and this is an appalling situation to be in. I pinch myself every day, saying, 'Is this a nightmare that I am living?' It is extraordinary, which is why part of this submission was to beg the people making this decision to come and see for themselves, because we are gasland refugees—there is no doubt about it—and we know how this government treats refugees.

CHAIR: Thank you very much, Ms Dougall and Mr and Mrs Bender, for taking the time to come today to share your personal experiences with the committee. It is very valuable. Thank you also for the additional information that you have provided to us.

JOHNSON, Dr Andrew, Chair, Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development

[11:55]

CHAIR: I would now like to welcome representatives from the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development. Welcome, Dr Johnson. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. Would you like to make an opening statement before we go to questions?

Dr Johnson: No, I am fine.

CHAIR: For the purposes of a bit of background, can you quickly outline the role of the IESC, the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development?

Dr Johnson: I am happy to. I also refer senators to our website. We do have a website that is on the public record. Briefly, the committee was formed in 2012 under an amendment to the Environment Protection and Biodiversity Conservation Act. Section 505D of the act was modified to result in our formation. Effectively, the committee's core business is providing advice to state and Commonwealth regulators on the water related impacts of coal seam gas development and coal development. We also have a range of other functions in providing advice to the federal minister around bioregional assessments and research priorities and bringing information to his knowledge around the broader matters associated with coal seam gas and coal mining development.

CHAIR: Last year, how many matters did you investigate and report back on?

Dr Johnson: Since the committee has been formed, we have provided advice on 86 projects. Seventy of those have related to large coal mining developments and 14 have related to coal seam gas developments. Again, we provide a breakdown of the statistics on our website. They are roughly split half in Queensland and half in New South Wales. I think we have had two from Western Australia and I think one from South Australia.

CHAIR: What was the kind of matters that you advised on?

Dr Johnson: It is highly variable. I think it is important for this committee to understand that when we are asked for advice it can occur anywhere along the continuum of the regulatory process. It can occur at the very beginning. It can occur at the very end. It can occur in the middle. Really, the choice of when we are asked for our advice is that the onus for that comes from the regulators themselves, not from ourselves. For example, the committee met last week in Canberra. We were asked for advice on a matter that was very early in the approval process. In other committee meetings we have been asked for advice on matters that are a long way down the approval process. But the choice, in terms of when we are asked for advice, is at the discretion of the particular regulator, whether it is the state or the Commonwealth regulator.

Senator URQUHART: Do the majority of your requests for advice come from the Commonwealth or do they come from the states?

Dr Johnson: As I was saying before, about half have come from the Commonwealth and about half from the states to date.

Senator URQUHART: Of the 50 per cent from the states, which states did they come from? Can you give us a breakdown of that?

Dr Johnson: We have had 42 so far from Queensland, 41 from New South Wales, two from Western Australia and one from South Australia. The framework through which the states ask for advice is a national partnership agreement that was signed between the states and the Commonwealth. Not all states are signatories to that. For example, Tasmania, your home state, is not.

Senator URQUHART: Which states are signatories?

Dr Johnson: The signatories are Victoria, New South Wales, Queensland and South Australia. Western Australia, the Northern Territory, the ACT and Tasmania are not.

CHAIR: In relation to water particularly, what are some of the issues that you found in relation to water associated impacts?

Dr Johnson: Just so I understand your question, are you asking what sorts of issues we have been asked to comment on in the advice?

CHAIR: Yes, and what sorts of comments you have made particularly in relation to water.

Dr Johnson: It is an enormous spectrum. I am sorry I cannot be specific with 86 different advices, but there are some common themes. In many of the requests for advice that we have received, the regulator has been interested in the connections between ground and surface water, for example. That is a very significant issue in most of the

jurisdictions that we are responsible to. It includes impacts on things like springs, for example, and impacts on vegetation that is linked or a water dependent vegetation. There are a range of common themes that go with that. As per the evidence you heard previously, the regulators are interested in the extent to which, for example, groundwater assets may be impacted by coal seam gas development or coal development. One of the things we do is provide advice on the quality of the modelling, for example, that a proponent has brought forward at a particular stage in the process.

Senator URQUHART: Is the advice that you provide then made public?

Dr Johnson: Yes. It is part of our statutory requirements that that advice has to be made public within 10 days of it being submitted. All of our advices are available on the website.

Senator URQUHART: On your website?

Dr Johnson: Yes. We also have a responsibility to respond within two months of a request for advice being given by the relevant regulator. There are very clear time dimensions to our response.

Senator URQUHART: How do you gather information necessary to provide that advice? How do you go about getting that?

Dr Johnson: Again, it depends on the issue that is at hand. We draw upon the best available information that we can access. It depends on the issue, but, for many of the issues that we are dealing with, there is a very large body of scientific literature that we draw upon. There are many, many other experts in addition to those members of the committee from whom we might draw upon. We draw upon expertise within the state agencies and Commonwealth agencies themselves. Particularly from a Commonwealth perspective, we draw upon expertise within the office of water science within the Department of the Environment, who play a really important role in often acting as a liaison point with the state regulators and Commonwealth regulators and the scientific base itself.

Senator URQUHART: Do you ask for submissions, data or other information from project developers?

Dr Johnson: Not generally. I am trying to think whether that has happened in the 86 that we have seen. Often we will point to gaps. For example, a proponent might have submitted a draft environmental impact statement to the regulator. The regulator will ask a particular set of questions of us in relation to that environmental impact statement. We will flag for the regulator where we consider there to be knowledge gaps or requirements for further information. It is really then up to the regulator to determine what they choose to do with our advice. Or a regulator, for example, might be seeking advice on a management plan a particular proponent may have suggested as part of their interchange around the regulatory conditions and the regulator may ask us for our advice on the adequacy of that management plan. Again, where we can provide scientific advice, we will.

Senator URQUHART: Is the information that you receive generally adequate for the purposes that you need it for?

Dr Johnson: It is highly variable, again. I am sorry I cannot be specific. The committee has published, as part of its operations, a set of guidelines. Again, they are publicly available. We encourage all proponents to access those guidelines and, as best they can, seek to respond to those guidelines when they are producing the various documentation that they need to as part of the regulatory process. In some of the material we see, there is a significant gap between what we consider to be best practice in terms of the information presented and what is presented. It is highly variable and I know that the Department of the Environment is working very closely with the industry and the state regulators to try and improve the quality of information that we receive. Often we will receive a request for advice from a regulator very early on in the regulatory process, where it is quite normal for the amount of information available to not be significant, but as the process moves on more information becomes available.

Senator URQUHART: Does the committee have a role in increasing public awareness or understanding of scientific information about the impacts of coal seam gas in large coalmining activities?

Dr Johnson: We see that as one of the roles that I touched on before. If you go to the website we have—

Senator URQUHART: How do you undertake that role; how do you actually do that?

Dr Johnson: Through a couple of different ways principally. Firstly, we advise the Minister for the Environment on research priorities and key gaps in knowledge. If you go to our website you will see that there are a number of publications, for example, that have been stimulated by our advice to the minister and published through the Department of the Environment. For example, there is a resource sheet there around hydraulic fracturing, which I know is something of interest to this committee. There are a range of public documents that we stimulate. We do not actually do the work ourselves; but through the Office of Water Science and the Department of the Environment, they will commission relevant experts to fill in those knowledge gaps. Our role is to advise as to where the knowledge gaps are, and also to provide critical review. Often during the process by which that research is

commissioned and then published, drafts of that research will come to our committee for critical review. For example, there is a study underway at the moment looking at chemicals in hydraulic fracturing. That is not work that we do ourselves, but the committee has been asked in a couple of junctures to provide critical comment on progress with that research. There are ways in which the committee interacts in that process.

Senator URQUHART: I have got your website up at the moment, but I am not going to try and hunt through it while I am here. In terms of some of the information that is put up on your website, when you do not do the work yourself and refer it out, do you put the source of that information on your documentation?

Dr Johnson: Absolutely. Transparency around the provenance of that information is absolutely critical. I am not sure whether you have looked at any of our advice on the web, but as best we can we try and reference all of the critical points through to the literature so that not only the community but the proponents can have a better understanding of the basis by which we have made our commentary.

Senator WATERS: Thank you, Dr Johnson, for being here today. Firstly, I would like to commend the work of the committee in producing readable but detailed, comprehensive science based assessments. Thank you for the role you play in the regulatory system; I think it needs to be much stronger. I think the role your committee plays in advising decision makers about the science is a crucial one. I want to come to some questions on particular proposals, but I want to start with the general state of knowledge. Obviously, IESC provides advice on particular projects and also does some bio-regional planning. Do you have a view or have you taken a position on the risks of coal seam gas and, if so, what are they to our land, water and climate?

Dr Johnson: To answer your question in two ways: firstly, the committee does not take a position. Our role is to provide advice to the regulators on the basis of the best scientific information we have available in relation to a particular set of questions or a particular proposal. Again, in the case of coal seam gas, the risks associated with coal seam gas development vary a lot depending on the local circumstances under consideration. So the risks depend on the nature of the intervention that a particular proponent is proposing, the local geology, the proponent's assessment of the risks and how the proponent intends to mitigate those risks. Some of those fall in the remit of scientific aspects and others fall in the remit of the regulatory aspects, so we very much focus our efforts on trying to address knowledge gaps as posed by the regulator with respect to those risks. It depends on the proposals. There is no single position. It very much depends on the nature of the proposal that is under consideration.

Senator WATERS: Thank you for clarifying that. I just put that in contrast with the National Water Commission, who put out a position statement quite a few years ago now. Do you say that the state of knowledge of our geology and hydrology is such that we cannot be sure that we are not doing long-term damage?

Dr Johnson: I see where you are going. Perhaps to give an example again: on our website we have issued a statement around hydraulic fracturing, which flags what the key issues, as we see them, are associated with that particular intervention, what we see as the key risks and what our current state of knowledge is with respect to those risks and their capacity to be mitigated, but it does not present a position.

I would encourage you to read it if you have not seen it already—I would be surprised if you had not. It states very clearly some of the issues I talked about before. It is really dependent on the local circumstances. It depends on what methodologies the proponents are proposing to use. All of those are very site specific. But it also states that the evidence to date, certainly in this country, suggests that, so long as the risks are understood and the proponents deploying that particular technology are cognisant of the risks and act in accordance with best practice and guidelines issued by the state jurisdictions, the risks, based on the current knowledge that we have, seem to be low.

Senator WATERS: That is assuming the conditions are complied with, which is sadly an assumption we cannot make, according to various Auditor-General's reports.

Dr Johnson: Yes. That is not a scientific matter. That is a matter for the regulators—

Senator WATERS: Indeed—the underresourced regulators.

Dr Johnson: but I take your point.

Senator WATERS: In relation to the advice that you issue on a project-by-project basis, I understand it is only that—simply advice. The decision maker is not bound to implement it. Have you had a look at how often your advice is indeed reflected in the conditions that are then set by the regulator?

Dr Johnson: We have not done a formal analysis of that. It is not within our role or mandate. I think informally members are always interested. I think all of us participate with a view that we are adding value here and are useful. So no formal analysis has been done, no.

Again, I am not sure how useful that would be, because, as I said before in answer to Senator Urquhart's questions, there is such a high degree of variability in the nature of the requests we get. They are all occurring at

different stages through the regulatory process, so it is apples and oranges in many ways. As I said, some occur right at the very beginning, where we might be asked to comment on a draft EIS—which is, as you know, a very high level statement—all the way through to, for example, a recent request we had from the Minister for the Environment around the Shenhua proposal, which came at a later stage in the process and was a very specific set of questions. Again, it really depends on the process.

What I can say is the feedback that we have had from one set of stakeholders, the regulators, has been very positive. You may be aware that there is a review being undertaken by the Department of the Environment around the effectiveness of the national partnership agreement. One of the matters under consideration there is the effectiveness of the IESC. That review has not yet completed but it will be done in due course and I am sure the results of that will be made public. That will also go to your question about how much value the regulators see in the advice we provide. But, as I said, the informal feedback that we have had from the regulators has been very positive.

Senator WATERS: Thank you. Rest assured we will try to block your abolition in the Senate, given the important role you play, and of course we want to retain the water trigger at the Commonwealth level, where it rightly belongs. But that is a matter for another day. So you have not done formal analysis of whether your advice is being followed by the regulators, and we will see whether your assistance can continue.

Dr Johnson: It is not our role to do that. It is not in our terms of reference to do that.

Senator WATERS: Sure—I appreciate that. Let's move to the process of issuing an approval and requiring further plans. Let's confine it to water and requiring many further water management plans after the approval has been issued. I think it was last week that a former member of your committee, Jim McDonald, said that that process was backwards—giving the approval and then asking for a water management plan. He described that as backwards. I share his view. I am not sure if I am allowed to ask whether you share that view, but—

Dr Johnson: It is not appropriate for me to comment on that. I have seen Jim's comments.

Senator WATERS: perhaps I could ask how frequently that kind of process happens, where the approval is issued perhaps without a full understanding of how the risks might be identified or managed. How frequently does that happen?

Dr Johnson: I do not have statistics on that, but it is not uncommon. Often we will be asked for advice on a particular proposal and in a number of cases, as part of that advice, the proponent has provided some information with respect to their intentions for water management, biodiversity management, salinity management or whatever. The regulator will ask our view as to the adequacy of those particular management plans and we will provide our advice based on the evidence we have. So, again, it is not uncommon for the regulator to ask us to comment on the management response and it is not uncommon for the regulator to take on board our advice and reflect our advice in the requirements of a proponent for a management response. But that does not necessarily mean that that comes back to us for approval. It is entirely at the behest of the regulator, if you understand what I am saying.

Senator WATERS: I do. Are you aware of whether any of the conditions of an approval have changed or whether an approval has been revoked as a result of advice that the committee has provided on a water management plan that has been requested after the approval has been issued?

Dr Johnson: I am not, but I would be happy to take that on notice. With the 86 that we have got, I am not aware of one.

Senator WATERS: I will look forward to confirmation of that. It would seem to undermine the very nature of even requiring a management plan after you have already issued the approval if you do not then change the approval once you get the water management plan.

Dr Johnson: It may be better to direct that question to the environment department—at least the Commonwealth—and I think you are seeing them tomorrow.

Senator WATERS: Many a time I have asked them that, and I will continue to try to get a response to that tomorrow.

Dr Johnson: I am not sure the committee can do that but I am sure that, through the portfolio, they can get you a response.

Senator WATERS: Thank you. But it is useful to know that you will confirm on notice that, so far, nothing has changed in an approval after what was meant to be a solution to all the problems, a water management plan, has been proposed. In the time we have left, I want to move to the Shenhua project. Obviously, the focus of this bill is on both coal seam gas and coal. Had the bill been enacted, it would have enabled many of the landholders to refuse permission for that and many other open-cut coalmines. I note that you have provided some detailed advice on

Shenhua to the federal minister. The minister has been a little confusing in his rhetoric, so I will seek your expert advice. Is this the first time that a detailed water management plan has been required after an approval is given?

Dr Johnson: Firstly, I think you should direct your questions around that approval process to the portfolio. We are providing advice on a particular proposal. I am not in a position to comment on that; I do not have that knowledge. With respect to that particular process, the Shenhua thing is a matter of process and I would like to limit my comments to that. As I said in my earlier answer to you, it is not unusual for the committee to have been asked for commentary on a water management plan or a biodiversity management plan. We have had that in the past from the regulator. As I said, based on science, we provided our commentary back to the regulators in that regard. In terms of the regulator—in this case the Commonwealth regulator—asking for our input on a management plan the Shenhua situation is not unusual in that regard.

Senator WATERS: That was my understanding. I was surprised when the minister contended that this was some fantastic new process when in fact it is the same process as always—the same inadequate process in my view. With that water management plan, on which I understand your advice will be sought once it has been prepared by the proponent, will your advice be put in the public domain?

Dr Johnson: Yes, that is my understanding. As I said before, under our statutory requirements all our advice is to be published within 10 days of it being provided back to the regulator.

Senator WATERS: Even post approval?

Dr Johnson: I am not sure it is helpful to distinguish between the two. We operate at the behest of the state and Commonwealth regulators, so at any stage, on any matter that they feel is relevant to our terms of reference, they can seek our advice. I look at the Shenhua proposal very much through that lens. In this case, the federal regulator has asked for further advice. We stand ready to provide that scientific advice. I assume it will come from a process point of view, as it always has, through a formal request for advice. And, once the advice is given, we will have two months to respond and 10 months to publish.

Senator WATERS: Do you know whether the public will have a right to comment on that advice?

Dr Johnson: I am not sure that is even feasible. It is not within our terms of reference. I do not think there is a mechanism for public advice within the EPBC Act.

Senator WATERS: Not post approval.

Dr Johnson: The committee is established to provide advice to the regulators. Our terms of reference are really clearly set, so we operate very tightly within them.

Senator WATERS: Indeed. It means the public does not really have a chance to comment on the detail because the approval has already been given.

Dr Johnson: That is really a matter for the government of the day and for the parliament, not this committee.

Senator WATERS: I know. I will take that up with the department and try might like yet again tomorrow. For the benefit of all of us here—because we have all got a lot on our reading pile—could you run us through the key points in your advice to the federal minister on the Shenhua project to date? What were the key issues you identified, with a focus particularly on the knowledge gaps?

Dr Johnson: I can. It could take some time. I am not sure whether committee members have had a chance to read our advice. The advice runs to many pages. I would draw the committee's attention to that. The core point in our view is that we considered the source documentation that we had in front of us to be sufficiently robust to draw conclusions about the impacts on the upper Namoi alluvium and in particular the Gunnedah formation, which is a matter of intense public interest. But we did say in our advice that we believe additional modelling and finer scale groundwater monitoring was necessary to improve the confidence in those predictions and to support clear identification and responses to any potential mine induced impacts at the local scale.

Senator WATERS: Could you say that again—the beginning of your sentence.

Dr Johnson: Again, I refer you to page 2 of our advice. We said that, if the proposed project is approved, additional monitoring and finer scale groundwater monitoring should be undertaken as mining progresses to improve confidence in predictions and support clear identification and response to mine induced impacts at a local scale. We have also said that further calibration and validation of these finer scale models is only feasible with observations of the actual response of the groundwater system to the proposed project. That is a critical point. I think the second critical point was that we said there remains an unassessed risk to groundwater dependent ecosystems.

Senator WATERS: Why is the risk unassessed?

Dr Johnson: The knowledge base has not been established by the proponents, who have enabled a formal risk assessment and appropriate risk assessment to be undertaken. There has been an insufficient survey effort.

Senator WATERS: There has been an insufficient survey effort by the proponents?

Dr Johnson: Yes. Senator, I do not mean to be unhelpful but we are into a detailed proposal here that is on the public record. I am happy to provide you and any other member of parliament a detailed briefing. We could spend a lot of time detailing one of 86 proposals, but I think it is probably only of limited relevance to the terms of reference of this inquiry. I am happy to answer specifics, but it is on the public record. It is extensive advice and I would refer the committee to it.

Senator WATERS: Thank you. It is indeed extensive. I just reflected on the likelihood of it having been read by all members of the committee. Hence my request for you to give us a summary of the key issues.

Dr Johnson: I am happy to provide that at a higher level. As I said, it is 20 or 30 pages long.

Senator WATERS: I thought you were going quite well so far, so I am certainly very happy for you to continue. I am not sure if the other committee members have questions. Senator Urquhart has asked hers and Senator Lazarus is not here any more. We have got another 12 minutes.

CHAIR: Yes, we have got 12 minutes. Dr Johnson, you are entirely entitled to answer the question as you see fit.

Senator WATERS: And if there is anything else you want to add on any other issues please feel free. We are here to learn from your expertise.

Dr Johnson: It is up to you how you want to proceed on this particular one. Do you have any other specific questions around it?

Senator WATERS: I was after a summary of what you thought were the key points that you told the decision maker. Again, I am not sure that we are all across them.

Dr Johnson: I think we have touched on two of the three. The first one was around the need for more detailed work to be done to understand the local scale impacts. The second one was around the unassessed risks to groundwater dependent ecosystems. The third one was that we consider it unlikely that the groundwater draw-down will extend beyond the area predicted in the environmental impact statement. The proponent in this case—and I assure you this does not happen a lot—has used very conservative assumptions in the modelling that has been undertaken. They are very conservative, in our view. Our view is that, even in a worst-case example, it is unlikely—but not impossible—that the groundwater draw-down will extend beyond the area that they flagged. But, as you have referred to before, we have also recommended more detailed monitoring at a local scale to actually verify that what is expected to happen does happen.

Senator WATERS: What was the area that they flagged for the groundwater impact?

Dr Johnson: Sorry, I do not have that detail in front of me.

Senator WATERS: But in your advice you have said you basically think they have got that estimation correct?

Dr Johnson: Yes. I would draw you to point 1(c) on page 2 of our advice, which touches on that matter.

Senator WATERS: Could you perhaps take it on notice to get back to us on the extent of the groundwater area to be impacted? It is a point I made before. Often they do in fact say, 'Yes, there are going to be huge impacts.'

Dr Johnson: It is a very complex and rich proposal. Sorry, I do not have that figure committed to memory.

Senator WATERS: That is fine. You are doing very well so far. Is there anything else you want to reflect on in that Shenhua advice? Are there any common themes in your advice? Let's move to coal seam gas now. I have read all your advices previously. Can you draw from those some common themes to share with the committee?

Dr Johnson: Sure. Certainly some of the comments I have made in reference to groundwater issues apply equally to coal seam gas and large coal developments. There are probably five or six common themes that we see across our advice—the use, storage and disposal of co-produced water is a significant issue associated with coal seam gas development. It is an issue that often comes up when we have requests from the regulator for commentary around those matters. We have touched on the issue of groundwater modelling and the relationship between groundwater and surface water. The issue is similar for coal development and coal seam gas. Given the criticality of connectivity between ground and surface water, the presence and absence of faults and the geographical formations that the coal seam gas industry is interested in, this is a common theme, a common matter of interest, where we have been asked for input from the regulators. There are two issues that you are well aware of—the impacts of hydraulic stimulation, or fracking, and associated chemical uses on water quality. That is a common request that we have had with the seven coal seam gas ones we have considered. In a couple of the ones we have considered impacts on

unconfined shallow groundwater systems. That has been a particular issue on the eastern Darling Downs, for example.

Senator WATERS: Could you tell us a bit more about that last one?

Dr Johnson: Only that it has been a request we have had on a couple of the proposals that we have had under our consideration. It was just that we were seeking the committee's advice on impacts associated with shallow groundwater rather than deeper groundwater.

Senator WATERS: And what was your advice, in potted form?

Dr Johnson: I would have to go back to it. As I said, we have had a number of these. I would have to go back to the individual ones to provide the particular advice. If there was a particular proposal there in the east, again I would refer to you to our website. It is on the public record. I do not have that with me.

Senator WATERS: You mentioned there were two where you provided advice on whether there were unconfined shallow aquifers.

Dr Johnson: There are at least a couple that I am aware of. Again, I would have to double-check. There was the Arrow Energy proposal in the east. It had some matters there dealing with Condamine alluvium, a shallower groundwater asset than some of the deeper groundwater assets further west.

Senator WATERS: Can you recall whether your advice in that respect was subsequently adopted by the regulator and made a condition of the approval?

Dr Johnson: As I said, we do not check it as a matter of course. Our recommendation is one of a whole suite of information sources that the regulators use in making their decisions. We have not done an audit, if that is what you are asking, of how that advice is actually translated through the regulatory approval process.

Senator URQUHART: Do you work with any of the regulatory bodies in terms of them getting a greater understanding of the scientific issues that are related to CSG and coalmining?

Dr Johnson: Occasionally. In fact, just this week there was a particular request from a regulator around the impacts on peat swamps in eastern New South Wales. This was not a particular request that had a particular project in mind; it was a general issue. There are a number of proposals under consideration in eastern New South Wales, particularly in the Illawarra west of Wollongong, that are interfacing. The risk there is of negative impacts on peat swamp communities. We received a request for advice from the regulator which was of a broad nature asking us to provide our best available scientific knowledge around this matter. With that particular asset, it is underground coal mining, not coal-seam gas. It is long-haul mining. That is a classic case of where we have been asked for that. Again, the committee does not actually initiate anything; we respond to a request from the regulator. As I said, we stand ready to provide that advice as they see fit.

Senator WATERS: How is the bioregional planning progressing and how is that feeding into the decision-making process?

Dr Johnson: Just to be clear, the committee does not oversee that process. It is done by the Office of Water Science in the Department of the Environment. So, again, if you have some specific questions around that process I would encourage you to raise that with them when you meet with them tomorrow. I am sure they will be able to provide you with the status update on all the studies that are underway. As you know, an incredibly extensive program of research is underway. The committee's role is to provide critical review on the methodologies and critical review on the outputs of those methodologies. Again, at our meeting last Thursday, we had nearly two hours with the bioregional assessment team, in that case reviewing the implementation of the methodology in the Gloucester Basin, north of Newcastle. That is an example where the team seek our input on the robustness and validity of the methodologies that they are implementing and our review on that response. Obviously, we are critically interested in the utility of the outcomes of those bioregional assessments so that they can add to the body of knowledge that informs our advice to the regulators. As you are aware, some of those studies are all going on in parallel in a number of regions simultaneously. Again, for example, in the Namoi, which I know is of interest to you, there were two products out of the bioregional assessment process that we drew upon to provide advice back to the regulators around the Shenhua proposal, for example. Again, there are different stages of evolution so, as soon as those products come online, we absolutely build them into the knowledge base that we draw upon to provide our advice to the regulator.

Senator WATERS: What were those two products?

Dr Johnson: The two products in the Namoi? There is a regional context analysis, which provides a deeper understanding of the ecological assets in the region and so on. That is very important to us. Then there is also a product which, supposedly, deals with the coal development or the coal resource pathway that that region is likely to

experience. That is also helpful in terms of our thinking around responding to any questions that we may get from the regulator around cumulative impacts.

Senator WATERS: Could you, just on notice, provide me with a little bit more information about the second one.

Dr Johnson: Sure.

Senator WATERS: That is the first I have heard of any sort of forecasting role as such by your committee. I am interested in—

Dr Johnson: That may be best directed to the environment department, but both of those matters are on the public record, so I am sure that getting it will not be a problem.

Senator WATERS: Thank you. It has just not got much attention to date. One final question: in the provision of your advice, both to the minister and the folk undertaking those bioregional plans—thank you for clarifying that you do the methodology testing and not the actual bioregional planning—

Dr Johnson: That is conducted by Geoscience Australia, CSIRO and the Bureau of Meteorology.

Senator WATERS: Thank you. I will have great fun trying to get a straight answer out of any of them, because it is always somebody else's problem. But thank you for clarifying that. Once again, I will face that difficulty in estimates. I am interested in whether the committee undertakes its own independent data gathering. What evidence are you using on which to base your advice and how have you sourced that? And are you getting any of it yourself?

Dr Johnson: As I said before, we actually do not commission any new knowledge or new research ourselves. That is done through the Office of Water Science. But certainly the committee provides advice to the minister on priorities for OWS. So if particular matters are coming before us where we feel there is a knowledge gap we will reflect that back to the minister. At the conclusion of each meeting it is customary for the chair of the committee—I have only been the chair since May—to write to the minister, informing the minister of the outcomes of the meeting. From time to time we have informed the minister in our correspondence with him—it has been a 'him' since we have been in operation—of particular knowledge gaps. So, again, it is up to the minister to reflect on those and it is at his or her discretion then to commission that work through the Office of Water Science. But the feedback that we have given to date to the minister of the day—we have had two ministers—has been acted upon and reflected back into the Office of Water Science. They then commissioned a portfolio of research and so we are certainly drawing upon the outcomes of that research as it comes on line. Otherwise, as I said in my answer to Senator Urquhart earlier, we are drawing on the literature. There is an increasing body of literature being developed around these areas and so we draw upon that, as well upon our own individual expertise. Members of the committee have a broad range of expertise. So I suppose there are multiple lines of evidence that we draw upon and that knowledge base is improving all the time. We draw upon it as best we can. We draw upon not only domestic knowledge but knowledge from overseas where we think it is relevant.

Senator WATERS: Yes, indeed, the point that we need to learn from the experience of other countries was made earlier. Just to clarify: you are drawing from the Office of Water Science information, the literature and, presumably, the information provided by proponents as well?

Dr Johnson: Industry and so forth—

Senator WATERS: Sorry—if you just let me ask a second question. Who is checking the proponents' data gathering? Is anybody?

Dr Johnson: The state regulators would certainly be doing that. The Commonwealth regulators would be doing that and when—

Senator WATERS: They are not, though.

Dr Johnson: Certainly, when—

Senator WATERS: If you are not, then who is?

CHAIR: Senator Waters, you were just very rude to the witness when he tried to answer a question. So I think it would be polite if you would let him finish answering it.

Senator WATERS: I would like to. Thank you, Chair.

Dr Johnson: Maybe just to repeat how it works in terms of our role, because there are many actors in this whole system, certainly when a proponent submits a response to a particular regulatory requirement—for example, an environmental impact statement—it is not our role to validate or otherwise that environmental impact statement. It is the role of the regulator to determine whether that impact statement addresses the issues that they feel are important under the relevant legislation that they are governing. The regulator will come to us and say, with a set of questions

—for example, 'Do you think that the groundwater modelling that the proponents put forward is robust?' We will then provide an assessment as to whether we think it is or is not.

Senator WATERS: How do you know, though?

Dr Johnson: How do we know?

Senator WATERS: How would you know if it is—

Dr Johnson: Because we have full access to that proponent's information.

Senator WATERS: So you use a proponent's information? That is what I am trying to—

Dr Johnson: Absolutely. We will test it and in some cases—

Senator WATERS: You will test it?

Dr Johnson: We will test whether we think the proponent's assumptions they have made, for example, are valid and robust. We will test whether we think the data that they have used is sufficient or adequate. In some cases we will draw upon third-party reviews. For example, in the Shenhua case, as you know, there are many additional expert opinions commissioned by the New South Wales government, the Planning Assessment Commission, three independent experts, as well as the University of New South Wales. We would draw upon that information as well. We would seek to avail ourselves of all the available information that is there and, on the basis of that information, form a view back to the regulator as to whether we think the quality of the modelling is right, the parameterisation is appropriate, the proponent's conceptualisation of the asset is appropriate and the data sources they have used are fit for purpose. Again, it depends on the application. In many cases, the answer to that question has been no, that the data is inadequate, the assumptions the proponent has used are inadequate and the conceptualisation is wrong. In some cases, again, going back to Shenhua, if you look at our advice you will see that we have said we think the proponent in that case has been extremely conservative in the estimates that they have made and the parameters they have chosen. Again, it really just depends. We will look at all the available information and, if we feel there are gaps, as you will see from all our advices—

Senator WATERS: You are very strong on that count.

Dr Johnson: we will definitely point those out to the regulator. It is then up to the regulator to choose what they want to do with it. That is not a matter for Science; it is up to the regulator. If they have further questions, then they can come back to us. We stand ready to help.

CHAIR: Thank you, Dr Johnson.

Proceedings suspended from 12:38 to 13:22

MANNING, Mr Leslie Anthony, Director, p&e Law

CHAIR: Welcome. Before we proceed with questioning, would you like to make an opening statement in support of or add anything to the submission we have already received from you?

Mr Manning: Having heard this morning's session, I want to start by talking about the information that is available. Then I want to touch briefly on how the decision-making process that is undertaken impacts on the relationship, which I thought was a very good question that came from the committee—how that works. I want to look at breaches and then really pick up on the breaches and how that goes forward, because that will be important in relation to relationships.

At the outset, one of the things that is very evident is this lack of bargaining position that has been identified by several other witnesses. That comes from a lack of ability by many farmers to actually understand the information that is being put before them and the quantity of information that is being put before them. Recently, in a matter that is going through court at present, we sought disclosure from the Department of Environment and Heritage Protection in relation to an environmental impact statement, various rehabilitation plans and other documents that were required to form part of the environmental authority, and we were delivered a disc with over 3,000 pages on it to review. So, the extent of the paperwork that a farmer has to get to grips with and understand is quite immense.

That is a very, very important factor. Not many of our clients have any ability to comprehend that amount of information. In the context of that information, there are often documents that are, in our experience, incomplete. Environmental authorities will say that, prior to the commencement of a use, various documents have to be prepared and submitted to the department. An example of the rehabilitation plan that was submitted to the department in relation to matters pertaining to soil management for a pipeline corridor had over 100 kilometres of material missing. There was no assessment of part of the pipeline corridors for one aspect of the assessment.

The clients get left in the position that they have to trawl through these documents to try to work out what information is there, what is relevant to their land, without the expertise that the companies have. If you put yourself into the position of a farmer, he is running a business; his business is operating his farm. He is given this material, and the party on the other side has myriad experts to assist, facilitate and explain. That is a significant imbalance of power. There is a real difference between the knowledge of the companies and the knowledge of the farmers, and that is one of the things we tried to rectify in the early days of trying to negotiate conduct and compensation agreements. We attempted to put clauses into agreements that said that the company guarantees that the client—the farmer—has all the necessary documents from which to make a decision and if there is a failure to produce any of those documents then the agreement can be set aside. None of those clauses have been taken up. We have not been able to get them into any agreements. But that is just an example of the sort of imbalance of power that starts with a lack of information.

The other thing that occurs over time is that environmental authorities are amended. They get issued on a regular basis and, as you would expect with major projects, things come into those projects that were not anticipated at the beginning. The notification in relation to those changes is not evident to many farmers. There will be some notification requirements in legislation, but the farmers will not necessarily be made aware of those changes, and those changes can have important impacts upon them. You will see, for example, in most of the conduct and compensation agreements and deeds that most of the definitions talk about the pipeline or the activity that is to be undertaken by the company to include anything as amended by an environmental authority. So you have an agreement—which has often been signed off before we get involved—where the farmer is actually agreeing to something when he has no knowledge of the potential future changes, and that is a problem.

Those sorts of activities ought not occur. I do not want to belabour the comments that have been made previously by the other people who gave evidence, except to say that we have seen the sorts of conduct they talked about on a fairly regular basis. Taking it from my perspective, I am a lawyer who is being approached by clients who have a problem. I know I am seeing the worst, and I know there will be examples where conduct is fine. But we are seeing too many of them, so there needs to be a redress of those circumstances to make that behaviour more appropriate. I have a particular dislike for the behaviour of the companies approaching clients saying, 'You don't need legal advice' when the person who is making the approach is a lawyer—but not with a current practising certificate. That is a terrible position to put that person in. That has occurred on many occasions that we have been told of. Obviously we have not been present in those instances, but we have been told of them. So there is this lack of information at the beginning of the process. That is a real problem, and that needs to be addressed.

The second thing I said I would like to talk about briefly is the decision-making process. That lack of information starts into that process. The examples I put in my written submission were in relation to water—moving away from soil impacts to water impacts—on page 7. A study was undertaken in relation to one of the proposals. Geoscience

prepared the study, of 29 September 2010. I have highlighted some phrases: 'require further work to fully establish the uncertainties and sensitivity of the models', 'useful preliminary assessment' and 'insufficient information'—that theme is not uncommon. In relation to an application to take water from an aquifer for farming, the amount of information the farmer has to provide has to be much more detailed than that; it has to be much more accurate than that. So I have two sets of rules. I have a set of rules for my farming clients, when they want water from an aquifer, and I have a set of rules for companies engaged in mining and petroleum activities. So, there is that lack there.

There is a lack of access to information. A lot of the information that is available to the mining company is not generally available to members of the public. We are currently in court in relation to matters involved in the petroleum and gas industry and mining, and one of the things that happens is that there is a declining of giving access to documents that are patently available to the mining company. So we then go back to the department and we ask for documents from the department. We can get some documents from the department and, to date, where the department has provided us with those documents on a sensible basis, I have no complaint there. But the mining companies themselves are the companies that have all of the documents readily available. It should not be a difficult proposition for them to provide material to a party which is involved in negotiating with them in the circumstances where there is this enforced contractual arrangement, where if you do not agree you end up in court. It is an unfair bargaining position that ought not to be entrenched in the legislation. It ought to be changed.

We also get conflicting information coming out of the different government documents. One of the best examples I have seen is, again, relating to my farming clients who want to get access to water. We have documents in Queensland court—water resource plans and resource operation plans under the Water Act. Those plans are created to determine what correct environmental flows should occur in relation to water supply. My farming clients, for example, are asked to reduce their take of water because of the environmental impacts of their take for environmental flows. They are asked to reduce—and this is both underground and surface water, so we are talking both levels here.

The position for the petroleum and gas industry, as you know, is that there is an unlimited take. So in the same areas where my clients are told, 'You can't take any more water because of the environmental impact,' the petroleum and gas industry is being told, 'You have an unlimited take of water.' One of those things cannot be right. The environmental reporting that has gone to government in relation to the formulation of those water resource plans cannot be consistent with an unlimited take if there is an environmental impact. The circumstance has to be that the government is saying, 'In relation to the mining industry, we are going to make a policy decision that those environmental impacts are going to be acceptable,' yet my farmers cannot take that water for agricultural purposes.

The other thing in relation to decision making, which has been again a difficulty and a comparison with farmers when they try to take water, is the adaptive management regime. Adaptive management regimes have to be based upon there being alternative methods to fix up a problem if it occurs. You cannot start an adaptive management regime and say, 'We're going to try this, and if this doesn't work we don't have the next step in the process.' Most of the early reporting in relation to water and water take talked about reinjection. The criteria that they were trying to establish was the hydrostatic pressure. That was criteria. If we maintain hydrostatic pressure we should keep the systems in place and things should work. There was no fallback. That is not a proper adaptive management regime. It does not work like that; you need the next step. What has happened when the reinjection process has not had the effect that was desired is that we have now gone to what we call make-good agreements in Queensland. Make-good agreements do not actually make good the loss of water in the manner of keeping the hydrostatic pressure or keeping the environmental flows; it is a compensatory thing. The environmental impacts are not protected as a consequence of make-good agreements.

The make-good agreements are only for a limited area and they do not, in my view, take into account the long-term effects. What happens in Queensland when there is an extraction of water from the Great Artesian Basin—when the recharge area for the Great Artesian Basin in Queensland flows through the Great Artesian Basin and parts of it end up in South Australia; what happens when we draw out through the middle and we do not know what is going to happen in 50 or 100 years time down the end of a system? I put a couple of extracts from one of the water scientists, Brian Smerdon, in the material that I have. He talks about the system being in terms of 100 years of flow. I have dealt with those situations in evidence before courts to do with farmers where we have short flow. So, it may be 10 or 15 years between recharge and water coming back into the system, and then you can have some adaptation because if you muck it up for a short period of time, you can actually come and fix it up. But with the Great Artesian Basin with the water coming out of that, that is a long-term, significant potential future problem. That is one of the questions that was asked earlier about why the Commonwealth would have power here.

I think, clearly, in relation to that issue about water, which is at a national level, there is power for the Commonwealth government to be involved in this sort of legislation. When looking at the bill in the first instance—

looking at the corporations power—it did not jump out at me and say the Commonwealth does not have power. I think there are going to be some limits on it, but I think that there is some broad base for that power in the current Constitution.

As I said, I was really pleased to hear the question about what happens with impacts on relationships and whether this proposed legislation would change those impacts, because I had not honestly thought about that before sitting in this morning. These are thoughts that I put together thinking about it and listening to the other people. One of the things that happens where you have a free trade system where the parties have equal bargaining power is that the parties come together, they say yes or no and then they either agree and move on or they move away and they do not agree. You do not typically get the sorts of disputes and things that are happening in the coal seam gas industry happening to the same degree out of commercial contracts for your cottage conveyancing or for your residential, tower or commercial buildings. I think that flows from that inequality in bargaining position where the farmers are not able to say no.

If you are obliged to take something on board, you do not have the information available to you to make fully informed decisions. You make a decision. You find out that your mate down the road has been paid five times as much, because many of the confidentiality agreements are spoken about—we all know that that occurs. It ought not occur, but it does. So you know that there is this disparity that goes on, and people become disgruntled. Work in my practice is moving not only from dealing with the agreements and constructing agreements for clients but also to going back into circumstances where people, before they were clients of the firm, have signed agreements and then have problems. Those problems are going to be the next round of litigation, and I have no doubt that that is going to be extensive and timely and time consuming and very costly for all parties involved. It is not something that we should be planning to have, but that is what this system is leading us to.

That brings me to the sorts of breaches which clients are now bringing to our attention where they are saying, 'We're not happy with the conduct that's occurring on our land as a consequence of these agreements that have occurred.' I want to try and put a little bit of structure around that. This is Queensland based. Typically, we have the environmental impact statement that comes forward with the application. We have an environmental authority which is produced under the environmental protection act. That environmental authority has conditions in it which have to be complied with. The mining companies go out to our clients and they seek to enter into agreements with our clients, whether it is for a deed, an option for a deed or a conduct and compensation agreement. They enter into those agreements. They typically have within those agreements a document called the land line list. That tells the company what the farmer says is important about their land. It will say, 'We don't want soil inversion. We've got really good soil. We don't have rock in our soil. We want that looked after. I'm really worried about weeds.' Some practical aspects come into these documents. So we have that structure where we have the authority that is given under the environmental protection act, we have the mining legislation dealing with the conduct and compensation agreements and then separately we have the environmental protection act and its requirements.

We are typically going into the environmental protection act because a lot of the earlier agreements did not protect our clients' positions. So we actually go back to those authorities. We are going back to them because they are not being enforced. In many instances, quite a few of our clients were not aware of those authorities when they entered into the agreements. They did not know what was in the background. We have had clients who have had all sorts of problems because of breaches of their line list, which is part of the contract that they have entered into, not knowing that there was a document sitting behind all of this called an environmental authority that had conditions that the law says must be complied with.

Because of the wording of some of the earlier contract documents, we have gone back to the environmental authority. In that context, we have to go to court to prove breaches in relation to the environmental authority. That means gathering evidence at the farmer's expense in relation to something that has occurred on their land. I may have to prove a breach in relation to something like soil inversion. I have a client who has good quality agricultural land. He has had a pipeline put through that land. The company is meant take off the topsoil, take off the subsoil and, if there is any rock to be excavated, take it away, then put the soil profile back in the same manner that it came out of the ground. Otherwise what you get is a different drying and a different structure in the soil, and that means a difference for the farming of that land. So you have those things. I had to go to court to prove that. I had to engage, for my client, experts to give that sort of evidence.

You heard comments before about a couple of hundred thousand dollars being for legal fees in actions of this nature. It is unfortunately the case when you are going to court dealing with multiple issues, things like subsidence of soil, weeds, noise, dust. All of the sorts of things that we are getting approached about breaches for now, I have to prove those things. If I do not have evidence to support it, I will not succeed in court. My clients have to put their

hand in their pocket to make those payments otherwise we cannot prove it. That is inequitable. They have had this brought to them. It has been put on their land. They have not invited it so there is a difficulty with that.

Some things sound so simple like leaving the gate open, big deal. I have got clients who have had to go and re-identify all of their breeding stock because gates have been left open and cattle have intermingled. It is not a simple problem. Things like subsidence running down a right of way, clients have had four-wheel tractors drop into those and overturn. Fortunately no-one was killed but they are risks that are brought to their land, not of their doing. They have had blasting go on without being notified of it. It is not conduct that is always prevalent, and I do not want to paint the picture that it is always the case that these faults occur.

I have another client who has in one easement three different pipeline corridors. Two of them have been rehabilitated beautifully. You can go out there and look at the land profiles, the revegetation and they work wonderfully. The one in the middle is scoured out, eroded, full of weeds. The extent of erosion I am talking about is over about a three-kilometre length of the property. There is a right of way over about three kilometres of the client's property and, at the end of that, there is a road. My client was telling me that on the other side of the road, the sediment had washed over the road and was about 200 millimetres deep. I took that sceptically at first. I walked over the road and he said, 'Do you see this star picket fence here? The one that has bent over? That shows where it goes.' I said, 'Well it is bent over so I cannot really tell.' He said, 'I can straighten it up.' I said, 'No you do not; that is evidence.' If you looked down the area, there were two other pegs in the ground that were straight and they had had sediment backed up to them by about 200 millimetres. So they are not minor problems; they are major problems.

When you look at some of the contractual arrangements that we can see between, for example, the company that is undertaking the work and the environmental authority holders, they have a great deal of pressure put on those companies undertaking the works to actually smack this thing through. The sorts of penalty rates are significant. I am doing this from memory but I think it was \$450,000 a day for not getting a certain mileage in per day or a kilometreage in a day, so immense pressures come on for these construction works.

Those sorts of things are becoming more and more prevalent and they are matters that, I think, go back to that question about what the satisfaction level is. I do not think that you will see that sort of dissatisfaction level where people do have the ability to say 'no'. I do not think that you will see that—I might be wrong.

I did want to talk briefly about Tara because—

CHAIR: We do not have a lot of time and I am sure that the senators want to ask questions. If you could do it in a minute, that would be great.

Mr Manning: We were approached by some people out at Tara to go and have a look. Again, this was one of these problems where proof was difficult. I went out to Tara personally. I drove around, spoke to people. There was a group of facts that I could say had been established. There were a group of people suffering from symptoms like bleeding noses, nausea and headaches that they had not had before the coal seam gas industry commenced in that area. They were saying it was only post coal-seam gas. There was a former pond where fracking water had been put that had been buried. I was shown the site of it and I cannot tell you what the chemical analysis was. I could not, on the basis of going out and interviewing and talking to those people, establish sufficient causation in evidence to be able to say that I could make a case for them. There is limited information but there is certainly something that has happened. That much I felt comfortable to say.

More recently, we had another instance where we were approached by a client in that area and they had their water tested. One of the companies said to them: do not drink that water; it is full of heavy metals and, by the way, we think it has come from your roof. So there are odd facts out there and I cannot join the dots from a legal perspective to say that is a claim but there are matters that really, in my mind, warrant investigation. That is the extent of what I wanted to say.

CHAIR: You made the comment towards the end of your statement that you believe if the farmer had the right to say 'no', that much of this would change. Do you believe that is the only way that we can rectify or create a better balance between the power of the farmer and the power of the mining company or are there other things?

Mr Manning: It is certainly not the only way. There are certainly lots of incremental steps that can be taken to improve that balance. It is certainly a very strong way of dealing with it and it is one of those basics in relation to negotiation that is really quite fundamental. It is important but it is certainly not the only way. There are things like disclosing greater information, disclosing more relevant information and entering agreements that say the company has to describe the impacts on this farm in exact detail so that any impact outside of that means a fresh claim for compensation. That can be done to incrementally improve it. The answer to your question, in short, is: no it is not the only way but it is a very strong way and an important factor.

CHAIR: You made a comment about the guy down the road being paid five times as much the chap over there. Has there ever been any work that you are aware of or have you done any work in coming up with some sort of uniform and consistent methodology about compensation for access and on-land? It is something that has been talked about in South Australia, which is where I come from, that that is half the problem—that one person thinks they are being done over whereas the other one thinks they have got a great deal. Is there some consistency and transparency in the methodology by which these companies pay compensation for access or exploitation?

Mr Manning: Yes, there is very clearly a need for a system which is very transparent. If you think about what you have said in the context of the residential market, the buyer and seller have the capacity to go and get information and check it out. If that information is not available and the confidentiality provisions and the hiding of material is not taken away then you will always have people who say 'I have got bad deal.' But if they have the information to be properly informed, if they are aware of all the impacts and if they can look at what their neighbour got then there is a way of lessening that impact.

There was some serious discussion probably 15 or 20 years ago in relation to various registrars of title considering what ought to be shown on title so when you do a land transaction, what physically goes on the title of the land. If you were to put information like that so it is available through title search on the land, I think that would be beneficial.

Senator URQUHART: I have got a lot of questions but I want to explore your thought process in terms of how I see what we have heard already this morning. It seems to me there are three groups of people and bodies who are involved in the effects of what we are talking about here: we have got the landowners who say 'yes'; we have got the landowners who say 'no'; and we have got the communities around them. I guess in a perfect world, how are we able to deal with improving the process for those who say 'yes'?

I know that in some areas in Australia there are farmers who are doing it very tough for lots of different reasons and who look at an opportunity to have income or whatever who see this as attractive. We do not want to shut the door on that but we also want to protect them. But we need to protect the ones who say 'no' and we also need to protect the community. So if you were given a blank page to say how you would actually protect those three groups, how would you do that?

Mr Manning: The very short answer is: I would have the ability to say 'no' put in the legislation because it allows those who want to say 'yes' to say 'yes', and allows those who want to say 'no' to say 'no'. But recognising the need for the Crown and the larger community to make decisions about broader infrastructure, just as it does in all other areas by requiring acquisition under the various states' acquisition of land acts, so that there is a compensation process that is provided for there. If the Crown wishes to interfere with that beneficial title that the landowners have, to exercise that radical resource entitlement, then it should acquire and there should be a process back between the exploration company and the state, because the state is exercising its rights in relation that. If I had a blank cheque to write to do that, that is what I would do.

Senator URQUHART: I think you touched on the fact that the legal costs that the landowners get are probably grossly inadequate in terms of what they need to do. Is there a time frame for the contracts? Are they locked in for a period of time or is that a movable feast, depending on each of the negotiations?

Mr Manning: The contracts are individual, and so, yes, it is moving, depending on the circumstances of the particular agreement.

Senator URQUHART: So they are individual in terms of time frame but also individual in content?

Mr Manning: Yes, very much so.

Senator URQUHART: Is there a cooling-off period after signing?

Mr Manning: No.

Senator URQUHART: Not at all?

Mr Manning: No. We do not have a cooling-off period here.

Senator URQUHART: Is that unusual in legal terms or legal documents?

Mr Manning: There has been more introduction of cooling-off periods because of protection of individuals' rights, so there has been more of a trend in legislation to bring in cooling-off periods. My knowledge of contract law goes back a while, and I am quite used to not having cooling-off periods, but certainly it is a matter that can be brought forward to allow people to have a look at things. Again, if you are given a cooling-off period, it should be exercised only for proper reasons. If parties have got together and reached an agreement—

Senator URQUHART: But it is also about having adequate information to be able to make a decision, which is not what people are getting, from what I am hearing.

Mr Manning: That is right. The information should come first, and the agreement should be based upon that information.

Senator URQUHART: Is the recourse for breaches—you mentioned things like the gate being left open and the consequences of that—written into contracts generally? I guess the landowner has some ability to ask for specific things to be put into the contract, but I do not think they are always given the opportunity to have that in there. If there is a breach of condition—such as leaving the gate open and the stock go and someone has got to find that breeding stock somewhere down the road or wherever it may have wandered off to—is there a process for the landowner to have compensation?

Mr Manning: The landowners will often ask for further compensation because of impacts that are not covered by the agreement.

Senator URQUHART: What is the process that they have to go through to do that?

Mr Manning: It is a further negotiation with the company, and there has to be an agreement reached in relation to that. But the damage is often done. One of the earlier speakers giving evidence indicated that there was this lack of teeth in relation to enforcement. If you think about the size of these projects, there is a reason why you cannot say, 'We're going to shut the project down.' So that is a difficulty. Having some penal clause in the common contract—the High Court have said that penal clauses ought not be in contracts, so that could likely get struck down. So you are left in this position of trying to work out what that is compensably. But it does not take account of the disruption to the clients, to their land, to their living on the land. That social impact is quite significant.

Senator URQUHART: So it is really an issue of: you might write it in a contract but it is beholden on the parties to the contract to be good social citizens and uphold those values of what is written in, isn't it?

Mr Manning: It is. There are marked differences in the conduct between some of my clients from time to time, some of the companies from time to time and different companies from time to time. There is not a consistency across, where you say one is bad and one is good, but there is constantly this battle of trying to get their farm operating the way it was. It is a constant grind and a battle.

Senator URQUHART: Regarding the question Senator Ruston asked about the confidentiality aspect of the contracts, I suspect it is there so that landowners cannot use one against the other. But do you see merit in them not having confidentiality contracts and actually being open and transparent so it is a level playing field, open to everyone, and there are opportunities for people to see what compensation others have received or whatever?

Mr Manning: Absolutely, and I made those submissions five, six or seven years ago. They should be open. There should not be confidentiality clauses, and they should go back on title.

Senator WATERS: Thank you for your excellent evidence so far and the very detailed submission you took the time to write and give to us. It is much appreciated. In that submission you mention—and this will be of particular interest to Senator Ruston, being from South Australia:

Underground water quality and the consequences of fracking intermingling different water quality in different aquifers, even if no damaging chemicals are utilised in the process, could also mean that the operations in Queensland will affect the livelihood of others in different states.

For the committee's benefit, can you elaborate on how the impacts of water meddling by coal seam gas could impact on South Australian water supplies?

Mr Manning: At page 5 of the submission I extracted from the Coffey Environments and Arrow Energy joint EIS that picture of the Great Artesian Basin. It identifies the flow and the recharge areas, and you can see where the flow of water occurs. Where there is an extraction of an unlimited amount of water from Queensland, if you follow the dotted arrows going across to South Australia, that water has come out of the system. Having come out of the system, what water remains in the system is going to then flow on through and eventually come out in South Australia. If the fracking causes a connection between aquifers and if the water quality in those aquifers is different, then you will have an intermingling of those water qualities. I have clients who have different water quality in different aquifers on their land, and they are concerned about, for example, saline water getting into clean water. So, you have that as a risk. If there is any chemical that is inappropriate in the fracking material, then that also passes through. It is a case of the intermingling of aquifers underground and the potential for intrusions into that water that were not there previously. That water, over the life cycle of the Great Artesian Basin, which is in terms of hundreds of years, will end up in South Australia or, just as importantly, not end up in South Australia, because it has been extracted.

Senator WATERS: Exactly. How much do you know about the inclusion in the Murray-Darling plan of gigalitres for coal seam gas extraction?

Mr Manning: I do not have that information.

Senator WATERS: Okay. I am remembering something on the edge of my recollection. I will investigate and come back to you later. Perhaps I can just clarify something. You were talking about a right to take unlimited water. For the benefit of everyone here, am I correct in my recollection that under Queensland state laws it is a statutory right to take water, that the mining companies do not have to go through the normal water licence process that every other water user has to go through—they have an entitlement to that water? Are you saying also that that entitlement is unlimited?

Mr Manning: That entitlement is unlimited in the legislation if it is associated with the extraction of the coal seam gas. That is the comparison I was making whereby my farming clients were asked to reduce their take—

Senator WATERS: For environmental reasons.

Mr Manning: for environmental reasons.

Senator WATERS: The same environment.

Mr Manning: Exactly, and that is where I see the conflict between the different parts of government.

Senator WATERS: Indeed. Has anyone ever proffered any logical explanation for that? It seems to be a flagrant contradiction, to me.

Mr Manning: I have never seen that.

Senator WATERS: Unfortunately we have only a short time left. A witness earlier today—I think it was Mr Bender—said that there had been a reg change in Queensland that meant that landholders who were negotiating their access agreements were not able to have a lawyer present with them. Can you update me on that? Did that one pass the parliament? If so, has the government said it will overturn that? To your knowledge, what is the status of that one?

Mr Manning: I was trying to check that out during the luncheon break and did not get to the bottom of it. The MQRA amendments talk in terms of there being an opt-out clause, and I do not know whether that is what is being confused with it, and the opt-out clause is something we say ought not occur in any event. So perhaps I could take that on notice. I am quite happy to get back to you.

Senator WATERS: I am sorry to give you homework, but thank you, I would be very grateful to clear that up. If that is indeed the case it is horrific and we would obviously seek to have the current state government change and revert back to their former position in that regard. I have two last questions, if there is time. Firstly, often we hear from industry and other supporters of industry that because there have been these thousands of so-called voluntary agreements farmers must therefore be happy. Obviously you see a lot of clients who perhaps do not fit that description. How on earth can we call these things voluntary access agreements when there is no ability to say no? And how happy are people really with the arrangements they have?

Mr Manning: In the first place, I do not actually think of them as agreements. An agreement is where two willing parties come together and actually meet and agree. In these circumstances, one party can say, 'If you don't like the position I'm going to go to court' and the only thing you are going to deal with in court is the compensation value. That is not the fundamental basis for making an agreement, so I do not even get to the word 'voluntary'. As far as clients are concerned, we have had clients who are absolutely ecstatic about the agreements we have reached for them. But there are a large number of clients who clearly did not want to go down that path but who are forced to go down that path, and they make the best of the circumstances as they can.

Senator WATERS: You mentioned that you had sought to have what sounded to me like some very sensible inclusions in those agreements. One that you mentioned in your submission was saying that if the impacts are greater in reality than what has been agreed on then there should be a fresh trigger for compensation or basically that you should have to reach a new agreement. I think you said you have had absolutely no luck in having the companies actually come to the table. Do they ever accept anybody's suggestion for change, or do they just have a standard agreement and you can try to seek changes, and they listen to you, but it does not end up in there? What has been your experience?

Mr Manning: The experience varies, and it varies between, again, not the same company. All the parties change over time. Accepting that, the ability to pressure the company into providing a client with a better outcome often relates to the timing needs of the company. If the company has to gain access by a certain time to keep their building project online, then that is a pressure point that the clients have in relation to entering some form of agreement. Sorry, Senator: I have lost the plot of the question again, so would you mind repeating it?

Senator WATERS: It was a two-part question. One was whether they ever accept any suggestions for change or just treat these as template agreements. And particularly if the impacts are greater than what the original agreement has authorised, does that change the legal scenario at all?

Mr Manning: They do try to treat them as templates, and certainly they put pressure on clients to do so. We do not accept that where we are acting, but we have seen clients pressured to accept that by the various sorts of inducements that other people have spoken about, so I will not restate those. Other companies, though, at times are very sensible, with things like access arrangements, where there has to be prior notice. Where one company was in breach we pulled them up and said, 'You can't come back onto the land until we sort this out'. We have modified an agreement to include an access protocol, which requires them to give notice before they come on and to tell us who is coming on, what they are going to do and what they are bringing on and to sign in and sign out. It does depend upon the company, but as far as the initial up-front conduct and compensation agreements were concerned, when they first started being prepared we sought those clauses to be inserted, and they were not. We could not negotiate them in. But then our clients did receive some fairly healthy recompense.

Senator WATERS: A follow-up question: if an agreement specifies the level of impact the landholder has consented to—and I use that term very loosely, because obviously they have no choice and are forced to consent—and then the impact is greater, what is the legal situation? What are their legal rights in that instance?

Mr Manning: If those impacts are clearly spelt out there is a capacity under the legislation to go back to seek further compensation. The difficulty comes with the wording in a lot of the earlier agreements. Recently I was in the Supreme Court arguing about the definition of 'pipeline'—what it means and what is included. The company sought to include in that definition infrastructure that was not clearly contemplated at the time that it entered into the agreement. The infrastructure was introduced into a further amended environmental authority and the agreement says that the pipeline infrastructure includes what is included in the environmental authority.

So you have arguments around it and it becomes difficult. It should be clearer. We should not be having these problems. If the farming community is to be treated fairly and the industry is to be maintained on a sustainable basis, we need to get rid of this rubbish. Farmers should not have to come to me to have these problems sorted out. It should be sorted out with legislation giving them sufficient support.

Senator WATERS: Is there ever an instance where those agreements include rectifying damage, or is it all meant to be that money somehow compensates for the entire loss of amenity, for the health impacts, for the loss of water? Is there anything that says, 'If we stuff up your land, we'll fix it for you'?

Mr Manning: We are not using agreements to do that. We are using provisions of the Environmental Protection Act and are currently running actions in the Planning and Environment Court to do just that: require rehabilitation of land where the soil profiles have been inverted, where rock has been put where it was not, where rubbish has been left on the land—all of those things. We are using the environmental authority to try to rectify them.

Senator WATERS: The companies have not complied with the conditions of their environmental authority, and now your clients have to pay to take them to court to enforce the rules that the government has imposed?

Mr Manning: That is correct. They also pay for the privilege of doing so.

CHAIR: Thank you very much, Mr Manning, for your time today and also for the effort and time you put into the submission. It is very valuable, so thank you very much.

HOGARTH, Ms Laura, Solicitor, Creevey Russell Lawyers

[14:06]

CHAIR: I now call the representative of Creevey Russell Lawyers. Welcome, Ms Hogarth. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. You have provided us with a submission. Would you like to add anything to that submission or make a brief opening statement?

Ms Hogarth: Yes, thank you. I am based in Chinchilla and I look after landholder clients throughout the Surat Basin. So the subject of this bill, land access, is within my area of practice and expertise. I welcome the bill insofar as it may lead to legislative reform regarding the current situation of mandatory negotiation, for the reason that I do not believe the conduct and compensation agreements being entered into are voluntary agreements by any proper description or that the compensation is adequate, because the landholders do not have sufficient commercial leverage to negotiate adequate compensation if they have no right to say no.

I hope you will be aware of the general position in Queensland from the other submitters this morning, but, briefly, the main issues are that preliminary activities require only a notice of intention to enter and not consent from the landholder. That is of concern to landholders because modern farming and grazing practices require compliance with very strict biosecurity rules which are unenforceable against tenement holders.

The reasoning behind this legislation is apparently that preliminary activities should not result in any permanent effects or compensatable effects and therefore there is no requirement for a conduct and compensation agreement. However, preliminary activity still carries the risk of the spread of weeds and disease when mining contractors unfamiliar with agricultural practices do not seek the consent of the landholder to enter. Negotiations for advanced activities obviously are mandatory after the issue of the notice of intention to negotiate.

A big concern has been cost. The reasonably and necessarily incurred accounting, legal and valuation costs are compensatable effects for which the landholder may attempt to negotiate compensation under a conduct and compensation agreement, or a CCA. That means that, unless and until a CCA is entered into, the landholder has no assistance with their legal costs and the cost of other experts required to substantiate the amount of compensation they are seeking. Negotiation typically lasts between six and 18 months—

Senator WATERS: Can I just interrupt on a point of clarification: am I correct in understanding that you cannot get your legal fees paid for until you have signed the agreement, but the agreement is really the end of your legal rights—

Ms Hogarth: To negotiate any further compensation.

Senator WATERS: So you get a reimbursement of the costs incurred in the lead-up to signing the agreement?

Ms Hogarth: That is correct. What often happens is that landholders, because they have a legislative obligation to use all reasonable endeavours to enter into a CCA, seek to comply with those requirements and hope to come up with a reasonable CCA in negotiations with the company. As time goes on and they realise how inflexible the company is about the location and intensity of their activities and the amount of compensation on offer, they realise that there is not going to be a good outcome for the landholder and, by that time, they have costs for accounting, legal and valuation and possibly other environmental experts such as dust or overland flow of water experts that are required by the valuer. So they may be out of pocket by a significant amount for months or years and the only way they can cover those expenses is to sign a CCA, as bad as it is. So that is a serious concern.

Then, if those mandatory negotiations fail, the tenement holder may make an application to the Land Court to decide the compensatable effect—the amount of compensation payable. That sounds fair enough, but then, immediately upon making the application, the tenement holder may start construction. They do not have to wait for a Land Court date or a hearing or payment of compensation before they start, which means the landholder, who is already out of pocket for accounting, legal and valuation costs, is going to have further costs—exponentially higher costs—to prepare for Land Court proceedings.

Then they have to suffer the 12 months of construction, which is the usual period it would take to get a Land Court hearing date, which usually means removing livestock from the land. So they are spending money on agistment, if they can get it; if they cannot get agistment in cattle-tick free country, for example, or with appropriate EU accreditation, if that is what they need for their business, then they may be cordoning the cattle off in a back paddock and hand-feeding them—so long as it is not some other pasture-fed or other accreditation that would not allow them to do that. So there are significant impacts on their business and financial outlay.

It is little wonder then that, as far as I am aware, no CCA negotiation for CSG in Queensland has actually made it to a hearing in Land Court. Landholders always settle. It does not mean that landholders are getting a fair deal—just that they cannot afford to fight for one.

So a right to refuse, as proposed under this bill, would dramatically alter that balance of power and allow for fairer commercial negotiations. In my mind, that would be the most positive outcome of the bill. Obviously it is not just the ability to lock the gate, although there would be some landholders who would do that on principle, and with good reason. To me the greatest advantage is the practical ability of landholders to have that new commercial leverage to make tenement holders properly compensate for their impacts or better mitigate those impacts with different practices.

So that is my general philosophical position on the bill, but my submission mostly talks about the more practical aspects of legislative drafting. I am happy to answer questions.

CHAIR: Senator Urquhart.

Senator URQUHART: I just want to go to an area in your submission where you talk about inconsistent application. If the bill was passed in its current form, landholders would still have no right to refuse other activities such as those relating to petroleum and geothermal energy. So what is your view on the application of the bill to some resources but not to others?

Ms Hogarth: It does not make sense to me. I think petroleum activities would have the same impacts that CSG activities would have. You are still drilling. You still have gathering lines—pipelines buried in a grid network throughout the property. I assume you would have a similar amount of access, as in frequency of drilling rigs returning to the land every year or two to work over the wells. I think it would have all the same environmental impacts and impacts on a farming or grazing business and on a family home on the land as well. So I think I would want to see any protections that are afforded for landholders affected by CSG and mining applied to those affected by petroleum, geothermal and greenhouse gas storage because all of these are dealt with under the same or very similar legislation in Queensland. That is what the Mineral and Energy Resources (Common Provisions) Act 2014 is about: merging together as one those five pieces of legislation for mining and petroleum and greenhouse and geothermal, because they have so many similar provisions and the activities have similar impacts. I would want to see the bill applying across the board to all petroleum, mining and energy activities.

Senator URQUHART: What effect do you think the bill would have on the relationships between landholders and petroleum companies? Do you think it would lead to better or more adversarial relationships? How do you see this bill changing that relationship?

Ms Hogarth: The companies have markedly different cultures and different attitudes to the way they negotiate and apply the legislation. Some will seek to enter into a voluntary negotiation and, if the landholder is resistant and unhappy, rather than spend extra money in negotiations and pay extra compensation, they will go away and look for low-hanging fruit elsewhere. Those days are going to come to an end as there are fewer resource areas to choose from and as all the low-hanging fruit is picked, and they will come back and negotiate more strongly. Some companies do not issue notices of intention to negotiate unless or until they have to. They find they get better outcomes from this. This is what they tell me, anyway, in negotiations when I insist that they do issue a notice of intention to negotiate.

Senator URQUHART: The companies tell you that. What do the landowners tell you?

Ms Hogarth: The idea is that, if they do not issue a notice of intention to negotiate and negotiations are not mandatory, then they have a more friendly, commercial negotiation from the get-go. And sometimes that works. Sometimes my clients appreciate that. I am not happy with that position, because, if they are not within the mandatory negotiation process, then their legal costs are not compensatable effects and, if those happy commercial negotiations break down, they have no recourse for reimbursement. I would like to see a scheme where companies do not have to work around to try to properly coexist with landholders. Some of my landholder clients do reach good commercial outcomes for them, but it depends greatly on the individual and on the land: how much flexibility there is for where the wells could be, whether they can relocate the cattle and the scale of the agricultural business—if they have options for restructuring their business, as opposed to a small landholder who is fifth generation, has one single lot, has nowhere else to go and cannot imagine what else they would do; they will fight to defend it whether there are mandatory negotiations or not.

Senator URQUHART: I think you said that you are from Chinchilla.

Ms Hogarth: That is right.

Senator URQUHART: How many clients who are landholders do you represent from that area?

Ms Hogarth: They make up 80 per cent to 90 per cent of my practice. But they are labour-intensive and long-term matters, so I probably have 20 or fewer in my books at the moment.

Senator URQUHART: How many of them are involved in this particular issue we are dealing with today?

Ms Hogarth: It is about fifty-fifty. Half would be negotiating a conduct and consultation agreement for the first time and trying to negotiate where the activities will happen and how much compensation there will be. The other half is where the company has breached that CCA and they are looking for further compensation, which is significantly harder.

Senator URQUHART: So it is fifty-fifty. If that is the role of your business, how do you see that this could be improved for landholders? I asked this of the previous witness. You may have been in the room. If you could start from a blank sheet and give advice about how people should be treated through this process and about opportunities, how would you sum that up?

Ms Hogarth: I think a right to refuse would be ideal because no commercial negotiation can really happen without it. If there is no voluntary negotiation of compensation then the only alternative would be some independent body that would assess compensation. I do not know where you are going to get that independent body from when the government is getting royalties from the tenement holders' activities. The NRM and EHP and even the GasFields Commission are unable to provide any real support in those one-on-one landholder negotiations. They always take the call to assist with larger matters, but when it comes down to an individual landholder's mediation they are unable to intervene. So there is great value in keeping the negotiations between the parties. But the only way that can happen fairly is if they have equal bargaining power and either one can walk away.

Senator URQUHART: If the bill were to proceed through the legislative process, do you think we would see a rush from some of the companies seeking to ensure that they access land before the bill is enacted? Do you think, if that happens, that could undermine the effectiveness of the bill or do you think that it would still provide a useful framework in the longer term?

Ms Hogarth: I think there will be some landholders already on the tenement holders' radar that they know will use this right to refuse and will lock up that land for the foreseeable future. They could foreseeably be targeted by tenement holders who believe they have a limited window to drag them to land court before that happens. But, for the most part, the companies seem to move through their tenement areas in a logical sequence with engineering efficiency because of the horrendous costs of those drilling rigs.

Senator URQUHART: It would probably be quite obvious if there were an intended rush towards trying to—

Ms Hogarth: I think so.

Senator URQUHART: step outside of that logical framework.

Ms Hogarth: I also believe many of the companies are now riding their budgets for the next financial year and would have little flexibility to change their plans last minute. If they wanted to expand a project in an area that has not been on the books, I do not know how much flexibility they would have to do it in practice. I am sure they are mindful of bad practice as well. It is certainly a possibility, though, that they could use that last window to access it, but they have not done it to date. They have not taken anyone—not for CSG—all the way to the Land Court, although they threaten it constantly.

Senator URQUHART: So that is a threat they use against the landholders?

Ms Hogarth: Absolutely. It is an intimidation tactic.

Senator WATERS: Thank you so much, Ms Hogarth. Your evidence has been excellent and very helpful in clarifying the horrific imbalance of power. Likewise with the last witness, you just shake your head that it ever got to this stage. So thank you for the work that you do in supporting your clients and trying to get a fairer deal for them in the impoverished legal structure that we have got. You have covered most of the issues that I wanted to ask you about anyway, so I will just use the opportunity to flesh out some of your responses to Senator Urquhart's questions. The last one about the fact that there has not yet been anyone taken to what is now the Land Court by coal seam gas companies or by coal companies either—but they threaten it constantly, you said. Can you give us any anecdotal, though it may be, proportion of how frequently those threats are made? Would it happen every time or half the time or only a small proportion of the time?

Ms Hogarth: It depends on the company and their strategy, but in my experience it is used particularly in the mediation process. After they have issued the notice of intention to negotiate, they have a minimum of 20 business days in the negotiation period. After that time, they can issue an election notice, and that starts the next minimum 20 business days, called the 'usual period'. During that period, the parties are required to attend mediation. I think the tenement holder or either party can elect to go to a DNRM conference or to alternative dispute resolution. In every case that I have been involved in they have elected to go to mediation. Creevey Russell was involved in litigation about whether or not arbitration would be acceptable in those circumstances.

However, mediation seems to be the strategy that the companies use. I do not know if that is because there are lawyers already involved that mediation is a format that works best for us, or if they use DNRM conferences more commonly for unrepresented landholders. But, once they get the landholder to mediation, the message is: today is the day and tomorrow the usual period ends. This means mandatory negotiation ends, which means your legal costs are no longer compensatable effects. So if you and your lawyers cannot get a deal today, you will not have lawyers after today, and we could go to court any day we want—so, 10 business days notice.

Senator WATERS: That is really unethical to me. Aren't there meant to be rules around mediation on entering it in good faith? How do they get around that?

Ms Hogarth: That is right. Both parties are supposed to use all reasonable endeavours. We have found that having the mediator is very useful to get away from the company's circular arguments about their budgets, time lines and requirements that are irrelevant to the legislative scheme and compensation and to get them on a track to make a commercial decision. But still the message is very clear that if the landholder does not settle today they can expect that they will be going to court and they will need to pay legal costs upfront. So there is a tremendous amount of pressure applied through those processes, and we try to keep our clients out of those processes and reach an agreement sooner than that.

Senator WATERS: Given the huge emotional turmoil that this clearly imposes on people—and we have heard multiple examples of that today and in every other hearing when I have heard from people on the land about how this is affecting them—I am concerned about that. Also, do people seek support, be it counselling or be it other help? And, if so—and this is getting a bit legal and it is not to devalue it—is that cost somehow reimbursable, because the costs just keep on mounting and you would have to have some outlet for that emotional pressure?

Ms Hogarth: That is right. I think some of them could use that kind of support. Some of them are under great psychological distress because their home, in their minds, will not be theirs anymore. They have said things to me such as, 'Yes, I will sign but it is going to be hard to tell the kids that they are sharing their inheritance with this company,' and that sort of thing, which is not strictly the legal interpretation of what is happening but that is the practical effect for them. So, yes, it is heartbreaking. Some of them are clearly under psychological distress that I would like to see them receive further support for.

Senator WATERS: Is that ever factored into the amount of compensation?

Ms Hogarth: You could make an argument that it—

Senator WATERS: Not that that makes it okay.

Ms Hogarth: No. You could make an argument that it is a consequential loss and a compensable effect. But, again, you have to negotiate compensation for compensable effects with the company so they have to agree whether or not it is a genuine compensable effect, whether it is caused by their activities, whether it is reasonable and necessary. Why would anyone want to discuss their medical condition with the company that caused it? So I do not see great avenues that way.

Senator WATERS: Thank you, that has been very helpful and I appreciate the forensic nature of your contributions.

CHAIR: Thank you for making time to be here today to give evidence and also for your submission.

Proceedings suspended from 14:32 to 14:45

KING, Mr Paul, Acting Secretary, Oakey Coal Action Alliance Inc.

[14:45]

CHAIR: Welcome. Would you like to make an opening statement before the committee starts to ask you questions?

Mr King: I would. I would like to outline the position of Oakey Coal Action Alliance, OCAA, on a number of aspects relating to the bill which is being considered, the Landholders' Right to Refuse (Gas and Coal) Bill 2013 and put those in the context of some of the issues which OCAA have faced, and perhaps go a little further into some personal tales. Oakey Coal Action Alliance have been asked to comment on this proposed bill because we have an interest in the rights of landholders and the community with regard to the mining of coal. OCAA was formed as a response to the impact of coalmining on the rich Darling Downs around the town of Acland. OCAA have found negative economic, personal and environmental impacts of the mine to be grossly underestimated and the benefits to the local community similarly overestimated. We believe the Acland mine and its proposed expansion is an example of the wrong mine in the wrong place at the wrong time. Therefore, OCAA, in principle, would support mechanisms to redress the power imbalance which exists between local communities and mining leaseholders. No doubt this committee has examined those power imbalances in its deliberations.

In our analysis, this bill seeks to place in the hands of those with any interest in land, except arising out of a coal or gas licence, the ability to refuse to negotiate or accede to requests for coal to be mined or gas extracted from that land. We would note, by way obverse, that this, in a way, codifies a converse right to allow such activities presumably for sufficient payment. This is an issue we would like to highlight. Although the pecuniary advantage to the landholder may be of advantage, there are permanent impacts on the land itself and there is a shift of long-term remediation and opportunity costs to the state. OCAA would be concerned in any case where an individual pecuniary interest might supersede the interests of neighbours, the local community or the public interest.

OCAA would support more robust assessment mechanisms and public interest test to a coal mine in addition to but, ultimately, trumping rights to agree, if not to refuse, to have coal mined or mining activities on-land. We think that this is an important consideration which should be taken into account by the committee. Those public interest tests, ultimately, are the ones which will demonstrate the value or otherwise of a particular project above and beyond individual interests.

Presumably, the fracking ban in the proposed bill applies to corporations because of the constitutional head of power that allows the Commonwealth to regulate those activities. At least, theoretically, this leaves private entities and perhaps some state government organisations in a position where they could carry on such activities without contravening this bill, and presumably that would be a case of a very rich individual or someone of that nature.

Just in relation to that aspect of the bill and to the penalties which are proposed to be part of it, we believe, and this would have to be investigated, that it may be more fruitful if this object of the proposed bill—that is, the ban on fracking practices—were achieved via amendments to environmental legislation prohibiting the introduction of fluids into formations unless the precautionary principle is satisfied. If that were constitutional, it would have the effect not only of a more comprehensive effect than banning all organisations and individuals from doing so but also that existing penalty provisions within the environmental legislation as it stands could be applied, obviating the need for additional ones. We do note that the additional penalties that are sought to be applied are substantial. Also, in the case of the environmental legislation, and especially if new offences are prescribed within that, that could cover that particular base.

The proposed bill proposes the granting of standing to make an application for an injunction against a prohibited activity to virtually any person, which is a good thing in itself. However, it is supported by a rather unusual requirement for the defendant to pay the cost of an application of an injunction against itself. Not being lawyers, we might find we cannot really question how that might go down, but it is certainly a departure from practise which may not be necessary, because, whilst we acknowledge that that payment is recognition that the financial cost of taking action against a company is high, OCAA has, in its experience, demonstrated that there are other costs which are far more substantial. Those costs are in terms of division within the community, which is created by some taking a stand and some not. It is personal cost in terms of stress and health, which individuals who become engaged in lengthy and protracted litigation against large companies invariably endure and which invariably has a cost associated with it.

As a general principle, OCAA would support: that notification to a government authority responsible for administering the legislation should be sufficient that, when that possible breach involving either a fracking or a mining activity without consent is reported an authority or government department, we have a system which is sufficiently robust in its responsibilities that that breach would trigger an enforcement process at a departmental or ministerial level or otherwise risk a breach of duty. In other words, the minister would become aware of a situation

through the reporting processes which are provided for in legislation or just through normal reporting processes which are provided for reporting breaches. We would find it preferable for it then to be incumbent upon the minister to act, rather than creating a plethora of alternative civil options for individuals to pursue against very large interests, regardless of the fact that they are somewhat indemnified against the costs by the provisions of this bill. We think those costs are greater than that and that the watchdog role should really be taken more through the departments.

In summary, the Oakey Coal Action Alliance supports the principle that landholders should have a veto over extractive land use, except where it is overwhelmingly and demonstrably against the public interest that they do. OCAA does believe that landholders have been inadequately compensated in the past and also notes that compensation paid to them does not restore the land to its previous state at the cessation of mining.

OCAA is not convinced that a decision by a landholder to allow mining which results in personal windfall is necessarily in the public interest and therefore should not be allowed to override it. I think it needs to be crystal clear within the bill that it does not create an overriding or an additional right, which is the obverse of the right to refuse and which supersedes any other public interest right or any other legislation. We would ask the committee to consider that question in the design of the legislation.

OCAA supports the preservation of agricultural land and recognises the value of underground and surface water. Therefore we support the application of the proportionality principle to all types of unconventional gas extraction. We support a total ban of coal and gas extraction on agricultural land because of the incompatibility—and this is demonstrable incompatibility—with most agricultural users and the permanent degradation of the land, and because of water loss and contamination. That concludes our remarks.

Senator URQUHART: I think that you made a comment in your opening statement, Mr King, that you are not lawyers. Can you just give me a bit of an overview of the skills and expertise of the group that you represent?

Mr King: The group that I represent consists of landholders, business owners and members of the community. A large proportion are in the farming or farming related industries. There are other skills within the organisation—there are some organisational ones, and some of the people within the organisation are multiskilled—but it is largely of a rural nature.

Senator URQUHART: In your opinion, how effective has the state government's regulation of the coal industry been?

Mr King: The ineffectiveness of that legislation is probably the reason that OCAA exists. There was no protection for individuals who were harmed economically, personally and health-wise, ultimately, by the regulations and legislation, and enforcement thereof provided by the state government. Therefore OCAA naturally believes that those are deficient and need to be improved.

Senator URQUHART: Have you or your organisation met with the relevant state ministers and officials to discuss your concerns about the ineffectiveness of that legislation at any time?

Mr King: I would lose count of how many such discussions have taken place—representations, letters and meetings locally in Brisbane—with members at all levels of government and of all persuasions.

Senator URQUHART: Can I ask what outcomes have been—

Mr King: There is some hope, in terms of process, that is usually offered as a result of meetings. There are some members of parliament who are fully supportive of the expansion of the New Acland Coal Mine and who make no bones about that. There are others, influential members of the Queensland parliament, who have committed to fairness in process. That is what we currently hold as the best prospect.

Senator URQUHART: Has the crux of your discussion really been about the fairness of the process as opposed to not having that process or not having that mining; or has it been a mixture of both?

Mr King: There has been a mixture. There is a strong view that the ongoing impacts to the local community—at the very least, if not the broader community and the broader economy—have been negative.

Senator URQUHART: Can you talk a bit about what you mean by that?

Mr King: The mine is obviously operating on land that was formerly agricultural land, and it is proposed that it extend further into the surrounding agricultural regions. As a result of that third expansion alone, 80 properties which were formerly businesses and rural and agricultural enterprises have been purchased and effectively put out of business as family-run small to medium enterprises. That is just in one stage, and that is the land that is directly beneath where the mine now will lie—the extension. You have a further perimeter of several kilometres where persons who have owned land have found it impossible to continue their operations for a whole host of reasons, not least of which are dust, noise and increased traffic—a whole host of things that relate to amenity as well as health. Those people are probably the worst affected. A mine is not obliged to buy them out, and their land cannot be sold at

any price. They are then left with a situation where they must accept an offer if it is made by the mine in order to end what has turned out to be misery in some circumstances.

I think of one particular individual and family who, late in life, set up a property on four titles with the son-in-law, the daughter, the individual concerned—Aileen Harrison—and her husband, who were displaced from that property by the activities of the mine. They were 1.25 kilometres away. They bought before the mine. The mine chased them. It ruined what was to be a blissful planned retirement with a dream home and a second home for the daughter and the son-in-law. It took those plans and shredded them. It became a place where the craft business built around the herd of alpacas that were shorn on the site—the tourists who came in buses no longer came because of the dust and the noise, and it was just unpleasant. The animals were sick. There was nothing that that family could do but accept an offer—which is confidential, as in so many cases—from the mine, which has left them living in the same district but on a smaller property and, in the case of Aileen and her husband, Ken, living in a converted container rather than their dream home. That is a cost which cannot be made up. At the age of nearly 80 now, Eileen and her husband cannot start again. They have had their future wrenched from them. And it is not just the emotional and sentimental loss; a thriving and active business was sent to the wall by the operation of this mine.

That cost is never counted in any of the propaganda or any of the solutions that are put forward. It is a human cost as well as an economic cost, and it must be taken into account. The proposal in this bill will at least give landholders some leverage against an imperfect and definitely asymmetrical situation. However, sadly, even the provisions of this bill will not protect the people living in proximity to the mine whose lives are ruined. The nature of the region has changed from agricultural to semi-industrial. Any economies of scale that were achieved with agricultural production are lost, and it gradually becomes a diminishing industry and one that will eventually die out. That will be a tragedy not just for the families but also certainly for the future of quality food production in this state.

Senator URQUHART: That leads me into my next question nicely, Mr King; it is almost like you knew where I was going! I just want to talk about the definition of 'ownership'. The bill defines 'ownership interest' as follows:

(1) A person has an ownership interest in land if the person has a legal or equitable interest in it or a right to occupy it.

So do you have a view on whether this definition is appropriate and workable?

Mr King: When considering making a submission for this particular committee, that was considered—the questions relating to ownership. The conclusion that I came to was that it was going to be well beyond me to say anything meaningful about it. There are so many aspects of ownership, some of which have been highlighted by the discovery, if you will, that the old title under which the Acland mine is to be developed involves the payment of royalty to the landowner rather than to the state government. That is not something I would have guessed. I have had some legal training, and I would never have guessed that. In fact, I do not know a lawyer who would have guessed that. So there are aspects of title and interest—for instance, easements: what do they constitute in terms of title, and what effect would they have within this bill? There are the rights to the fruits of the land. They are ancient rights, as such. But, of particular concern—and not directly related to Oakey Coal Action Alliance—is a possible impact, and that should be considered by the committee, on the Northern Territory Aboriginal land rights legislation, because they do have particular rights that are enshrined that, if the Commonwealth sought to cover the field of mining rights in this manner, would certainly have to be considered because it may alter those rights.

Senator URQUHART: The Minerals Council argued that the definition was too broad because, they say, it extends protection to a broad group of persons well beyond the occupier of the land. So do you think it is possible for a company to identify all persons with an ownership interest, or is that just not possible?

Mr King: I would not say it is not possible. It is possible to identify. But it is true that they can extend well beyond the person who currently occupies that piece of land. There are numbers of titles under which they may occupy, whether it be leasehold or freehold title. As to what sort of impact that would have, that is a title which, as I understand it, would currently come under the auspices of this bill—leasehold land. But then we have terms of leases and, of course, in a sense, the ultimate owner of the land, the ultimate custodian of the land, is the crown. That is the reason that the mineral rights are vested in the Crown—they have a responsibility to the state, which involves future generations, to maintain its capital value, if you will, and its other values, which are less quantifiable, for the future. So in a sense the landownership is for all Queenslanders, and all Queenslanders have a stake, however small it may be, in all land in the state.

Senator URQUHART: The Latrobe Valley Sustainability Group argued that, in addition to landholders, communities should have the right to veto unconventional gas activities. Do you have a view on broadening the scope of the bill to include communities? Do you think that is a sensible move?

Mr King: OCAA, it would be safe to say, would support that wholeheartedly. There is a difference in the returns that are provided, economically and in other ways, between the local communities, who sometimes suffer terribly for

the alleged benefit of the economy of a whole. That has never been quantified. It certainly is the case that we consider individuals living within the community to have the say or have the ultimate responsibility for their future within that community. The more autonomy that can be devolved the better it is for society generally, where people are free to act in a manner which is beneficial to them, in their particular circumstances, given their particular environment. So the community is vital in our view.

Senator URQUHART: Finally, you talked quite a bit about the balance of power and we have heard this, I think, throughout most of the day, particularly about the imbalance of power. Do you think there is a possibility, in some way, of getting that balance of power right? And, if you think there is, how do you think that would be best handled?

Mr King: The achievement of sound, reasoned public policy would probably facilitate that. But—

Senator URQUHART: Sorry—I just want to jump in there. You talked about the elderly couple who had started their craft business. That is one example; there are many that you probably know of. Would good public policy get around those types of issues as well or are there, consequently, always going to be imbalances?

Mr King: There will always be an incompatibility with mining activity and other activities of an agricultural nature. That has been the experience. So in that sense there will always be a loss that will occur. The extent to which that loss can be remediated to the individual is a question for public policy, as to whether they can be included where they are currently excluded. There are some cases that are currently big losers but are not covered. So, to that extent, that can be done. But of course, in another sense, things can never be recovered. So there is always to be a cost associated with it.

Good public policy, in our view, would always ensure that those costs were well below the true benefits to all concerned and that those who suffered as a result of the development were adequately compensated as people and also that future development of other industries is not unnecessarily stymied. Mining may well have a place. Mining will continue. OCAA has no official policy that says: 'We oppose all mining.' There is no policy of OCAA. But there is a time and a place and, in our case, we reiterate that it is the wrong mine, in the wrong place, at the wrong time. That is what we feel many of these issues come down to.

If this bill can help redress that, that is great. On the other hand, the more bizarre outcome could be a whole heap of royalty-rich hillbillies—the case of the 'Beverley Hillbillies' or something like that—carrying on. That is not necessarily a desirable public outcome, although—

Senator URQUHART: As much as we all love the Beverley—

Mr King: That sort of individual windfall is not broadly the aim of the exercise.

Senator WATERS: Thanks, Mr King, for being here today and for your advocacy so far. Can you tell us the story of Acland. You touched on it a little bit in response to Senator Urquhart's questions. Can you just give us a bit of a history of stage 1, stage 2 and now stage 3, the nature of the land and the impact on the community. Can you bring us up to speed in a nice summary form, if you can.

Mr King: In summary, with the final point: Acland is still there with one resident—a sole resident, who cares and tends to the local park and hall. From the beginning, the mine has made various promises as to the future of Acland as a township, all of which up to this point have been broken. That is probably the greatest summary that I can give. Any indication that Acland would be allowed to remain as a viable community has not been met. Forgive me, Senator, but a donation to a school was made in the area some years ago, which I cannot recollect, but that school of course is now closed completely. It might have got a new hall for a few months but it is now no more. It virtually has meant the end of Acland as a town and as a community. Jondaryan, which is a close-by town, is also feeling the effects of that since they have an enormous coal stockpile in their backyard—literally.

Senator WATERS: Mr Beutel, who is the last man standing, bless his soul, gave some evidence to a different inquiry earlier in the year. How many people were in the town originally?

Mr King: I believe it was in the vicinity of 440.

Senator WATERS: So it was quite sizeable, and now we are down to one. So the mine has basically eaten up—

Mr King: All those lives have changed. Very few people who lived in the town would have walked out with any sort of meaningful compensation.

Senator WATERS: You say that the remaining adjacent towns, such as Jondaryan, which I have been to, are suffering from the coal stockpiles of the existing stage 1 and 2—

Mr King: Possibly. There is a stockpile which has been noted as the largest coal stockpile there is just sitting right next to the highway and blowing right over the township.

Senator WATERS: What is the plan with stage 3? Where is that at? Does it have all of its approvals? If it does proceed, which I hope it does not, what would that mean? Would that mean Mr Beutel would have to go? Would it just eat up the town entirely?

Mr King: The current process with stage 3 is twofold, in our view. There is a mining lease application objection process and an environmental objection process which closed on 1 July. Those considerations are being made through the normal channels that mines are considered through. If there are any challenges, they will be made through the land court or by other statutory mechanisms. But there is a parallel process which is being undertaken. That is a process which was promised prior to the election of the current state government to be carried out within six months of their election. That date is rapidly coming up. We welcomed the promise of a fair analysis of the process of approval, but we are concerned that the process has not been open and public. Without an open and public process, we find it difficult to be assured of its fairness and openness. That is where that stands. As far as Glen is concerned, he will not leave Acland willingly. I have no doubt that any attempts to remove him will leave the company with a bloodier nose than what they give him!

Senator WATERS: He is a gentle man but a tough one, that is for sure.

Mr King: And he has backing.

Senator WATERS: Yes. I am just trying to remember the political history of this. My understanding is that the former state government—the Newman government—had said prior to their election that they would not let stage 3 go ahead. My understanding is that, subsequent to that, a donation in the order of \$700,000 was made. It is on the public record that that donation was made and received. The Newman government did then restart the process but said that stage 3 had significantly shrunk. I have heard that it is not really that different. What is your view on whether it is actually that different?

Mr King: It is not substantially different. Some areas have been taken out and others have been put in. I guess some attempt has been made to address some concerns. The matters which you referred to regarding the decision-making process were the subject of evidence given to a previous inquiry into certain matters of the Queensland government. The evidence there, if I recollect, was that there was a sum of \$700,000 or perhaps it was \$900,000 that was donated in a legitimate way, according to our laws, to a political party.

Senator WATERS: Yes, huge donations are still legal. They are improper but they are legal.

Mr King: However, the influence that that donation may have had comes into question when it is realised that, prior to the election, the political party in question made an ironclad commitment not to proceed with Acland stage 3, and then, hot on the heels of the donation, changed their minds.

We like to have faith in governmental processes, and we certainly like to have faith in departmental and public service processes, but it would be naive to believe that those processes and those individuals are not influenced by government policy and desire. Therefore, if that is the case, then the entire Coordinator-General's recommendation and report must be put into question. That report is the one that approved the expansion. So I think that your inference is quite right: propriety is under question, and that is fundamental. That is certainly one of the processes which we hope would predominate in the decision as to whether or not to approve this mine expansion.

Senator WATERS: Where it is at currently is that the current state government have said that they will look into the whole murkiness of that donation and approval, but time is ticking?

Mr King: That undertaking has been given publicly, in private and in letter form. However, our only concern is that that process is not subject to scrutiny.

Senator WATERS: Has it stopped the approval process? You mentioned that it was July that the objection periods closed for both of the two instruments?

Mr King: The approval process continues. So presumably if, as is the case with almost all other mining lease applications, it is approved, it will then be incumbent on the state government either to revisit the question of propriety or to revisit the questions that they originally considered when they brought in strategic cropping land legislation, the impetus for those kinds of decisions, and whether they should reconsider the whole criteria for approval and approval for future mines. It is a fact that there are mine leases covering the entire Eastern Downs. That is, without a doubt, the most productive crop land in Queensland; we do not have that much of it. If mining leases cover most of the Eastern Downs, then the approval of one mine is likely to lead to a cascade of others, because the principle will have been established that the coal wealth is greater than the agricultural wealth and value. We do not believe, in the long term, that that is the case.

Senator WATERS: I agree with you. Global prices are on your side and mine, but we will see. On strategic cropping land, can you talk about whether or not Acland fits what used to be the law of that description? You have

mentioned a few times land use between farming and coal—and this bill covers coal seam gas, as well, but obviously in Oakey's instance it is coal. Can you tell us more about why you think that they are incompatible? I agree with you, but I want to hear your reasons why.

Mr King: The Acland district is one of the early closely settled districts. It was closely settled because its productivity enabled families to engage in activities such as dairying and mixed farming pursuits, in the past, which were sufficient to support them and the local communities. When we say that mining is incompatible, we are talking about specific forms of mining more than anything. We are talking about open-cut coal mining, specifically, as being one of the most damaging ways of conducting business, and we are talking about expanded mining prospects.

Acland was the site at the turn of the century of an underground coal mine, which operated successfully up until, I believe, the middle of last century. The fact that that went underground and was of a much smaller scale than the current operations meant that the impact on the surface was minimal and the impact on the groundwater was also minimal. So the scale of operations is also a factor in those kinds of situations. But Acland could be described as good for cropping land, it is good for pastoral land and it is the site of one of the most modern dairies in the world which produces high-quality milk using the latest laser milking equipment. So there is investment in the area.

There are large operations and enterprises that exist through an agricultural base which are providing benefit to the local economy because they do buy locally. The mine may claim to buy locally but they would be lucky if they sold an extra 10 pies in Oakey as a result of the mine's operations because the mines go to Toowoomba for the trucks and they go to various providers of larger industrial capacity for those kinds of things whereas the local farmers, the local people who work in the agricultural industry do buy through the local stock and station agent, they do purchase from amongst each other feed and other supplies and they do spend their money in the local supermarkets so that is a give. And that again is one of the reasons why the positive impacts of the mine—positive impacts if you want to call them that—are not felt as strongly in the community in which they are actually located but the negative impacts are.

CHAIR: Thank you very much for your very informative contribution this afternoon.

McCARRON, Dr Geralyn, Private capacity

[15:27]

CHAIR: I welcome Dr McCarron. Information on parliamentary privilege and the protection of witnesses and evidence has been provided to you. You have provided us with a submission. Would you like to add anything to that submission before we go to questions?

Dr McCarron: Yes. We have talked obviously about the inequity in access and about the fact that there is supposed to be 4,000 happy farmers in Queensland who have signed access and alternative arrangement agreements. It is definitely my contention that there are over 4,000 documents whose validity is in dispute, obviously because landholders had the option of signing them or they had the option of signing them but there was no option to say 'no'.

I would wonder at the level of coercion of the Queensland government. In 2010 they produced a document which was distributed to landholders, which was a 10-page document which included among the tips these three: firstly, you cannot obstruct a resource company just because you do not agree with the activities being carried out on your land; secondly, regardless of how you feel about the activities taking place on your land, you are encouraged to develop a courteous and cooperative working relationship with the resource company; and thirdly, worst of all—a tip from the government—ending up in court could be costly, stressful and time-consuming.

Since the petroleum exploration licences relinquished ownership of the gas to the licensees, the question in my mind is: had the Queensland government any business involving itself in and exerting influence on behalf what was the private business interests of the companies involved?

This is particularly relevant when the government involvement was at the expense of Australian citizens and was forcing access to mainly foreign business interests onto freehold land. Landholders and communities had no right to refuse gas, and it is well past time that they did.

Despite the best attempts of the Queensland government to avoid any science based approach to the ongoing reports of ill health in Queensland's gas fields, the international science is now coming in, and it is my assertion that no longer can claimed ignorance of human health harms be a defence for legislators. This bill introduced by Senator Waters draws a line in the sand with regard to federal responsibility.

A short summary of the health evidence is as follows. There is a new document, published on 15 July this year, which is an analysis of 95,000 hospital admissions. This is from the University of Pennsylvania and Columbia, and it shows that hospitalisations for heart conditions and neurological illnesses were higher among people who live near unconventional oil and gas drilling. Hospitalisations for skin conditions, cancer and neurological problems were also associated with the proximity of dwellings to active wells. Since that was not in my original submission, I would like to table that document.

A report on the analysis of nearly 125,000 births in Colorado, released in January 2014, found that, in areas with the highest number of gas wells, there was a 30 per cent increase in the number of babies born with congenital heart defects compared to areas where there were no wells within a 10-mile radius. Birth defects were most likely undercounted, because non-live births, terminated pregnancies and later-life diagnoses—that is, after the age of three years—were not included.

A study from Cornell University found that babies born within 2½ kilometres of a gas well had lower birth weight and more health problems than babies who were born within 2½ kilometres of a future well. This obviously caused problems, as low birth weight and preterm babies in the States incur an average of over \$15,000 in additional hospital costs in the first year of life, and each low-birth-weight infant is 50 per cent more likely to require special education services as well as having lower lifetime wages.

There is a review of 150 studies which concluded that the chemicals released during natural gas extraction may harm human reproduction and development, with strong evidence of decreased semen quality in men, higher miscarriage in women and increased risk of birth defects in children.

The extreme air pollution caused by the resources industries has been accurately measured and documented in the peer reviewed literature. For example, in remote rural Utah, far from major urban or industrial regions but the site of major oil and gas development, air pollution over two consecutive winters far exceeded that in the most heavily polluted inner cities. It was 10 to 100 times worse than the average US city. The volatile organic compound emissions were the equivalent of the annual emissions of 100 million cars.

It is internationally recognised that outdoor air pollution causes cancer. In 2013 the World Health Organization defined outdoor air pollution as a class 1 carcinogen. Diesel fumes, benzene and particulate matter all cause cancer. The health danger of particulate matter is well understood. The particles, if small enough, can be absorbed from the lungs directly into the bloodstream, causing damage to multiple organs. This includes lung damage, strokes, heart

attacks, kidney damage, diabetes and high blood pressure. With particulate matter, as with benzene, there is no safe level of exposure or a threshold below which no adverse health effects occur.

Air pollutants react to form other harmful compounds. Ozone is formed when the oxides of nitrogen and volatile organic compounds combine in the presence of sunlight. Ozone can permanently damage children's lungs. A study by the University of Southern California of fourth-grade schoolchildren found that each increase of 20 parts per billion of ozone was associated with a 63 per cent school absence rate increase for illness.

Data from the National Pollutant Inventory in Australia demonstrates the rapid escalation of emissions of all these harmful air pollutants from the gas and coal industries in Australia. With regard to the gas industry's activities in the Darling Downs, the extent of this pollution reported to the National Pollutant Inventory has been collated and published by Dr Wayne Sommerville. I had thought he had put a submission to this inquiry, but I am told that he has not; so I can table his submission, if you wish.

CHAIR: Sure.

Dr McCarron: A study from Harvard University published in March—

CHAIR: Dr McCarron, in the interests of having the opportunity to ask more questions, would you like to just table your opening statement. How much longer is it?

Dr McCarron: It is not much longer.

Senator URQUHART: If you could go to some key points, it might be useful.

Dr McCarron: Internationally, the evidence is that this level of pollution causes extremely bad effects. Harvard University found that women who are subject to particulate air pollution in their pregnancy have twice the risk of having an autistic child. Children are not just little adults. In children the risks of exposure to even low-level toxins is not well understood. Occupational health standards cannot be applied to children. So what can be considered acceptable for an 80 kilogram worker exposed to a single toxin over an eight-hour day cannot be extrapolated to an unborn infant or a child exposed 24 hours a day to a mixture of toxins, many of which are unidentified. Some chemicals can affect the endocrine system at extremely low levels, and children and unborn babies are most vulnerable.

The report showed that global flaring produces multiple chemicals. There are over 250 identified toxins released from flaring, which include many chemicals that cause cancer. They mobilise the radioactive materials. They include toluene. They mobilise the heavy metals—mercury, arsenic and chromium. Fair warning has been given in the international literature to the effect of contaminated material entering the food chain. There has been documentation of animal deaths, stillborn calves and congenital defects in animals. What is really important is that the most recent literature highlights the fact that the currently accepted methods of monitoring emissions does not take into account the actual, sometimes very high levels of periodic exposure.

Studies in the states by Dr David Brown found that households are subjected to variable particulate and chemical air exposure that may reach potentially dangerous levels. Concerns relate to the whole lifetime of gas development rather than primarily focusing on hydraulic fracturing as the predominant polluter. Hydraulic fracturing itself occurs over a matter of weeks, while compressor stations and gas processing plants also located near people's homes pollute 24 hours a day for as long as the gas runs through the pipeline.

The studies from the states mirror what I found out on the Darling Downs. In 2013, I surveyed the health of 113 gas field residents, and 58 per cent of the people surveyed were certain that their health was affected by coal seam gas. Of concern to me was the impact on the children, particularly the neurological effects, as well the nosebleeds and the headaches. Also, of the 113 people that I surveyed two years ago, I have lost track of some of them but 45 of them have been forced from their homes due to the impact on their health and wellbeing. Six of those families were bought out with confidentiality agreements, so they are not allowed to speak.

In December 2014, New York State banned high volume hydraulic fracturing on the grounds of public health. The public health doctors who authored the report on which this decision was based were looking at, again, the entire process of natural gas well development and production. This document, which I am told that you have got, contains 90 pages of references and abstracts from studies which inform the report. Acting Health Commissioner Dr Howard Zucker said that the study had identified significant public health risks. He went on to say:

I asked myself, 'would I let my family live in a community with fracking?' The answer is no. I therefore cannot recommend anyone else's family to live in such a community either.

In my opinion, it is unconscionable that in Australia landholders in the community should be denied the right to protect themselves and their families from such serious health harms. There are other documented harms linked to

the unconventional gas: local harms such as risks to agriculture, tourism, food security, water security, property values and community harmony as well as the big picture of climate change.

It is unacceptable that any citizen of Australia should be forced, by law, to say yes to the intrusion of such an industry onto their property and into the community, and it is time legislators at the federal level put into place real protections for the Australian people. I think this bill is just the beginning. Federal laws that protect health are needed. I also believe it is time legislators who ignore the evidence and put the community at unnecessary risk be held accountable and liable for the harms caused by their decisions.

Senator Ruston, in the first session this morning, when the Environmental Defenders Office spoke about NICNAS, you questioned the validity of what they were saying and whether they were scaremongering. I have a document here, which I can send to you, on QGC's well-site stimulation. They list the chemicals they use, including six biocides, clay controllers, corrosion inhibitors, cross-linkers and gels—many chemicals around which there are very definite health concerns. These chemicals are used in astronomical levels, as you have already heard—tens of tonnes per well—and none of these have been assessed by NICNAS.

CHAIR: Or any other regulatory organisation?

Dr McCarron: No. They were meant to be assessed by NICNAS. There were 23 different chemicals recognised as having been used in Australia. Two of them have been assessed by NICNAS, but not for hydraulic fracturing, so basically there is not any information on it. That is part of the problem with this: the science just has not kept up with —

CHAIR: If you would like to table that document we will have NICNAS take a look at it, and the other regulators, to confirm the validity of what you have just said. Is that the end of your opening statement?

Dr McCarron: Yes.

Senator URQUHART: Dr McCarron, how long have you been a GP? And where have you practised as a GP?

Dr McCarron: I have been a doctor since 1980. I have been a GP since I came to Australia in 1989.

Senator URQUHART: You have only practised in—

Dr McCarron: Australia—in urban Australia, not in rural Australia.

Senator URQUHART: One of my questions was about the health effects your study found. You talked about neurological issues—nosebleeds and headaches. What were the other health effects your study identified? Or was that it in the main?

Dr McCarron: They are skin conditions; sore eyes; bleeding noses; severe headaches; severe headaches in children, to such an extent that they were banging their heads on walls in the middle of the night because their headache was so severe; neurological problems, such as little children with very little language who are trying to describe to their mum what is wrong with their hands describing it as ants in their hands and little children with no language just screaming for water and then dipping their fingers in the water.

Senator URQUHART: Is that the skin conditions and things like that which you were talking about?

Dr McCarron: No; that is the funny feelings in their fingers—children who are constantly rubbing their fingers.

Senator URQUHART: What feedback have you received following your report?

Dr McCarron: From whom?

Senator URQUHART: From anywhere. I might go to the next question, and you can answer the two of them together, if you like. A 2013 study by Queensland Health found that there was no link between CSG and illnesses suffered by residents in Tara, but in your report you describe the Queensland Health report as inadequate and flawed. I am interested in what brought you to that conclusion about the report being inadequate and flawed.

Dr McCarron: First of all, that was not what they said. They did not say there was no link. Basically, they did not have enough evidence to make a link, and the reason they did not have enough evidence was that they really did not have any evidence of sufficient quality at all. In terms of the environmental evidence they had collected, there was not enough to do even the most simple statistical analysis of the chemical contaminants that they had organised. They had got QGC, which is the company that was being investigated, to set up and organise for testing. So they were testing themselves. The extent of that testing was that in July, I believe, 2012 QGC over a period of a week or so took environmental tests—air, soil and water—on nine properties. That is the basis of the environmental testing for that Queensland report. There was a bit more work which involved DERM doing some longer term monitoring where they left a few little things out for a week. The most interesting information actually came from the residents, who had demanded the use of summa canisters—they let it off and it takes 30 seconds of air into a canister, which is then analysed. That is the extent of the information that fed into the environmental one. From the point of view of

the clinical study, Dr Penny Hutchinson was the Darling Downs public health doctor who was organising the study. In her debriefing of the local people at the beginning of 2013 she confirmed that she had received no extra funds and no extra personnel to do this testing program. Not a single doctor from Queensland Health went anywhere near the gas fields or the people who lived on them. People were to phone a 13 health number and have a phone survey, and Dr Hutchinson would then phone them back and have a longer talk about it.

Senator URQUHART: Was this monitoring that you are talking about with the canisters and things in the same area, Tara, where you did your—

Dr McCarron: Yes. The air testing was in the Tara residential estate.

Senator URQUHART: And that is where you picked up your research information?

Dr McCarron: Partly. It was some people from Tara and some people from—

Senator URQUHART: Over a wider range.

Dr McCarron: Yes.

Senator URQUHART: Your report recommended:

A fully funded comprehensive medical assessment of residents currently living in proximity to unconventional gas development should be carried out as a matter of urgency.

That was one of the recommendations.

Dr McCarron: Yes.

Senator URQUHART: Are you aware of any government response to that recommendation?

Dr McCarron: The interesting thing is that the Queensland government's own report, if you take it that they could not come to a conclusion and you just treat it as a pilot study, which in effect it was, is fair. Their main recommendation—a very discrete recommendation—in that report was that there should be a testing program which should determine the overall coal seam gas emissions and the exposure of the residents to those emissions. That was the main point and recommendation of that report, which was undertaken and released in March 2013. My problem with the whole process is that that still has not been done. My really deep concern about the whole process is why it has not been done. I had communication with the deputy minister for health in June 2013—Dr Davies—and he assured me that this was underway and that there was a whole process of intergovernmental work on going forward with that report. Towards the end of that year I had discussions with Dr Jeanette Young, who was head of Queensland Health, and she confirmed that there was a whole-of-government process.

Senator URQUHART: That was the end of 2013?

Dr McCarron: Yes, 2013. Nothing happened. I really think that a very bright light needs to be shone on the DEHP, the Department of Environment and Heritage Protection, because in 2014 I received a letter from Dr Bristow—I can table both of these as well—who is head of Darling Downs Hospital and Health Service—

Senator URQUHART: I think we have a copy of that in the stuff that you gave us.

Dr McCarron: Yes. So what he said was that, in relation to Dr Neville's recommendation proposing a strategic ambient air monitoring program to monitor overall coal seam gas emissions and exposure of the local communities to these emissions, this recommendation was apparently initially considered by the Department of Environment and Heritage Protection, who determined that the air quality data from Tara indicated compliance and thus did not support expanding the program. So they, in late 2014, were depending on data from 2012 to say that the companies were in compliance, and, therefore, they would not follow through the very defined recommendations of their own government's report. So I find that definitely a problem.

Senator URQUHART: Just take a step back. Your report was in 2013.

Dr McCarron: At approximately the same time.

Senator URQUHART: About the same time as that. And since then you have followed up with, I presume, both meetings and letters?

Dr McCarron: Lots of letters, circular letters—

Senator URQUHART: And you have had no feedback in a response from them as to what is happening.

Dr McCarron: Yes. So that letter and DEHP deciding that the health requirements of the people in the gas fields did not need to be complied with was for the last government. Now we are on to this different government—and I got a letter back from this particular government. I had asked about the flaring that had been going on. It was advertised in the local papers that there was going to be flaring because it was going to be so extensive. So I sent a letter to various people, including Dr Lynham's ministry and Premier Palaszczuk. I asked what air testing program

had been put in place during this period of prolonged flaring, which was for over about a month or so, and I got the answer back that 'atmospheric emissions of combustion products from flares at well sites and field compressor stations involved typically small quantities of low-risk contaminants that could not be expected to cause measurable environmental impacts. Accordingly, the very low potential for harm did not support any proposal for EHP to conduct atmospheric monitoring during this maintenance or testing process.' So, again, DEHP are overriding the health concerns of the people out there. There is no science. The reason that you cannot find data is because the collection of data has been deliberately blocked.

Senator WATERS: I just want to make sure I am understanding this. Am I right that you have said that during the course of 2013 various senior people assured you that some studies were underway, and then, magically, in 2014 there was a change of position, but it was the same government—that was before the election—

Dr McCarron: Yes.

Senator WATERS: Do you know why the studies were discontinued? Did anyone explain that?

Dr McCarron: No. Only that letter.

Senator WATERS: Only a letter from the subsequent administration saying: 'We decided that, no, there are not 55 flares around somebody's house'?

Dr McCarron: No. The first letter was from the head of hospital and health on the Darling Downs—

Senator URQUHART: There were two separate letters.

Senator WATERS: But that does not address the question, though; it just ignores that recommendation.

Senator URQUHART: Can I just seek clarification. The letter that we are talking about is dated 27 October 2014.

Dr McCarron: Yes.

Senator URQUHART: And that is the first one?

Dr McCarron: The first one, yes.

Senator URQUHART: But the other document you were talking about was a later one?

Dr McCarron: Yes. It was 16 July 2015.

Senator WATERS: I am following that sequence of events, but what I do not understand is: that letter of October 2014 does not address what you called the 'discrete recommendation' for further studies and, in fact, it says that everything is fine. Why the change of position? Did anyone ever say why they so radically changed their position?

Dr McCarron: No. And they keep going back to this and saying that they find that there was no problem—which is not true.

Senator WATERS: Which you say is wrong.

Dr McCarron: It goes round in circles. They did not find that there was no problem; they found that they needed more studies to define, not whether the companies are compliant or not. That is not the issue. The issues are: what are the total coal seam gas emissions and what are the exposures of the residents to those emissions?

Senator WATERS: And the health impacts. Does the letter from Minister Lynham shed any light on the current proposal as to whether to get that information? I am only halfway through it. It is—

Dr McCarron: No.

Senator URQUHART: Okay. Maybe while you finish reading it, Larissa, I might be able to finish my questions. Dr McCarron, your report recommended that the Commonwealth government should legislate a unified standard to protect public health from the effects of unconventional gas development. You talked about that in your opening statement. Given that the states have responsibility for mining regulation, why do you think that the Commonwealth government needs to overlap in this area?

Dr McCarron: In Queensland, the Queensland government completely forgot about the precautionary principle. They did no baseline health studies and, as I implied, failed to gather evidence consecutively, over years. This is something that is planned to be rolled out all over Australia and Queensland is being held up as the happy state with the 4,000 happy farmers and no problem from health effects, but with no evidence to support either scenario, and everybody who is impacted has confidentiality agreements. So there must be some federal oversight on it.

Senator URQUHART: To what extent, if any, do you think that this bill would address those concerns?

Dr McCarron: It would be a very small start.

Senator URQUHART: Have you reviewed the 2014 report on CSG by the New South Wales Chief Scientist and Engineer?

Dr McCarron: I read it, but it was a while ago.

Senator URQUHART: That is okay. I do not expect you to be across all this stuff. The report observed:

- All industries have risks and, like any other, it is inevitable that the CSG industry will have some unintended consequences, including as the result of accidents, human error, and natural disasters.

But the report concluded that the most appropriate response to this risk is:

Industry, Government and the community need to work together to plan adequately to mitigate such risks, and be prepared to respond to problems if they occur.

What would be your response to that particular finding?

Dr McCarron: I would go back to the New York report. Fracking was banned in New York on the basis of public health. Public health has not been examined at all under any auspices, including in the New South Wales investigation. It is inconceivable that you can be talking about these effects, which are so profound and which international studies have shown unequivocally are a problem. The scale of the problem is not known—just that there is definitely a problem. That is not taken into account at all. How are you going to mitigate it? You first have to say whether you are going to do it at all, before you decide whether this is something that you can contain.

You cannot regulate accidents. That is the point—they are accidents. Somebody today told you about that blow-out on the pipe. I can show you what that blow-out on the pipe looked like if you want me to—it is about 20 seconds. But it is really important. There is 90 kilometres of pipeline and they can contain it at one end or the other, but they cannot contain 90 kilometres of a pipe almost 1½ metres wide of high-pressure gas that can be extruded straight into the atmosphere. Everybody who is around there is going to be affected by it. You cannot regulate accidents.

Senator WATERS: Thank you so much for your evidence, Dr McCarron, and for summarising all of the international health studies, because, as you have rightly pointed out, we are yet to make serious inroads into doing domestic health studies, for reasons that escape me. I am trying to both listen to you and read the letters. The letters do not appear to say much, other than it is somebody else's problem. Perhaps that is an unfair summary. That is really all I can detect so far. We will try to establish from the Queensland government—I do not think they have touched on it in their submission—why they discontinued the studies that were on foot. Perhaps we could, as a committee, write and seek an explanation of what the impetus—

CHAIR: Maybe you should direct your questions to Dr McCarron. Perhaps that is something you can discuss with the committee at some stage.

Senator WATERS: I am making that suggestion to the committee and, if the committee does not agree, I will do it myself. We will try to get an answer to that is because it seems like a very important question based on the evidence that you have brought before us. Regarding the Pennsylvania study that was published a week ago is explosive. All your evidence so far is explosive—no terrible pun intended. Why do we not hear more about this? Have you had conversations within the medical community about this? Are there any other bodies that have read your evidence and be similarly horrified by it?

Dr McCarron: I do not understand why there has been such silence on the part of physicians in Australia, and not just in Queensland but throughout Australia. I really do not know. Part of the problem may be doctors' unwillingness to show themselves to be wrong when they happen to be wrong, to stand up and say something and to be shot down, so they just do not stick their head up the above the department at all. I really do not know why it has not eventuated. It could be partly due to around the time that the Queensland government investigation started. It was the time that 14,000 public servants were sacked.

Senator WATERS: Of course.

Dr McCarron: That might have something to do with it. I do not know.

Senator WATERS: Timing wise—I am trying to remember the year. It could well be. Have you mentioned this to the AMA? Do they have copies of your reports?

Dr McCarron: I have been in contact with the AMA from time to time and they have put out various statements. The belief is that current air quality standards have failed to keep up with scientific evidence and key sources of hazardous air pollutions are not subject to routine or independent monitoring, which is an obvious understatement. They are of the opinion that the precautionary principle should stand and if it cannot be shown to be safe then it should not proceed.

Senator URQUHART: Have the AMA commented at all on the health issues that were raised in your study?

Dr McCarron: To my knowledge they have not commented, particularly on the people out at the Tara gas fields. I am not aware that they have.

Senator URQUHART: A causation or a correlation between what you found in your research and the sort of stuff they are talking about comment terms of the monitoring not being—

Dr McCarron: I do not know what they have said about it. I do not think they have said very much.

Senator WATERS: We can certainly take that up with them. I am still try to get to the bottom of what studies are currently under way, if any—

Dr McCarron: In Queensland?

Senator WATERS: In Queensland—by anybody, and ideally by our health department.

Dr McCarron: By the health department?

Senator WATERS: Or anyone.

Dr McCarron: As far as I am aware, it is a trickle-down effect, in terms of whose responsibility it is. The Queensland government devolved responsibility of health to the regions, so the Darling Downs Public Health Unit is responsible for Darling Downs. Any investigations regarding health would have to come out of the Darling Downs Public Health Unit's budget. In terms of feedback from the individual people within that unit, they seem to think that it then trickles down to the local GP in the area, in terms of investigating what might or might not be going on. So there is none that I know of. I know there have been desktop studies, but, as far as any real science is concerned, there is none that I am aware of.

Senator WATERS: And of course there is no requirement for health impact studies at the federal level. There is no requirement even at the state level for a health impact study when an enormous approval like this is issued.

Dr McCarron: No.

Senator WATERS: We will digest the material that you have given us. It is incredibly alarming and I hope that we can give it might some more airing and get to the bottom of what is going on here.

Dr McCarron: Thank you.

CHAIR: Thank you very much, Dr McCarron, for making yourself available, particularly at such short notice, and for your submission. I thank everybody here for taking the time to be here today.

Committee adjourned at 16:05