

NSW Coal Seam Gas Report Card

28 September 2015

One year on from the Final Report into coal seam gas by the NSW Chief Scientist, the New South Wales Government has still not implemented her most important recommendations.

A general report card on the status of NSW Government policy on CSG at this important juncture shows that it is falling short on the four big issues of concern to communities: **water, health, protection of farmland, and landholder and community rights.**

Lock the Gate Alliance has produced a summary report card of NSW Government performance in addressing the four most serious concerns that have been expressed by the community about coal seam gas, and a separate, more detailed analysis of the extent to which the Government is delivering on the Chief Scientist recommendations.

The results indicate that the overall implementation of CSG policy in NSW is falling short of community expectations, and that delivery of the Chief Scientist recommendations has been poor overall. The NSW Government has cherry-picked recommendations that suited it, and appears to have ignored those that did not.

As a result, there is still extensive community opposition to the industry and the regulatory framework remains fragmented, inadequate and poorly understood.

At the request of the NSW Government, the NSW Chief Scientist & Engineer was asked to review coal seam gas (CSG) related activities in NSW, “with a focus on the impacts of these activities on human health and the environment.”¹ The Review came about because “Government recognises that gas development in NSW concerns some of our communities, and that mistakes have been made”².

The NSW Government’s effort to win a social licence for the gas industry in NSW, has been largely based on promising to listen to the Chief Scientist and implement her recommendations. Minister Roberts emphatically declared in the Gas Plan: “We have accepted all the Chief Scientist and Engineer’s recommendations.”

The failings exposed by this report card are particularly damning, because it was the Chief Scientist’s recommendations which formed the basis for the NSW Government to push ahead with the industry. Poor implementation of those recommendations is affecting lives and impacting on communities.

¹ Final Report of the Independent Review of Coal Seam Gas Activities in NSW, September 2014, TOR

² NSW Government Gas Plan



North West NSW declares:
3 million hectares gasfield free!
96%

REPORT CARD AGAINST COMMUNITY CONCERNS

ISSUE	REVIEW	SCORE
Health	An extensive body of new research from the United States has revealed that there are very serious health concerns with unconventional gas mining, and the Chief Scientist acknowledged that the potential health impacts in NSW were unknown. Despite the good steps taken to implement a 2km buffer on urban areas, communities are still being exposed to dangerous air pollutants via venting and flaring at Gloucester, Camden and Narrabri, and there is still no plan for understanding and preventing the health impacts of CSG.	1/10
Water	<p>There is still no groundwater mapping of the areas threatened by CSG, and there are no protection zones in place for even our most precious groundwater sources - alluvial aquifers of the Gunnedah Basin or recharge areas of the Great Artesian Basin - or for important drinking water catchments. However, two licences have been bought back over drinking water catchments.</p> <p>Promises to ban evaporation ponds and require Aquifer Interference Approvals have not been enshrined in legislation, risky irrigation experiments have been approved at Narrabri and moves are afoot to allow aquifer re-injection of wastewater despite the severe and well-documented risks.</p>	3/10
Protection of farmland	Measures to protect Critical Industry Clusters in the Hunter Valley in 2013 were positive, but no other Critical Industry Clusters have been protected. There are no other legal measures available to protect important farmlands, and the 'Gateway Panel' that was supposed to protect Strategic Agricultural Land has not been effective in protecting anything. However, several licences covering important farmlands have been bought back.	4/10
Landholder & community rights	<p>Communities are being prevented from challenging the merits of mining and gas projects in court. There are still no right for landholders to say "no" to CSG, although the NSW Government has negotiated non-binding commitments from two companies not to force access against landholder wishes.</p> <p>There is no mechanism to respect the decision of over 240 communities around the state who have declared themselves Gasfield Free, and the Northern Rivers is still waiting for regional protection despite 87% of people voting against the industry in polls and all 7 local councils passing resolutions against it. However, the NSW Government acted to suspend Bentley drilling and has bought back a number of licences of concern to the community, including in the Northern Rivers.</p>	4/10

THIS ROAD IS
**GASFIELD
FREE**

NO
NARRABRI
GASFIELD

FORMS
NOT
GAS

HIGHEST COMMUNITY CONCERN and REGULATORY GAP - HEALTH

In her Final Report, the NSW Chief Scientist noted that “*potential human health risks from CSG activities are consistently raised as an issue of concern to the community.*” The Chief Scientist’s Initial Review in July 2013 conceded that “*considerable work and research still needs to be conducted by researchers, government and industry to determine the potential risks to health from activities related to CSG extraction.*”³ A health study commissioned by the Chief Scientist – published in August 2014 - found that while “*there are a number of potential threats to health associated with the CSG mining activity, the epidemiological studies needed to test these claims are yet to be conducted.*”

One year on, there has still been no health study conducted in NSW, or any apparent advancement in research or knowledge about the risks. Research in other jurisdictions indicates that action to understand and prevent health impacts from CSG is urgently needed. The Concerned Health Professionals of New York produced a compilation of the evidence for the risks and harms of unconventional gas in December 2014, bringing together findings from scientific and medical literature, government, industry, and journalism. They found that, “*public health problems associated with drilling and fracking are becoming increasingly apparent. Documented indicators variously include increased rates of hospitalization, ambulance calls, emergency room visits, self-reported respiratory and skin problems, motor vehicle fatalities, trauma, drug abuse, infant mortality, congenital heart defects, and low birth weight.*”

What do the experts say?

Australian Medical Association

The AMA passed a motion in 2013 calling on Australian Governments to ensure all coal seam gas operations are “*subject to rigorous and independent health risk assessments before they are allowed to proceed.*”⁴

Doctors for the Environment

“*Doctors for the Environment Australia regards the development of coal seam gas mining in NSW and Australia as a significant threat to public health. The current level of assessment, monitoring and regulation of CSG exploration and mining activities in Australia is inadequate to protect the health of current and future generations of Australians.*”⁵

Public Health Association

“*Existing CSG activity needs to have adequate monitoring for potential health effects as they emerge and to give the public confidence that government is concerned for the wellbeing of its citizens holistically and beyond the provision of energy.*”⁶

³ Initial report on the Independent Review of Coal Seam Gas Activities in NSW, NSW Chief Scientist & Engineer July 2013, pg 98

⁴ AMA. May 2013. “AMA calls for coal seam gas health checks.” Media release. <https://ama.com.au/media/ama-calls-coal-seam-gas-health-checks>

⁵ [Doctors for the Environment Australia](http://dea.org.au/images/uploads/submissions/Review_of_CSG_in_NSW_-_Chief_Scientist_Submission_05-13.pdf). May, 2013. Submission to Chief Scientist’s review.

[http://dea.org.au/images/uploads/submissions/Review_of_CSG_in_NSW - Chief Scientist Submission 05-13.pdf](http://dea.org.au/images/uploads/submissions/Review_of_CSG_in_NSW_-_Chief_Scientist_Submission_05-13.pdf)

⁶ Submission to Chief Scientist Review of CSG. http://www.chiefscientist.nsw.gov.au/_data/assets/pdf_file/0012/30027/CSG-Review-Submissions-0191.pdf

NSW GAS PLAN v CHIEF SCIENTIST RECOMMENDATIONS

The NSW Government claims that the NSW Gas Plan accepts the Chief Scientist's recommendations, but as outlined below, it fails to deliver on most. Acceptance is merely a form of words: the question remains as to whether the NSW Government is actually implementing the recommendations.

Our analysis shows that the Government has failed to deliver on 8 of the 15 recommendations, and only delivered partially on the remaining 7 recommendations. The Government's program of buying back gas exploration licences has greatly reduced the area of the state immediately threatened with to CSG exploration. Since November 2014, 16 PELs have been bought back, reducing the area of the State where exploration is licenced. But the scheme has not been targeted in response to risk, instead buying licences only where there are willing sellers.

While some important areas, such as the drinking water catchments for Sydney and the Central Coast, have had the immediate threat of gas exploration removed in this way, and applications for new licences have been frozen, there is no permanent protection in place for drinking water catchments, or other areas like the Great Artesian Basin recharge area, productive aquifers and farmland or the Northern Rivers. There is nothing to stop CSG licences being re-issued in areas where they have been cancelled or bought back this year.

While there has been progress on some aspects of CSG regulation, like Codes of Practice for produced water storage, environmental management and community consultation for exploration activities, and minimum standards for exploring companies, the more fundamental matters raised by the Chief Scientist are all still in the too-hard basket: i.e. deciding where CSG should be allowed, establishing an expert group to provide advice and comprehensive risk management.

RECOMMENDATION 1: Establish a 'World Class' regime for CSG extraction

Response: **Fail** - A review by the NSW EDO has shown that NSW regulation falls far short of world class practices in place elsewhere on the globe.⁷

RECOMMENDATION 2: Ensure clear and open communication

Response: **Partial** – While some material is made available through the new “Common ground” database, the assessment and approval process for gas exploration is conducted out of public view.

RECOMMENDATION 3: Strengthened benefits and protections for communities, including fees & levies on CSG companies

Response: **Partial** – The Government is developing a voluntary Community Benefits Fund, and promises statutory compensation and benefits sharing for landholders, but it is unclear if these benefits will come solely from

⁷ EDO NSW. December 2014. *A review of NSW Coal Seam Gas Regulation and Best Practice*.
http://www.edonsw.org.au/a_review_of_nsw_coal_seam_gas_regulation_and_best_practice

companies, or partially from Government royalties. Protections are still wanting: the Government has not yet implemented the recommendations of the Walker Review into the land access arbitration process at this stage.

RECOMMENDATION 4: Full cost recovery of Government regulation and support for CSG

Response: **Fail** - Instead of committing to this, the Government response just says it will “aim for this over time.” (Gas Plan – Government Response to Chief Scientist)

RECOMMENDATION 5: Carefully restrict areas where CSG is allowed (taking into consideration geology, hydrogeology and land use)

Response: **Fail** - The Government has promised to assess environmental, economic and social factors before CSG companies are granted a new exploration licences. Though new licence applications were cancelled and frozen, the promised “strategic release framework” to prevent new licences being issued over inappropriate areas has not yet been delivered. Furthermore, the framework will not apply to areas with existing licences, like those covering the recharge area of the Great Artesian Basin. Many licences have been bought back, including some that threatened Sydney’s drinking water and wine-growing in the Hunter, but the buy-back is directed by the licence holders, not by objective criteria for where CSG is appropriate.

RECOMMENDATION 6: Move to a single Act for all onshore subsurface extraction

Response: **Fail** - Non-committal: “We expect this will take time” and we “Will consult broadly with the NSW community.” (Gas Plan – Government Response to Chief Scientist)

RECOMMENDATION 7: Separate allocation of titles from regulation of gas drilling and mining and establish a single, independent regulator

Response: **Partial** - Govt did the *reverse* of this recommendation, giving approval of exploration drilling back to the Minister for Resources and removing the requirement for an EIS for exploration projects with more than five gas wells. The EPA is now the “lead regulator” but does not have consent power for gas exploration or production activities.

Recommendation 8: That Government move towards a target and outcome-focused regulatory system, with three key elements: targets, penalties and automatic monitoring

Response: **Partial** – There is work being done to tighten and clarify the regulatory system, and Codes of Practice are being developed for well construction and decommissioning and water management, but the promised “Automatic monitoring processes that can provide data which will help detect cumulative impacts at project, regional and sedimentary basin scales” are not in place. Approval was given in August for a water treatment plant at Santos’ gas exploration in the Pilliga forest prior to key questions about waste management being answered.

RECOMMENDATION 9: A robust and comprehensive policy of insurance and environmental risk coverage

Response: **Fail** - No commitment to implement the changes recommended, instead says it 'will further consider whether there are additional benefits that could be gained' from it.

Recommendation 10: That Government commission the design and establishment of a Whole-of-Environment Data Repository for all State environment data

Response: **Partial** – Development of this database is underway, but it is not expected to be delivered this year, and coal seam gas exploration activities are still underway.

RECOMMENDATION 11: Develop a centralised Risk Management and Prediction Tool for extractive industries in NSW

Response: **Fail** - The Government committed to “investigate risk-based approaches and tools,” but fails to commit to risk assessments *prior to project approval* as recommended by Chief Scientist elsewhere in her final report.

RECOMMENDATION 12: Establish a standing expert advisory body on CSG, comprising experts from the biological sciences, medicine and the social sciences, to advise on a range of things including specific research on CSG (ie research into fate & transport of chemicals etc)

Response: **Fail** - The Government has announced \$3 million in funding for CSIRO's Gas Industry Social and Environmental Research Alliance (GISERA), saying that this "responds to" to this recommendation. GISERA is largely funded by gas companies and does not provide the independence or expertise recommended by the Chief Scientist. It's not clear if there is any intention to do more than this, and there are concerns that the Standing Expert Advisory body will never be created.

RECOMMENDATION 13: Establish a formal mechanism consisting of five steps requiring companies/regulators to, among other things, identify water impacts, consequences, pathways and likelihood, and construct regional models to address cumulative impacts

Response: **Fail** - No specific commitment to implement the changes recommended, merely stating that it will 'improve governance and accountability of water data and water management.' There are groundwater baseline projects in development, and codes of practice developed for produced water, but jobs and expertise have been cut from the Department of Primary Industry water section.

RECOMMENDATION 14: Mandatory training and certification for all CSG personnel and public service staff

Response: **Partial** - Government agrees to training but not certification. It has created a guideline outlining recommended minimum qualifications for persons working in positions operating a petroleum drilling rig and drilling for petroleum, but these qualifications are not mandatory.

RECOMMENDATION 15: Develop a plan to manage legacy issues and transition existing projects to new regulatory system

Response: **Fail** - We are unaware of any progress to plan to manage legacy issues, and there is no mention of how existing projects will be transitioned to a new regulatory system. In fact, there are grave concerns that projects are being pushed through at Gloucester and Narrabri before the new system is in place. A Rehabilitation Code of Practice for exploration activities only has been developed.



YEAR IN REVIEW

28 September 2014	Final Chief Scientist report released
13 November	NSW Government releases "Gas Plan" in response - predicated on increased gas demand and expected supply gap.
19 December	Revelations that Transpacific was fined by Hunter Water for dumping CSG flow-back water into the Kooragang Island sewer system in Newcastle
27 January 2015	Gloucester gas exploration suspended after BTEX chemicals are found in two of its four CSG wells and a water storage tank.
25 February	Parliamentary committee recommends no further CSG be contemplated until all the Chief Scientist's recommendations are implemented
5 March	First gas exploration licences bought back.
6 March	AGL fined \$15,000 for gas leak at Camden gas field.
16 March 2015	Sydney catchment licence (PEL2) bought back
28 March 2015	Four seats change hands on mining and CSG issues at the NSW State Election and a further 7 show major swings against the Government on the issue. The largest swing in the state (27% in Ballina) and the loss of the seat by the National Party to the NSW Greens due almost entirely to opposition to CSG.
13 April	AEMO <i>2015 Gas Statement of Opportunities</i> dramatically revises down expected NSW gas demand, and reveals there is no expected supply gap.
16 April	AGL suspends CSG waste water irrigation trial regulators found it left behind unacceptably high levels of salt and heavy metals
24 April	Metgasco wins court case overturning suspension of Rosella drilling program, announces intention to return to Bentley to drill for gas.
18 May	AGL cleared to continue exploration at Gloucester after BTEX scare, but cannot resume without a solution for flow back water.
31 May	Discussion Paper on Community Benefits Fund released for comment.
10 June	Approval given by Dept Resources and Energy for AGL to store fracking "flow-back" water in open dams at Gloucester gas exploration site.
1 July	Improved Management of Exploration Regulation introduced, new codes of practice and guidelines take effect and EPA becomes "lead regulator."
20 August	Santos' Leewood water treatment approved, despite no plan being in place for brine management, and inclusion of an experimental and risky irrigation trial
13 August	NSW Greens <i>Petroleum (Onshore) Amendment (Prohibit Coal Seam Gas) Bill 2015</i> is narrowly defeated in the NSW Upper House.
25 August	ALP introduces <i>Coal Seam and Other Unconventional Gas Moratorium Bill 2015</i> to parliament, which would deliver the big ticket items missing from Gas Plan.
26 August	MOU between NSW Government agencies on gas regulation released.
30 September	Final deadline for gas exploration licence buyback.