

07 July 2015

Keir Delaney,

Secretary, Environment & Planning Committee,

Parliament House, Spring Street, Melbourne, VIC 3002

Re: Submission to Victorian Parliamentary Inquiry on Onshore Unconventional Gas Mining

Thank you for inviting submissions regarding Unconventional Coal Seam Gas Mining Exploration in Victoria.

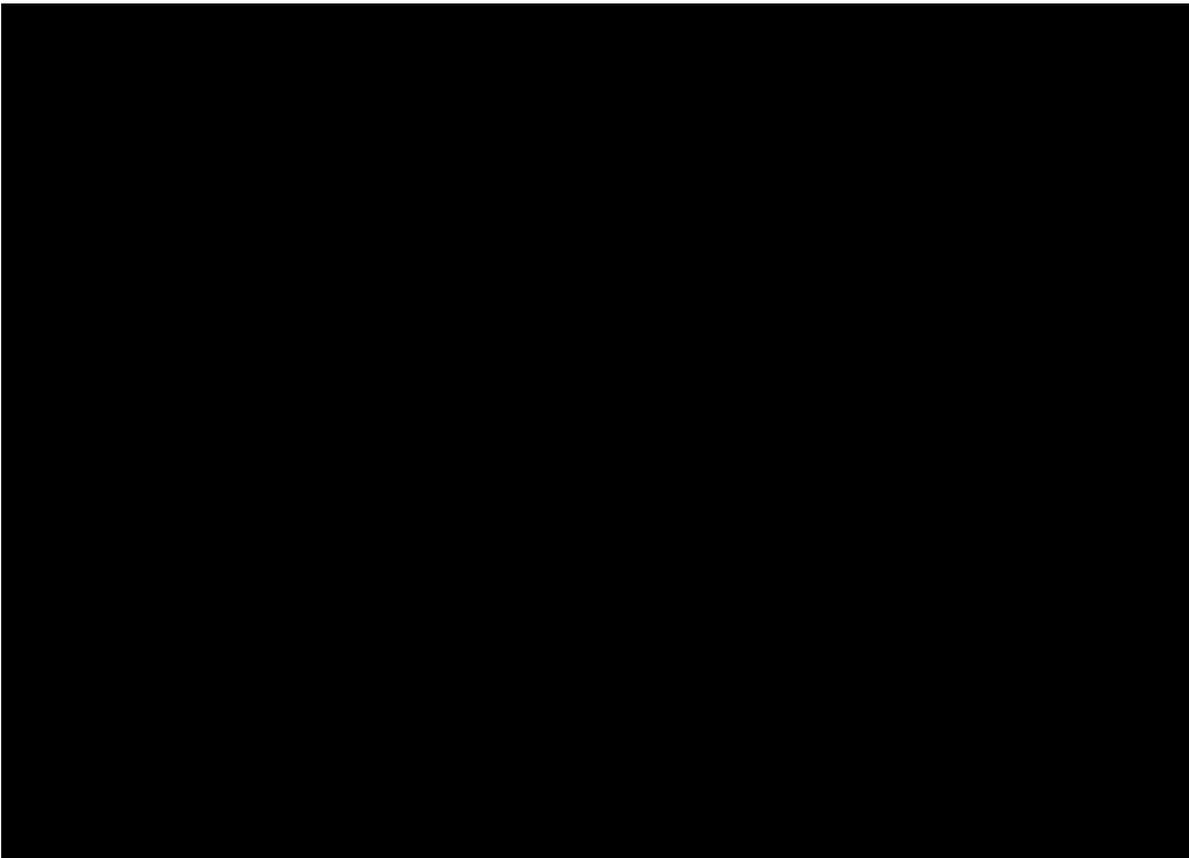
We, the paediatric doctors of the Barwon region, are unanimously opposed to any form of unconventional gas mining proceeding in the Geelong / Surfcoast / Bellarine areas given the concerning emerging data related to environmental and associated health impacts.

Having carefully appraised **the emerging safety data, it is clear that the proposed gas extraction practice poses an unacceptable risk to our local environment and to the health of our community. With our duty of care to the children of the Barwon region in mind, we strongly urge the Victorian Government not to approve any UCSG / Fracking exploration or mining permit applications.**

We support an extension to the current moratorium to UCSG / Fracking while data from existing sites around Australia and internationally is being analysed and more robust risk estimation becomes available.

For ministers interested in the data that has led our group to take this position regarding the need for caution, **please see the following brief appendix with links to the most relevant resources.** We would be glad to provide more information or advice upon request.

Yours Faithfully,



Appendix- Research summary links- Health risks of UCSG

The following summary points below are from the recent **editorial in the British Medical Journal** in response to Public Health England's draft report regarding the safety of UCSG:

'Mistaking best practices for actual practices' <http://www.bmj.com/content/348/bmj.g2728>

- **Public Health England's draft report** thoroughly assesses the peer reviewed scientific literature on the **public health implications of extracting shale gas**.
- **The conclusion that shale gas operations present a low risk to public health is not substantiated by the literature.** The correct conclusion that Public Health England should have drawn is that the **public health impacts remain undetermined and that more environmental and public health studies are needed.**
- Furthermore, the report incorrectly assumes that many of the reported problems experienced in the US are the result of a poor regulatory environment. This **position ignores many of the inherent risks of the industry that no amount of regulation can sufficiently remedy**, such as **well casing cement failures and accidental spillage of waste water.**
- More attention should have been paid to drilling in areas that are densely populated. **Recent evidence suggests a higher prevalence of some adverse birth outcomes for those living in closer proximity.**

An American summary of some of the emerging health concerns is the '**Compendium Of Scientific, Medical, And Media Findings Demonstrating Risks And Harms Of Fracking (Unconventional Gas And Oil Extraction) July 10, 2014**' - by 'Concerned Health Professionals of New York' where the State Assembly recently passed a three-year moratorium on fracking. See <http://concernedhealthny.org/wp-content/uploads/2014/07/CHPNY-Fracking-Compendium.pdf> It includes a summary of the **emerging paediatric data.**

Referenced in the compendium (and which was also quoted in the BMJ editorial above) monitored a cohort of 124,842 births between 1996 and 2009 in rural Colorado, reporting **an association between density and proximity of natural gas wells within a 10-mile radius of maternal residence** and found that **Neural Tube Defects e.g. Spina Bifida (NTD)** prevalence was associated with the highest exposure (**OR = 2.0, 95% Confidence Interval: 1.0 to 3.9**, based on 59 cases), compared to no gas wells within a 10-mile radius. Also the **prevalence of babies born with Congenital Heart Defects (CHD) increased the closer the pregnant mother lived to natural gas wells within a 10 mile radius**, with the closest exposure group being 1.3 times more likely to have a heart defect (95% Confidence Interval: 1.2 to 1.5). This is one of many concerning associations in the emerging scientific data, and while it is statistically significant, it does not yet demonstrate causation. It does however warrant further scientific enquiry, and caution by decision makers in potential UCSG mining regions such as ours.

The potential human health impacts has been explored in the **submission to the Australian Chief Scientist by the Doctors for the Environment Group** http://dea.org.au/images/uploads/submissions/Review_of_CSG_in_NSW_-_Chief_Scientist_Submission_05-13.pdf

Most recently, the second **Lancet Commission on Health and Climate Change** has been released. This report argues that **tackling climate change could be the greatest global health opportunity of the 21st century, an opportunity that now requires political will to realise.** The following excellent **3 minute video** summary of the current health risks of ongoing fossil fuel based energy consumption at current or increasing levels is sobering. It highlights the **health co-benefits of policy directed at shifting to renewable energy development.**

<https://www.youtube.com/watch?v=d4YCPqz8NQU>

Specifically regarding further gas infrastructure investment, the Commission reports **"The time when fuel switching could decarbonise the global economy sufficiently quickly to avoid dangerous climate change has almost certainly passed. It is increasingly difficult to justify large-scale investment in unabated gas-fired infrastructure."**