

From: John & Ruth Graham [REDACTED]
Sent: Wednesday, 23 September 2015 4:28 PM
To: EPC
Subject: Hamilton Conventional gas enquiry

The Chairman,
Enquiry panel,

Thank you for the brief opportunity to say something at the Hamilton Enquiry.

My name is John Graham, a retired Agricultural Scientist, a 40 yr resident of Hamilton. My agricultural research involved animal production and greenhouse gas measurement, both methane and nitrous oxide. I am completely against any form of unconventional gas production.

Most of the points that needed to be said had been covered on the day, but I thought that there were some points that weren't adequately covered.

These were the points I briefly covered this afternoon.

1 Should this abhorrent industry proceed, there needs to be put into legislation that the gas companies must rehabilitate the land back to its original state upon decommissioning the gas well. That should include getting rid of any left over damed water or byproducts. In the past companies have been able to walk away, leaving tailings dams full of saline water and waste.

2 There should be compulsory banking of funds for insurance purposes should an environmental accident happen well beyond the life of the well. If something happens to damage the environment 10 years after the gas production has ceased, who is there to pay for the damage.? The rate or tax payers should not have to cover the cost of any long term effects, certainly not the farmer. There needs to be an insurance/compensation policy in place should something happen beyond the life of the gas well.

3 Currently there is NO background information regarding normal emissions in areas where gas production is proposed. Without background emissions monitoring information it would be difficult to prove of unwanted emissions should they be alleged to have occurred. Thus companies would be able to walk away from alleged breaches (ie methane bubbling rivers and streams etc). Legislation needs to be put in place whereby a proposed gas site be monitored for emissions 12 months prior to any activity taking place. Problems of this nature have occurred in NSW and QLD and elsewhere where fracking has taken place.

4 Water use- there was no mention of the absolutely huge amount of water required for hydraulic fracking. Generally, **5 - 36 million litres of water may be used to frack a well**. Some wells consume much more. **A well may be fracked multiple times**, with each frack increasing the chances of chemical leakage into the soil and local water sources.

The New York State Department of Environmental Conservation estimates each well, per frack, will require **10.9 to 35.4 million litres of water**, that water will need to come from somewhere! Our aquifers are already under stress, and indeed in some areas of our western Victorian aquifer, when the large centre pivots are switched on for irrigation purposes on the border of Vic and SA, domestic aquifer levels of nearby residents drop below the level of their submersible pumps!!

If gas companies get that water from a deep saline aquifer as MECRUS stated they would, where were they going to deposit that saline water after use (a question that Samantha asked re disposal of by products but

MUCRUS failed to answer). Where will that saline water be deposited??, it is too salty for stock water, and would certainly affect the healthiness of our rivers and streams should it be deposited there!!!

Thank you for the opportunity to say a few words.

Kind regards
John Graham



Sent from me