

**From:** Barry Nicholson  
**To:** [fracking inquiry](#)  
**Subject:** Website function missing and comments on inquiry  
**Date:** Tuesday, 21 February 2017 1:40:40 PM

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Dear Sirs,

the latest document on this inquiry indicates there is an ability to provide feedback on the website ("Have your say"). In fact there does not appear to be any such facility present, as far as I could determine.

In reading the document, the technical aspect mentions "Shales have low porosity". This is incorrect. Shale porosity is similar to other clastics, and is often in the 30% range, as can be measured on porosity logs. Permeability is very low, though, due to the small grain size.

Water used in fracturing does not need to be potable, or even fresh. This fact appears to be missing from the document. Other technical papers on studies of fracturing (e.g. Geochemistry of Marcellus Shale) emphasise that it is the formation water, not the fracturing fluid, that is the main source of contamination in flowback waters. Consequently, it is examination of the fluids present in the target formations that needs to be considered in the risk analysis.

The only other comment I have at this stage is that the broad review of the potential risks are so common that they have been covered to a massive degree by other studies and, indeed, by conventional oil and gas, as well as farming activities. The "increased" risk of weed transfer, for example, is in no way specific to hydraulic fracturing and would be present in, for example, increased food production efforts. It's questionable why such issues not specifically relevant to hydraulic fracturing operations should be in the remit, given the drilling of potable water wells, for example, would represent a much higher threat.

Regards,

Barry Nicholson