

SHOULD BSDA MEMBERS BE CONCERNED ABOUT FRACKING?

James Dodds, Envireau Water

“Fracking”, or more correctly Hydraulic Fracturing is the technique used to exploit natural gas from shale rock. Fracking involves high pressure injection of water containing small amounts of sand and very low concentrations of chemicals into deep, horizontally drilled boreholes to fracture the rock. The fractures are held open by the sand, allowing methane contained in the rock to flow to surface via conventional gas production wells. The chemicals are used to improve gas flow and limit corrosion and biochemical growth.



Exploratory Drilling at a site in the UK

Hydraulic Fracturing has gained significant, but not always positive, media coverage following the rapid development of the shale gas industry in the United States. One particular topic of concern is whether fracking could present a risk to human health and businesses through contamination of groundwater and drinking water supplies.

Images of ‘taps on fire’ make easy headlines and groundwater abstractors in the UK, such as those found in the soft drinks and water bottling sectors are quite rightly concerned about the potential impacts Hydraulic Fracturing could have on them, if the industry gains momentum in the UK.

Whilst there have been some cases in the US where Hydraulic Fracturing may have given rise to pollution of groundwater, these are very specific cases related to largely unregulated developments and the implementation of thoroughly inadequate (or no) proper well construction techniques.

Disappointingly for those who like a good headline, the possibility of these events happening in the UK is essentially none. The key reasons for this are:

- The onshore gas industry is regulated by the Environment Agency (amongst others), who will only issue licences and permits once they are satisfied any potential risks to the environment have been properly considered and adequately addressed.

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- Most target Shale Gas reserves in the UK are deep (over 1.5km or more), which means there is no chance of hydraulic connection between the reserves and useful groundwater used for drinking water, which is found at much shallower depth (usually less than 400m).
 - The only realistic chance of pollution to groundwater is through well casing failure. In recognition of the severity of the potential impacts a well casing failure could have, the design and construction of shale gas wells is carefully regulated by the HSE and the Offshore Installations and Wells Regulations (also applicable to onshore operations), making the risk of failure essentially zero.

The residual risks posed to groundwater and groundwater abstractors from hydraulic fracturing here in the UK are therefore negligible. That's not to say there is absolutely no risk, but that the risks are very low, well understood and can be adequately mitigated.

Far greater risks exist to water abstractors than deep Shale Gas developments. These include new or increased abstractions close to existing sources or activities close to existing sources that could impact groundwater quality.

As with any industrial development, there are risks associated with works at ground level. While mitigated through the county planning process and environmental permitting system, it is important that any sources owned or controlled by members are considered within risk assessments carried out by applicants; and it is the member's best interest to check via engagement in any public consultation or contact from the developer, that this is done.

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