



Department
for Environment
Food & Rural Affairs

T: 08459 335577
helpline@defra.gsi.gov.uk
www.gov.uk/defra

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REQUEST FOR INFORMATION: Petroleum Exploration & Development Licences – Bath, Somerset and Bristol

Thank you for your request for information about Petroleum Exploration and Development Licences (PEDLs) covering parts of Bath, Somerset and Bristol (PEDL226, PEDL227, PEDL228) specifically:

- the long term risks to groundwater and drinking water for agriculture and local constituents;
- the use of fracking chemicals by “non-transparent private organisations”;
- the impact of increased water demand and the effect on constituents’ water bills and local agriculture;
- the disposal of toxic materials from the drill sites;
- whether Defra objects to, or supports, unconventional gas exploration in the aforementioned areas and on what evidence that conclusion is based;
- whether risks involved with coal and shale drilling in these areas are lesser than the risks posed by the proposed asbestos landfill dump in Stowey Quarry in 2011;
- and whether the sale of the aforementioned licences by DECC contravene legislation that covers Chew Valley Lake as a Drinking Water Protected Area.

We received your request on 19 February 2014.



As you know, we have handled your request under the Environmental Information Regulations 2004 (EIRs). I have tried below to address each of your concerns in turn.

PEDLs are issued by DECC and these licences give exclusive rights to explore for, and exploit, hydrocarbons within a specific area. Licences themselves do not give consent for drilling, hydraulic fracturing or any other operations. Therefore the issuing of PEDLs themselves present no environmental risk and any assessment of potential subsequent activity can only be considered at this stage in general terms. Before any drilling could commence in England operators would need:

- Landowner(s) agreement
- Planning permission, which may require an environmental impact assessment
- Environmental permits from the Environment Agency.
- Their plans examined by the Health and Safety Executive, and an independent competent person to review the well design
- Consent for drilling or production from the Department of Energy and Climate Change

Specific proposals to drill for onshore oil and gas would be assessed on a site by site basis and no permissions to drill will be granted where to do so would present an unacceptable risk to the environment, including our water supplies.

Long term risks to groundwater and drinking water/ use of fracking chemicals

The Environment Agency requires full disclosure of chemicals used in fracking in England. The Agency will make an assessment of the chemicals an operator proposes to use and will not authorise the use of hazardous substances for any activity, including hydraulic fracturing, where there is an unacceptable risk they would enter groundwater. The Agency may restrict or prohibit the use of any substances where they would pose an environmental risk.

Impact of increased water demand and the effect on constituent's water bills and local agriculture

Estimates for the volumes of water vary according to site. More water would be required at a site undertaking hydraulic fracturing than for a conventional oil or gas well. However, to put this in context, the estimated annual water requirements for a large-scale industry would equate to less than 0.2% of the 11,400 billion litres of water that is currently abstracted in England and Wales each year. Fracked wells do not use a constant supply of water and are likely to be fracked only a few times in a ten year period.

So far, water for fracking operations has been provided by local water companies. Water companies are obliged to produce, and then update every five years, a long-term plan which takes account of the need to ensure there is enough water in our rivers and aquifers to support healthy ecology in our rivers and wetlands and protect the interests of existing

lawful users of water. Therefore, water companies will assess the amount of water available before providing it to operators.

Water UK and UK Onshore Operators Group (UKOOG) have recently signed a Memorandum of Understanding. This will provide an important mechanism, early on in the planning process, for water companies and oil and gas operators to engage with each other.

The disposal of toxic materials from the drill sites

Fracking wastewaters typically contain salt, natural organic and inorganic compounds; chemical additives used in fracturing fluid and may contain some Naturally Occurring Radioactive Materials (NORM), picked up from deep underground.

Flow-back fluid can either be treated and re-used on-site or taken to a permitted wastewater treatment works. Any treated water leaving the waste-water treatment works will have to comply with that works' environmental permits, which ensure protection of local people and the environment. Open storage lagoons would not be allowed in England.

Whether Defra objects to, or supports, unconventional gas exploration in the aforementioned areas and on what evidence that conclusion is based

The Government is encouraging the safe and environmentally sound exploration for shale gas to determine its potential. We want to develop a safe, cost-effective and sustainable unconventional hydro-carbon sector. Appropriately regulated, unconventional gas could be a significant contributor to UK growth and energy security. Whether drilling consents are given in any specific instance will depend upon a site specific assessment of risk.

Comparison with the proposed asbestos landfill dump in Stowey Quarry in 2011 and whether the sale of the aforementioned licences by DECC contravene legislation that covers Chew Valley Lake as a Drinking Water Protected Area.

It is not possible to compare site specific considerations by a planning authority for a landfill site with as yet unspecified potential future oil or gas sites. As explained above, the PEDL licence does not give permission to drill. No permission to drill will be given if to do so would present an unacceptable risk to drinking water.

For further information on PEDLs please visit the DECC pages on the Govt.Uk website. As part of a consultation on the forthcoming licence round DECC are consulting on an Environmental Report considering potential impacts of activity that could follow the issuing of licences. The report and consultation can be found here:

<https://econsultation.decc.gov.uk/decc-policy/consultation-env-report-further-oil-gas-licensing/>

In keeping with the spirit and effect of the EIRs, and with the government's Transparency Agenda, all information is assumed to be releasable to the public unless exempt. Therefore, the information released to you will now be published on www.gov.uk together with any related information that will provide a key to its wider context. Please note that this will not include your personal data.

I attach Annex A, which explains the copyright that applies to the information being released to you.

I also attach Annex B giving contact details should you be unhappy with the service you have received.

If you have any queries about this letter, please contact me.

Yours sincerely

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Annex A

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Annex B

Complaints

If you are unhappy with the service you have received in relation to your request you may make a complaint or appeal against our decision under section 17(7) of the FOIA or under regulation 18 of the EIRs, as applicable, within 40 working days of the date of this letter. Please write to Mike Kaye, Head of Information Standards, Area 4D, Nobel House, 17 Smith Square, London, SW1P 3JR (email: requestforinfo@defra.gsi.gov.uk) and he will arrange for an internal review of your case. Details of Defra's complaints procedure are on our [website](#).

If you are not content with the outcome of the internal review, section 50 of the FOIA and regulation 18 of the EIRs gives you the right to apply directly to the Information Commissioner for a decision. Please note that generally the Information Commissioner cannot make a decision unless you have first exhausted Defra's own complaints procedure. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF