

Department of Energy & Climate Change 3 Whitehall Place, London SW1A 2HD www.decc.gov.uk

Our ref: 12/0296

16 March 2012

### FREEDOM OF INFORMATION REQUEST 12/0296

Your e-mail made the following request:

I am writing to request information relating to shale gas exploration under the Freedom of Information Act (2000).

The information that I would like is:

- 1) The locations where shale gas wells have been identified?
- 2) Who owns exploration or fracking permits on these sites?
- 3) Which energy companies have declared that they used the hydraulic fracking method of shale gas extraction, and on which sites is this process used?
- 4) A copy of the exploration licence granted by the DECC to Cuadrilla for the Bowland shale site and any subsequent drilling licenses.
- 5) Information on the date when fracking started at this site
- 6) Results of chemical testing on waste water from the Bowland shale, including the dates of each test.
- 7) A list of known chemicals used in the fracking mix at the Bowland site
- 8) Information on whether earthquakes/tremors around the Bowland shale including the dates of each such event, could be associated with the fracking.
- 9) All correspondence between DECC and Cuadrilla or its representatives concerning the Bowland shale site since fracking began

If any of these information is already in the public domain, please tell me where it can be found. Additionally if this request exceeds the cost limit I would like to have information relating to points 1-5.

We have considered your request in accordance with the Environmental Information Regulations 2004 (EIRs) as the information you have sought disclosure of, does in our view, fall within the definition of 'environmental information' as stated in the EIRs. Responses to your questions are set out below:



#### 1) The locations where shale gas wells have been identified?

Shale gas exploration drilling is only taking place in a small number of locations within the UK at present. The most active drilling area and the only one where hydraulic fracturing (fracking) for shale gas has been carried out is at Cuadrilla's Preese Hall 1 well near Blackpool. Two exploration wells have been drilled and a further well is currently being drilled. There has also been drilling activity in South Wales and in Cheshire – see below.

### 2) Who owns exploration or fracking permits on these sites?

Petroleum licences are not specific to shale gas and do not give permission for operations, but grant exclusivity to licensees in relation to petroleum appraisal and exploration within a particular licence area. (Further consents from DECC are required for any drilling operation, or for production.) Shale gas prospectivity was identified by some applicants in the last (13th) onshore licensing round with those licences awarded in 2008. There are also a number of companies who were awarded licences in earlier onshore rounds, before shale gas prospectivity was identified, and some are now reassessing the shale potential on these older licences.

Any drilling and/or fracking requires planning permission, and subsequent drilling consent from DECC. They also have to be notified to the relevant environment agency (in England and Wales, the Environment Agency) and the Health and Safety Executive, before operations commence. The Agency and the Executive have powers to impose conditions, or halt operations, if not satisfied with the operator's proposals.

Following the grant of planning permission, consent has been given to drill for shale gas in the following locations:

Well Name	Company	Location
Preese Hall 1	Cuadrilla	Poulton-le-Fylde, Lancashire
Grange Hill 1	Cuadrilla	Poulton-le-Fylde, Lancashire
Becconsall 1	Cuadrilla	Banks, Lancashire
Banwen 1	UK Methane	Neath, South Wales
St Johns 1	UK Methane	Maesteg, South Wales
Ince Marshes 1	IGAS	Frodsham, Cheshire

The drilling consents for the first two of the three wells listed above being drilled by Cuadrilla cover fracking operations: no other consent has been given to fracking for shale gas.

However fracking operations for shale gas in the UK are currently suspended pending consideration of the implications of the two small earthquakes in the Blackpool area last year. A geomechanical study has been undertaken for Cuadrilla and was submitted to DECC in November. It is being reviewed very carefully by DECC, in consultation with the British Geological Survey and other independent experts. No decision on the resumption of these fracking operations will be made until the implications of this report, has been fully considered, and appropriate practical measures have been approved by Ministers to minimise the risk of such events occurring again. Other key regulators will be consulted before any such decision is taken.



## 3) Which energy companies have declared that they used the hydraulic fracking method of shale gas extraction, and on which sites is this process used?

Only exploration activities are in question at present. Shale gas extraction (i.e. production) at any location would require a new planning permission, a further DECC consent, etc. Cuadrilla are the only company in the UK to so far use fracking in exploring for shale gas – at the Preese Hall site in Lancashire.

# 4) A copy of the exploration licence granted by the DECC to Cuadrilla for the Bowland shale site and any subsequent drilling licenses.

A copy of the licence (PEDL165) can be accessed via the following weblink: http://og.decc.gov.uk/en/olgs/cms/licences/licence data/recent licence/recent licence.aspx

### 5) Information on the date when fracking started at this site

Fracking at Preese Hall 1 began on 26 March 2011.

## 6) Results of chemical testing on waste water from the Bowland shale, including the dates of each test.

This information is not held by DECC. The Environment Agency may hold this information and if you have not already done so, you may wish to contact them at the following address: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Email: <a href="mailto:enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>. You can also use their <a href="mailto:enquiry form">enquiry form</a> to request information.

## 7) A list of known chemicals used in the fracking mix at the Bowland site

This information is available on Cuadrilla's website: (www.cuadrillaresources.com)

# 8) Information on whether earthquakes/tremors around the Bowland shale including the dates of each such event, could be associated with the fracking.

Following the seismic tremors experienced in Poulton-le-Fylde in Lancashire in April and May, DECC asked Cuadrilla to carry out a geomechanical study to look specifically at the geological and seismic properties of the rock strata and shale in and around Poulton-le-Fylde, and any linkages between the recent seismic tremors and hydraulic fracturing operations in the area. The study, which confirms a connection between the hydraulic fracturing at the Preese Hall-1 well and the seismic activity which took place on 1 April and 27 May 2011, was submitted to DECC, and published by the company, on 2 November 2011.

The study is being reviewed very carefully by DECC, in consultation with the British Geological Survey and other independent experts. No decision on the resumption of these fracking operations will be



made until the implications of this report has been fully considered, and appropriate practical measures have been approved by Ministers to minimise the risk of such events occurring again. Other key regulators will be consulted before any such decision is taken.

# 9) All correspondence between DECC and Cuadrilla or its representatives concerning the Bowland shale site since fracking began

After a preliminary assessment of this element of your request we regret to inform you that following a search of our records and consultation with colleagues, we are unable to provide you with the information requested because in our view the exception in Regulation 12(4)(b) of the EIRs is engaged. This regulation provides that a public authority may refuse to disclose information to the extent that the request for information is manifestly unreasonable. In order to obtain all of the correspondence, including e-mails, we would need to request the information from every policy official across the department who has been in contact with Cuadrilla since the beginning of March 2011. Cuadrilla will have been in regular contact with the Department during this time on a range of technical and regulatory issues relating to their UK operations, with a various officials depending on the nature of the issue under consideration.

In applying this exception, we have considered the public interest in disclosing the information. In this respect we recognise that disclosure could enhance public understanding of the Government's position on fracking at the Bowland shale site and facilitate the accountability and transparency of Government decisions. However, we consider the balance of the public interest to lie in favour of withholding the information. This is because your request is very broad and voluminous and to deal with it would involve applying significant resources which would otherwise be deployed in undertaking core work of the Department. You may wish to consider narrowing the terms of your request (for example by reducing the timescale or restricting the request to Ministerial correspondence).

## **Appeals procedure**

If you are unhappy with the result of your request for information, you may request an internal review within two calendar months of the date of this letter. If you wish to request an internal review please contact the department. Please remember to quote the reference number above in any future communications. If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. Contact details: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF.

Oil & Gas Licensing Exploration & Development Energy Development Unit