

require consent from the Department of Energy and Climate Change (DECC) before drilling or production activities can commence.

6 Particular concern has been expressed about potential risks to water supplies, and non-disclosure of chemicals used in frack fluids. The Environment Agency has powers to require full disclosure of chemicals used in fracking in England and Wales both under the Water Resources Act 1991 and the Environmental Permitting Regulations 2010. It uses those powers to ensure full disclosure and will make an assessment of the chemicals an operator proposes to use.

7 The Groundwater Daughter Directive provides the framework for the control of the release of substances into groundwater. Substances found to be hazardous under the directive must be prevented from entering groundwater whilst substances found to be non-hazardous may be allowed to enter groundwater but they must not cause pollution and must not be released directly into groundwater.

8 The environmental regulator (the Environment Agency in England and Wales), makes an interim classification of substances that operators propose to use in fluids used for fracking. This interim classification is subject to a peer review by the other environmental regulators, who work together in the Joint Agencies Groundwater Directive Advisory Group. The interim determinations are subject to a public consultation before they are finalised.

9 As a consequence, the regulator will not authorise the use of hazardous substances for any activity, including hydraulic fracturing operations where they would be likely to enter groundwater. Non-hazardous substances may be used, subject to their appropriate use but the regulator may restrict or prohibit the use of any substances where they would pose an environmental risk. The Environment Agency has considered all of the chemicals used by Cuadrilla Resources in Lancashire and determined them to be non-hazardous and safe for use in hydraulic fracturing operations at the sites in question.

10 The Energy & Climate Change Select Committee, in their 2011 report on shale gas, concluded that there is no evidence that the fracking process involved in shale gas extraction poses a direct risk to underground water aquifers, provided the well is constructed properly. They also concluded that there was no case for a moratorium on shale gas operations.

11 More recently, the Royal Academy of Engineering and the Royal Society conducted an independent review of the scientific and engineering evidence on the risks associated with hydraulic fracturing for shale gas. Their report, published in June 2012, concluded that the risks can be managed effectively in the UK, provided that operational best practices are implemented and enforced through regulation; and made a number of recommendations which have been accepted by the Government.

12 Shale gas exploration in the UK is at an early stage, and only one well has so far been fracked. Fracking operations at this well in April and May 2011 resulted in two small seismic tremors. Further fracking for shale gas was halted pending a detailed investigation, but the Government announced on 13 December 2012 that, subject to new control measures to mitigate the risk of seismic tremors, fracking for shale gas would again be permitted, subject to case by case scrutiny and regulatory control as outlined above.

13 The Government also announced that DECC is setting up a new Office of Unconventional Gas and Oil, which will join up responsibilities across Government, provide a single point of contact for investors, and ensure a simplified and streamlined regulatory process.

14 It is known that some UK shales contain significant amounts of gas. But as little drilling or testing for shale gas has taken place in the UK, it is not at this stage possible to confirm